

BAYERO JOURNAL OF  
EDUCATION IN AFRICA



**Volume 9 No.3 2023**

**FACULTY OF EDUCATION  
BAYERO UNIVERSITY,  
KANO- NIGERIA**

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**BAYERO JOURNAL OF EDUCATION IN AFRICA**

©Faculty of Education  
Bayero University, Kano

**ISSN: 2360 – 7637**

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Faculty of Education  
Bayero University, Kano – Nigeria

Printed & Published By:



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**Bayero University, Kano - Nigeria**  
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# BAYERO JOURNAL OF EDUCATION IN AFRICA (BJEA)

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FINAL DRAFT BJEA VOL 9 No3

**TABLE OF CONTENTS**

Preliminary Pages ..... i

1. Stakeholders’ Perception on the Funding Structure of Public Tertiary Institutions in Taraba State, Nigeria..... 1  
**Amaechi, Appolus Azunwanne, PhD., & Obiweluozor, Nkechi, PhD**

2. Implications of Motivation in Teaching English Language to Students with Learning Difficulties: A Review ..... 15  
**Ahmad Shafiq Usaini & Ahmad Usaini Umar**

3. Influence of Parental Involvement and Career Maturity on Academic Achievement among Secondary School Students in Kano, Nigeria..... 28  
**Dr. Isa Ado Abubakar**

4. A Comparative Analysis of UTME and Direct Entry Biology Education Graduates’ Academic Achievement in Federal University of Kashere, Gombe State..... 41  
**Yilshik, Obed Musa Ezekiel, Dazi Pam, Hamza Mohamed, & Zulai Danladi Samaila**

5. The Roles of ICT in Social Studies Curriculum Implementation in Colleges of Education, Nigeria..... 57  
**Munirat Binta Abdullahi, PhD, & Prof. I.D Abubakar**

6. Mathematics as an Essential Tool in Tackling the Crucial Economic Issues and Insecurity in Nigeria..... 69  
**Marwana Muhammad**

7. The Roles of the Government and Other Educational Stakeholders in the Funding of Primary Education in Nigeria..... 79  
**Comfort Remilekun Olorunyomi (PhD)**

8. Assessment of ICT Competencies among Business Education Lecturers in South-West Nigeria: Implication for Quality Teaching and Learning ..... 89  
**Soneye Gbolade Michael, PhD**

9. Library Management and Human Resource Development in Delta State University Library ..... 106  
**Ukubeyinje, Ejiro Sandra & Uwa, Ibiere Nora**

10. Effects of Field Trip and Discussion Methods on the Academic Achievement of Geography Students in Secondary Schools ..... 118  
**Ahmodu Jacob Shaibu & Aibangbe, Mary Oyere**

11. Investigation into the Availability of Non-Psychosocial factor in English Language Classrooms among Secondary Schools in Kano State..... 131

**Mustapha Sada & Oteniya Mojeed Gbenga**

12. The Evolving Roles of Library and Information Science (LIS) Educators in Transitioning from Librarianship to Cyberianship in the Digital Age..... 141

**Kamaluddeen Isa El-Kalash, Bappah Magaji Abubakar (PhD) & Hindatu Salisu Abubakar (PhD)**

13. Analysis of Undergraduates' Performance in Computer-based Test in Faculty of Education, Niger Delta University, Bayelsa State ..... 155

**Amatari Veronica Odiri**

14. Strategies for Maintaining and Securing Information and Communication Technology Facilities for Sustainable Digital Literacy Skills among Undergraduate students of Universities in Bayelsa State, Nigeria..... 170

**Epelle Patience Alazi, PhD & Epelle, Beracah Tamunoboma**

15. Effects of Mathematical Skills on Learning Science in Senior Secondary Schools for Sustainable Development in Nigeria ..... 182

**Ibrahim Sarki Zubairu M.Ed; B.Sc (Ed)**

16. Principals' Supervision Strategies and Management of Instruction in Public Secondary Schools in Edo Central Senatorial District of Nigeria..... 189

**Ofangbonmu, Unity & Constance Iyore Osagie, PhD**

17. Validation of Head Teacher's Supervisory and Leadership Role on Teachers to Improve Early Child Care in Nursery and Primary Schools in North Central Nigeria..... 210

**Nicholas, Chidi Achikasim PhD & Agada, Ameh Michael PhD**

18. Restructuring Higher Education for Relevance in the Era of Globalization: A Catalyst for a Model Shift in Educational Policies and Administration ..... 223

**Dahiru Inuwa Modoji PhD**

19. Dynamics of School Discipline, Admission Criteria and Student Academic Achievement in Universities in Oyo State, Nigeria ..... 240

**Prof. Adenaike, Fausat Abisoye, Sheriff Adeshile Oduniyi, Qudus Ajibola Garuba, Wakeel Olalekan Maradesa**

20. Guided Inquiry Instruction and its Impact on Biology Students Performance on Ecology Concept..... 250

**Asiya Hassanu**

21. Impact of Audiovisual Instructional Resources on Senior Secondary School Students Academic Performance in Algebra in Kano Metropolis, Nigeria..... 256

**Hussaini Gali Ahmed**

22. Factors Militating Against Effective Management of Teaching in Secondary Schools (A Review)..... 267

**Mujitafa Lawan Muhammad, Muhammad Abdullahi & Sadauki Suleiman Umar**

23. Impact of Social Studies Education in Promoting Soco-Cultural Integration among the Nigeria Certificate in Education Students in Colleges of Education Kaduna State ..... 277  
**Ramalan Mohammed Tukur**
24. Globalization and National Policy in Nigeria..... 292  
**Shehu Saad Janguza PhD**
25. A Review of Technological Advancements on Counselling Psychology ..... 300  
**Dr. Elegbede, Christie Bola & Abidogun, Moruf Adebayo**
26. Relationship between Training and Development of Business Educators and their Perceived Job Performance in Colleges OF Education in Kano State ..... 312  
**Dr. Egele, Amaka Cordelia**
27. Teachers’ Tolerance and Communication Skills as Correlates of Early School Adjustment of Preschool Children in Ilorin Metropolis ..... 326  
**Dr. Stella Chinwe Anyama & Gafar Isiaka**
28. Relationship between Social Adjustment and Academic Performance among Senior Secondary School Students in Sokoto State: Aftermath of Covid-19..... 340  
**Mukhtar Abubakar Hassan**
29. ICT Knowledge as Predictor of Career Choice among Undergraduates of Caleb University, Imota Lagos, Nigeria ..... 351  
**Ayodele, Mercy O. & Adeyanju, Ibukun O.**
30. An Investigation on the Level of Knowledge of the Causes of Diabetes among Residents in Ovia North East LGA of Edo State..... 363  
**Egbochuku, O.O. PhD & Timbiri, E.B. (MPH)**
31. Qualitative Research Method in Libraray and Information Science ..... 370  
**Hajara Yakubu (PhD), Hamza Ukashatu Musa (PhD) & Mustapha Haruna (PhD)**



**Stakeholders' Perception on the Funding Structure of Public Tertiary Institutions in Taraba State, Nigeria**

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**ABSTRACT**

Underfunding has been a perennial issue in the education sector in Nigeria. This paper examines stakeholders' perception on the funding structure of tertiary institutions in Taraba State, Nigeria. Three research questions guided the study. The descriptive survey research design was adopted for the study. The population of the study consisted all the 2,970 academic and non-academic staff and 8,657 students of State-owned tertiary institutions in Taraba State, Nigeria. The simple random sampling technique was used to select a sample of 200 respondents stratified along male and female. Instrument used for data collection was researcher-developed questionnaire titled "Stakeholders Perception on Funding Structure Questionnaire (SPFSQ)". Data collected was analyzed using mean and standard deviation. Findings revealed that stakeholders' perception is that government budgetary allocation is grossly inadequate for capital and recurrent expenditure in tertiary institutions in the State. It further revealed that stakeholders are of the opinion that introduction of tuition fees at tertiary education level will increase hardship and lead to mass drop-out by students. It was recommended that government should enlighten stakeholders through town-hall meetings on the need for them to support financially for tertiary education funding in the State, if global competitiveness is envisaged.

**Keywords:** *Funding Structure, Tertiary Education, Stakeholders, Perception, global competitiveness.*

**Introduction**

Education defines generally the quality of life; it is the foundation on which the society is built. Higher education takes the intellect to the next level of success and provides a deeper understanding of relevant subjects; it

also provides the necessary foundation for economic growth. The success of any educational system hinges on proper planning, effective administration and adequate funding (Federal Republic of

Nigeria, 2013). Funding is essential for the survival of any institution and tertiary institutions in Taraba State are not left out, especially now that the country is experiencing economic hardship.

There is no gainsaying the fact that education is very vital to the pace of social, political and economic development of any nation. This is why most nations of the world strive to devote a sizeable proportion of their Gross National Income to develop the educational sector. In Nigeria, a sizeable chunk of our annual expenditure is devoted to education (Amaechi and Obiweluzor, 2016). Tertiary education, also referred to as third stage, third level, and post-secondary education, is the educational level following the completion of a school providing a secondary education. The World Bank, for example, defines tertiary education as including universities as well as institutions that teach specific capacities of higher learning such as colleges, technical training institutes, community colleges, nursing schools, seminaries, research laboratories, centers of excellence, and distance learning centers. Higher education is taken to include undergraduate and postgraduate education, while vocational education and training beyond secondary education is known as *further education* in the United Kingdom, or *continuing education*

in the United States (Amaechi and Obiweluzor, 2016). The Management of Tertiary institution encompasses its functions which include teaching, research and community service. According to Ifidon and Okoli (2002), universities now have additional functions which include:

- Pursuit, promotion, and dissemination of knowledge;
- Provision of intellectual leadership;
- Manpower development;
- Promotion of social and economic modernization;
- Promotion of intra and inter-continental and international understanding.

Funding has been a perennial problem in the education sector in Nigeria. According to Udoh (2008), Nigeria as a developing nation is currently witnessing increased enrolment of university students. This increase in enrolment demands corresponding increase in funding which is not the case in Nigeria. Fund allocation does not increase to meet the demand of funds occasioned by the enrolment increase.

Imhabekhai and Tonwe (2001) reported that government provides for over 80 per cent of all the funds needed for capital and recurrent expenditures in tertiary institutions in Nigeria while the reverse is the case in most developed countries where payment of

tuition fees is the most essential source of funds for tertiary institutions. Various propositions have been made on how to lessen the burden of funding being carried solely by the government in Nigeria by introducing tuition fee in the public universities, checking corruption and fraudulent practices, increasing commercial activities on the various campuses, seeking for funds from international development partners, carrying out researches, rendering consultancy services, offering long distance and part time programmes through the internet, making giant strides in scientific breakthroughs and becoming the forerunners in technological advancements and implementation (Arikewuyo 2001). This means that introduction of tuition fees in tertiary institutions in Taraba State will go a long way to help in the funding of education in the State. Ezekwesili (2006) affirmed that underfunding of education especially at the tertiary level has become a persistent occurrence in Nigeria as funds released to the tertiary sector can no longer meet the increasing demands and growth of Nigerian tertiary institutions. Amaechi & Ozoemena (2014:59) further affirmed that the most severe problem of the education sector is poor funding, which according to them directly or indirectly leads to other perennial

setbacks such as shortage of quality staff, dearth of infrastructure, inadequate classrooms and offices, proliferation, cultism, brain drain, inadequate laboratories for teaching and research, shortage of books and journals, indiscipline, low remuneration, inconsistent and ill-conceived policies. Funding of Nigerian higher education is imperative because of the costs involved in maintaining an institution.

Investment in higher education revolved around capital and recurrent expenditure that are cogent to academic survival of higher institutions in the current period of global competition for attracting funding and best hands. However, Taraba State government and the Nigerian government have not been able to fund higher education adequately in order to achieve best result. Ajayi and Ekundayo (2006) argued that the Nigerian government over the years has not met the United Nations Educational Scientific and Cultural Organisation (UNESCO) recommendation of 26% of the total budget allocation to education sector despite the government's allocation towards education on yearly basis.

The simulation exercise carried out in Nigeria by Chang (2007) revealed that funding gap exist in achieving the policy goals set for tertiary institutions, the funding

gap is relatively high ranging from around 50 per cent to 90 per cent across 2010 to year 2020. This implies that the key players in tertiary education in Nigeria will have to search for alternative and improved means of filling the void created by underfunding by reviewing accountability, resource management, good leadership and administration, promotion of public-private partnership in providing education at all levels. The challenge of underfunding of Nigerian Tertiary institutions has a significant effect on the performance of staff and students who are at the receiving end. According to Udoh (2008), the government finds it increasingly difficult to match the growing enrolment of students with qualitative funding due to drastic reduction in revenue and economic despondency experienced in the country. Bamiro and Adedeji (2010) noted that the quality of lecturing and research work has significantly declined over the years leading to overcrowding and uncondusive learning and teaching environment. Oyeneye (2006) affirmed that making qualitative education available to all citizens is a right but there can't be quality education without adequate funding. He further stated that in Nigeria, it is difficult to ascertain the pattern of fund allocation. Ekundayo (2008) posited that

most of the capital projects being undertaken to meet the increasing number of students have been abandoned due to lack of funds. He also affirmed that the pressure on the inadequate resources has led to a decline on the staff welfare package and remuneration coupled with depreciation of working conditions and environment. The resultant effects are high brain-drain of professional staff, persistent strike action, rioting, high crime rate, and cultism, extortion of students, admission runs, embezzlement and all sorts of vices. It is important to note that all of the above effects as stated by Ekundayo are still prevalent in our tertiary institutions till date, and Taraba State is not an exception. According to Imhabekhai & Tonwe (2001), inadequate funding deters growth in the tertiary institutions.

The higher education system has been criticized for being inefficient and ineffective, major issues of higher education in Taraba State are similar to those in other parts of the country. Overcrowding in our higher institutions and inadequate funding resources are contributing factors to the decline in the quality of higher education. Inadequate funding has resulted in problems such as the breakdown and deterioration of facilities, shortages of new books and current journals in the libraries, supplies for the

laboratories, and limited funding for research (Famade, Omiyale & Adebola, 2015).

Stakeholders in this context refer to the management staff, which represents government as the proprietor of these state-owned tertiary institutions, academic and non-academic staff of these institutions and students. Taraba State has four state-owned tertiary institutions: The State University, Polytechnic, College of Education and College of Agriculture. Perception here will mean intuitive understanding and insight, which means the way in which stakeholders perceive, regard, understand and interpret the funding structure of tertiary institutions in Taraba State.

Funding structure refers to the conventional sources of funding tertiary education in Taraba State, which include: Government grants/subventions, this form a very high proportion of the fund that is available for use by tertiary institutions, through annual budget for her capital and recurrent expenditure. Another one is Endowment Fund/Donations by corporate organizations, philanthropists, politicians and individuals who are willing to support tertiary education in their communities, state or nation. Tuition fees/levies is yet another source, where students who attend tertiary institutions are requested to pay for the teaching they are

going to receive. Tertiary Education Trust Fund (TETFUND) is yet another source, the scheme established by the federal government in 2011 to disburse, manage and monitor education tax to public tertiary institutions in Nigeria. Lastly on the structure is the Internally Generated Revenue (IGR), the federal government of Nigeria gave a mandate to tertiary institutions to generate at least 10% of their required fund for each fiscal year as revenue. It is pertinent to note that among the above structure discussed, it is only the government subvention through annual budget and TETFUND intervention that is visible in tertiary institutions in Taraba State.

Global competitiveness refers to the ability of nations to supply high-quality goods and services at reasonable costs, resulting in satisfactory returns. However, in this context, global competitiveness will mean the ability of tertiary institutions making their learners truly globally competitive through a paradigm shift of recognizing the integration of global issues and challenges into their curriculum, such as climate change, poverty, security, peace and conflict resolutions; thereby acknowledging the fact that higher education and training is one of the pillars of global competitiveness – hence its adequate funding is key.

A cursory look at the Taraba State budget shows that between 2016 and 2023 education budget fluctuated between 3 to 8.5%. For instance in 2017 out of a total budget of 110 billion naira, education got 2.5 billion naira. The immediate past governor created the Ministry for tertiary education in 2021, and in 2023 out of a budget of 173 billion naira, the ministry got 14.6 billion naira, which is 8.4%. This will cover both capital and recurrent expenditure in four (4) tertiary institutions owned by the State, including their Boards.

#### **Statement of Problem**

The success of any educational system hinges on proper planning, effective administration and adequate funding; this means that funding is essential for the survival of any institution. In year 2022, precisely between March and September, the Academic Staff Union of Universities (ASUU) embarked on a 7-month strike, and one of the reasons for their action was poor funding for the revitalization of universities; the Taraba State University was part of that strike. In March 2023, the Academic Staff Union of Universities (ASUU) Taraba State University Branch went on strike for non-payment of salaries by the Stat governor for 4 months; it took the intervention of the governor-elect for them to suspend the strike. The question

that has been on the lips of stakeholders is what is government doing with the budgetary allocation to education? Where is the money generated by the university and other tertiary institutions in the State? Does it mean that government cannot fund tertiary education again? All these incessant strike actions contribute to the fallen standard of education at all levels and is responsible for the poor quality of graduates from our tertiary institutions. On the other hand, a visit to some of these tertiary institutions in the State reveal that most of the current structures in place were sponsored by the Tertiary Education Trust Fund (TETFUND). If the above is the case, then what is the State budgetary allocation to education used for? The thrust of this paper therefore is to examine stakeholders' perception on the funding structure of public tertiary Institutions in Taraba State vis-a-vis capital and recurrent expenditure.

#### **Purpose of the Study**

The main purpose of this study is to evaluate stakeholders' perception on the funding structure for tertiary institutions in Taraba State. Specifically, it seeks to:

- (1) Find out stakeholders' views on adequacy of budgetary allocation for infrastructural development in tertiary institutions in Taraba State.

- (2) Determine the position of stakeholders on how budgetary allocation takes care of recurrent expenditure in tertiary institutions in Taraba State.
- (3) Evaluate stakeholders' opinion on their contributions to funding of tertiary institutions in Taraba State.

### **Research Questions**

The following research questions guided the study.

1. What is the stakeholders view on the adequacy of government budgetary allocation for infrastructure in tertiary institutions in Taraba State?
2. What is the stakeholders' opinion on the extent of which government budgetary allocation takes care of recurrent expenditure in tertiary institutions in Taraba State?
3. What contributions have stakeholders made in funding tertiary institutions in Taraba State?

### **Methodology**

The descriptive survey research design was adopted for the study. The population of the study consists of 2,970 academic and non-academic staff and 8,657 students of State-owned tertiary institutions in Taraba State. The stratified random sampling technique was used to select a sample of 150 staff, stratified along academic and non-academic;

while a sample of 50 was selected from student population, stratified along male and female. In all 200 stakeholders served as respondents for the study. Three research questions guided the study. A 15-item, 3 clusters researcher-developed questionnaire titled "Stakeholders Perception on Funding Structure Questionnaire (SPFSQ)" served as instrument for data collection. The instrument was validated by two experts and it yielded a validation index of 0.88. The precision and internal consistency of the instrument was determined using Cronbach reliability method which gave rise to a coefficient ranging from 0.73 - 0.81. A total of 200 copies of the Stakeholders Perception on Funding Structure Questionnaire (SPFSQ) was administered through the help of four (4) research assistants. At the end of the distribution, after two days, a total of 192 questionnaires were retrieved which is 96% rate of return. The questionnaire consists of two sections, section A contained the sex and category of respondents, while section B contained 15 items on stakeholders' perception on funding structure of tertiary institutions in Taraba State. Respondents were requested to respond to the questionnaire using four point Linkert modified scale of Strongly Agree (4), Agree (3), Disagree (2) and Strongly Disagree (1).

Data collected were analyzed using Mean and Standard Deviation and percentage scores. A scale mean of 2.50 was used to determine respondents perception, this means that a mean of 2.50 and above is high or positive perception, while a mean of 0 – 2.49 is low or negative perception. This enabled the researcher to draw conclusions on the data collected. All statistical analyses were

conducted using the Statistical package for the Social Sciences (SPSS) latest edition.

**Results & Findings**

**Analysis of research questions**

**Research Question One:** What is the stakeholders’ view on the adequacy of government budgetary allocation for infrastructure in tertiary institutions in Taraba State?

**Table 1: Summary of Mean and Standard Deviation of stakeholders’ perception on the adequacy of budgetary allocation for infrastructure in tertiary institutions in Taraba State.**

S/N	ITEMS	SA	A	D	SD	M	STD	DEC.
1.	Government budgetary allocation is adequate for the construction of classrooms and offices in your school.	23	32	61	76	2.0	1.02	Disagree
2.	Government budgetary allocation is adequate for equipment needed in the laboratories in your school.	22	28	43	99	1.9	1.05	Disagree
3.	Government budgetary allocation is adequate for the construction of hostel accommodations for students in your school.	16	14	61	101	1.7	0.92	Disagree
4.	Government budgetary allocation is adequate for the Library holdings required in your school.	29	33	56	74	2.1	1.07	Disagree
5.	Government budgetary allocation is adequate for the facilities required for teaching and learning in your school.	18	23	84	67	2.0	0.92	Disagree
<b>Cluster Mean</b>						<b>1.9</b>		<b>Disagree</b>
<b>Scale Mean = 2.50</b>								

Table 1 show that respondents disagree that government budgetary allocation is adequate for the construction of classrooms and offices in tertiary institutions in the State; with a mean of 2.0 and standard deviation of 1.02. They also disagree that government budgetary allocation is adequate for

equipment needed in the laboratories of tertiary institutions in the State; with a mean of 1.9 and standard deviation of 1.05. They further disagree that government budgetary allocation is adequate for the construction of hostel accommodation for students in tertiary institutions in the State; with a mean of 1.7



and standard deviation of 0.92. Respondents went further to disagree that government budgetary allocation is adequate for the library holdings of tertiary institutions in the State; with a mean of 2.1 and standard deviation of 1.07. They also disagree that government budgetary allocation is adequate for facilities required for teaching and learning in tertiary institutions in the State; with a mean of 2.0 and standard deviation of 0.92. With a cluster mean of 1.9 which is less than the scale mean of 2.5, it could be concluded that stakeholders' perception is that government budgetary allocation for

infrastructural development in tertiary institutions in the State is grossly inadequate. This means that the budgetary allocation to tertiary institutions in the State is not capable of providing for the construction of classrooms, hostels or to equip the library or acquire facilities for teaching and learning as shown on table 1.

**Research Question two:** What is the Stakeholders' opinion on the extent of which government budgetary allocation takes care of recurrent expenditure in tertiary institutions in Taraba State?

**Table 2: Summary of Mean and Standard Deviation of stakeholders' perception on the adequacy of budgetary allocation for recurrent expenditure in tertiary institutions in Taraba State.**

S/N	ITEMS	SA	A	D	SD	M	STD	DEC.
1.	Government budgetary allocation is adequate for the regular payment of salaries and allowances of staff in your school.	31	42	64	55	2.3	1.04	Disagree
2.	Government budgetary allocation is adequate for staff training and development in your school.	22	31	66	73	2.0	1.0	Disagree
3.	Government budgetary allocation is adequate for the overhead cost for faculties and departments in your school.	19	23	84	66	2.0	0.93	Disagree
4.	Corruption is one of the reasons why government budgetary allocation is inadequate for recurrent expenditure in your school.	71	67	30	24	3.0	1.01	Agree
5.	Government budgetary allocation is adequate for the procurement of vehicles for the running of the institution.	22	34	56	80	2.0	1.03	Disagree
<b>Cluster Mean</b>						<b>2.3</b>		<b>Disagree</b>
<b>Scale Mean = 2.50</b>								

Table 2 shows that respondents disagree that government budgetary allocation is adequate for the regular payment of salaries and allowances of staff in tertiary institutions in the State; with a mean of 2.3 and standard deviation of 1.04. They also disagree that that government budgetary allocation is adequate for the staff training and development in tertiary institutions in the State; with a mean of 2.0 and standard deviation of 1.0. They further disagree that government budgetary allocation is adequate for the overhead cost for running faculties and departments in tertiary institutions in the State; with a mean of 2.0 and standard deviation of 0.93. They however agree that corruption is one of the major reasons why government budgetary allocation is not adequate for recurrent expenditure in tertiary institutions in the State; with a mean of 3.0 and standard deviation of 1.01. Respondents

disagree that government budgetary allocation is adequate for the procurement of vehicles for the running of tertiary institutions in the State; with a mean of 2.0 and standard deviation of 1.03. With a cluster mean of 2.3 which is less than the scale mean of 2.5, it could be concluded that stakeholders' perception is that government budgetary allocation for recurrent expenditure in tertiary institutions in the State is grossly inadequate. This means that the fund provided by government through budgetary allocation to tertiary institutions is not able to take care of staff emoluments, training and development; and procurement of facilities for the institutions due to high level of corruption, as shown on table 2.

**Research Question three:** What contributions have stakeholders made in funding tertiary institutions in Taraba State?

**Table 3: Summary of Mean and Standard Deviation of stakeholders' perception on the contributions of stakeholders on funding tertiary institutions in Taraba State.**

S/N	ITEMS	SA	A	D	SD	M	STD	DEC.
1.	Philanthropists have built some structures in your school within the last 5 years.	15	24	67	86	1.8	0.93	Disagree
2.	Government is open to Public-Private Partnership (PPP) in the funding of your institution.	20	24	58	90	1.9	1.0	Disagree
3.	Government is partnering with Donor Agencies to help in funding tertiary education in your State.	28	34	51	79	2.1	1.08	Disagree
4.	Government should introduce tuition and other fees in tertiary institutions in the State to enhance funding.	34	43	62	53	2.3	1.06	Disagree
5.	Government should increase tax and create special fund for tertiary education in the State.	62	84	20	26	2.9	0.98	Agree
<b>Cluster Mean</b>						<b>2.2</b>		<b>Disagree</b>

**Scale Mean = 2.50**

Table 3 shows that respondents disagree that philanthropists have built some structure in tertiary institutions in the State in the last 5 years; with a mean of 1.8 and standard deviation of 0.93. They also disagree that government is open to Public-Private Partnership (PPP) in the funding of tertiary institutions in the State; with a mean of 1.9 and standard deviation of 1.0. They further disagree that government is partnering with Donor-Agencies to help in the funding of tertiary education in the State; with a mean of 2.1 and standard deviation of 1.08. They also disagree that government should introduce high tuition and other fees in tertiary institutions to enhance funding; with a mean of 2.3 and standard deviation of 1.06. Respondents however agree that government should increase tax and create a special Trust Fund for tertiary education in the State; with a mean of 2.9 and standard deviation of 0.98. With a cluster mean of 2.2 which is less than the scale mean of 2.5, it could be concluded that stakeholders' perception is that their contributions towards funding of tertiary education in the State is very low and or grossly inadequate. This means that stakeholders themselves agree that their financial contribution towards tertiary education is low, as they are not able to mobilize for funds through fund-raising,

neither are they ready to pay tuition fees for their wards, hence inadequate funding of tertiary institutions in the State.

### **Discussion of Findings**

The finding of this study reveal that stakeholders' perception is that government budgetary allocation for capital expenditure in tertiary institutions in Taraba State is grossly inadequate because the fund is not enough to construct additional classrooms, offices, hostels; or equip laboratories and libraries and to procure facilities for teaching and learning as shown on table 1. This is in agreement with Udoh (2008), who opined that Nigeria as a developing nation is currently witnessing increased enrolment of university students. This increase in enrolment demands corresponding increase in funding which is not the case in Nigeria. Fund allocation does not increase to meet the demand of funds occasioned by the enrolment increase. This finding also agrees with Ezekwesili (2006) who affirmed that underfunding of education especially at the tertiary level has become a persistent occurrence in Nigeria as funds released to the tertiary sector can no longer meet the increasing demands and growth of Nigerian tertiary institutions.

The finding also shows that stakeholders' perception is that budgetary allocation to

tertiary institutions in the State for recurrent expenditure is grossly inadequate, they further stressed that corruption is one of the major reasons for inadequacy of funds in tertiary institutions in the State. According to them, this is the reason why funds allocated is not enough to cater for staff salaries and allowances; training and development; and even to provide overhead cost for Departments and Faculties in tertiary institutions as shown on table 2. This finding is in tune with Amaechi & Ozoemena (2014) who affirmed that the most severe problem of the education sector is poor funding, which according to them directly or indirectly leads to other perennial setbacks such as shortage of quality staff, brain drain, inadequate laboratories for teaching and research, shortage of books and journals, corruption and low remuneration, The finding further reveals that stakeholders' perception is that their contributions towards funding of tertiary education in the State are grossly inadequate and or very low. This is because the stakeholders have not been fully involved in the financing of tertiary institutions in the State; they are not willing to pay tuition fees for their wards, they are not also willing to mobilize funds through fundraising or endowment as indicated on table 3. This finding is in tandem with

Imhabekhai and Tonwe (2001) who reported that government provides for over 80 per cent of all the funds needed for capital and recurrent expenditures in tertiary institutions in Nigeria.

### **Conclusion**

The importance of adequate funding for tertiary education for efficiency and effectiveness cannot be over-emphasized. Adequately funded tertiary institutions not only ensure a higher standard of curriculum, but also have the potential to result in competitive advantages over other institutions.

Government should as a matter of fact expand its funding structure by partnering Donor-Agencies, make use of the PPP (Public-Private-Partnership) window, create a special education tax for tertiary education; and mobilize other stakeholders to contribute towards tertiary education funding in the State. On the other hand, tertiary educational institutions are expected to seek alternative funding sources to supplement government budgetary allocation in order to attain institutional performance in teaching, research and community service. This sector (tertiary education) is capital-intensive, and government alone cannot provide all the resources or funding required, all hands must

therefore be on deck if global competitiveness is envisaged.

**Recommendations**

Based on the findings, the following recommendations are made:

1. Taraba State government should increase budgetary allocation to education to at least 30% of its total annual budget.
2. Government should organize town-hall meetings and sensitization workshops for stakeholders to educate them on the need for their support in funding tertiary education in the State.
3. There should be zero tolerance for corruption in the education sector to ensure effective and efficient use of budgetary allocation.
4. Government should partner with donor-agencies, organized private sector and other foundations to expand the funding structure for tertiary education in the State.
5. The State government should device means of effective collection of tax, create a special education tax fund for the efficient funding of tertiary education in the State

FINAL DRAFT BJEA VOL 9 NO 3

## REFERENCES

- Ajayi, I. A. & Ekundayo, H. T. (2006). *Funding initiatives in university education in Nigeria*. Paper presented at the national conference of Nigerian Association for Educational Administration and Planning (NAEAP), Enugu, Nigeria.
- Amaechi, A. A. & Obiweluzor, N. (2016). Income Generating Activities (IGA): Panacea to Poor Funding of Tertiary Institutions in Taraba State, Nigeria. In N. M. Abraham, D. O. Durosaro, Nwadiani, M., G. G. Kpee, C. E. Edemenang, J. E. Okon & I. A. Odiba (eds). *Changes and Innovation in Financing education for sustainable national development in Nigeria*. Port-Harcourt: NAEAP Book of Readings. Pg. 466-475.
- Amaechi, A. A. & Ozoemena, P. O. (2014). *Economics of education: An introduction*. Lafia: Transform Printing Publications.
- Arikewuyo, M.D. (2001). Public participation in management of higher institution in Ogun state, Nigeria. *Evaluation Research*, 1, 30-37.
- Bamiro, O.A. and Adedeji, O.S. (2010). *Sustainable financing of tertiary education in Nigeria*. Ibadan: Ibadan University Press.
- Chang, C. (2007). *Nigeria 10 year strategic plan for education: policy, cost and financing assumptions and their implication*. Working document-United Nations Educational Scientific and Cultural organization.
- Ezekwesili, O. (2006). *Lack of fund is the bane of Nigerian education system*. NTA Network News, October, 2006 .
- Ekundayo, T. A. (2008). Expanding Access to Higher education in Nigeria: The Question of Quality Control. *Journal of Reforming Higher Education in Africa*, 22-36.
- Famade, O. A., Omiyale, G. T. & Adebola, Y. A. (2015). Towards Improved Funding of Tertiary Institutions in Nigeria. *Asian Journal of Humanities and Social Sciences*. 3 (2), 83-92.
- Federal Republic of Nigeria (2013). National policy on education. Lagos: NERDC Press.
- Ifidon, S. E. & Okoli, G. N. (2002). *40 Years of Academic and Research Library Service to Nigeria: Past, Present, and Future*. Paper presented at the 40th Nigerian Library Association, ASCON, Badagry, pp. 22-33.
- Imhabekhai, C.I. & Tonwe, D.A. (2001). Funding higher education in Nigeria. *Evaluation Research*, 1, 30-37.
- Oyeneye, O. Y. (2006). *Current issues in the administration of University education in Nigeria*. Lecture delivered at the 15th convocation ceremony of University of Ado-Ekiti, Ado-Ekiti, Nigeria, March 29.
- Udoh, G. (2008). Alternative Sources of Funding University Education in Nigeria. *An International Multi-Disciplinary Journal*, 2 (3), 98- 110.

**Implications of Motivation in Teaching English Language to Students with Learning Difficulties: A Review**

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**ABSTRACT**

This article seeks to examine the implications of motivation in teaching English language to learners with learning difficulties (LD) by reviewing relevant literature. Learners with LD often lack intrinsic motivation (IM) and engagement in the classroom, leading to lower academic achievement and underachievement. Therefore, this review aims to explore the various strategies used to promote motivation in English language classrooms for this cohort of learners. The review focused on motivation and specific strategies that teachers can employ to encourage motivation in learners with LD, such as scaffolding instruction strategy (SIS), autonomy and controlling strategy, extrinsic motivation strategy (EMS), gamification strategy (GS), direct instruction strategy (DIS), strategy instruction (SI) and cooperative learning strategy (CLS). The review further examines the potential implications of the strategies for those learners with LD. The review of this research indicates that these strategies have some positive impact on learners' motivation and academic achievement. It also suggests that in order to be successful, teachers must take into account the individual personalities and needs of their students. Furthermore, school administrators may need to provide additional resources to ensure that teachers are able to implement the strategies effectively.

**Key Words:** *Learning Difficulties, English Language Teaching, Motivation*

**Introduction**

Motivation is an imperative cause of success in learning an L2; it kindles learners' interest to learn, it therefore, plays an essential role in the success of language learners in all language aspects and skills (Asghar, Jamil, Iqbal, & Yasmin, 2018; Dörnyei & Csizér,

1998; Wilona, Ngadiman & Palupi, 2010 in Ahmed & Al-Ward, 2020:695). According to Vibulphol (2016) motivated learners are more likely to achieve their goals than those demotivated. The reason is that language learning does not guarantee high levels of

achievement if learners are not sufficiently motivated (Pawlak, 2012: xxxiv). Recently, a significant number of researchers have investigated learners' motivation in English language classrooms, however, little has been written on the implications of motivation on English learners with learning difficulties (LD) and learners with LD, learning English as a second language need more motivation to excel in communicative and academic pursuits. This is why English language teachers ought to use strategies that increase motivation among learners with LD. Dörnyei (2001:1) aptly opines that motivation is one of the critical issues in language learning, and skills to motivate learners are crucial for language teachers.

#### **Learners with Learning Difficulties (LD)**

Learners with learning disabilities/difficulties experience challenges in specific areas of academic achievement due to one or more impairments in their cognitive processes “involved in understanding and using spoken or written language, which results in deficits in the ability to listen, think, speak, read, write, spell... (Namkung & Peng, 2018:5)”.

#### **Categories of Learning Difficulties**

The term “learning difficulties”, refers to learning differences is categorized into two, namely:

- i. Developmental learning difficulties and
- ii. Academic learning difficulties (Taura, 2014 cited in Kirk and Chalfant, 1984).

Developmental learning difficulties refer to failure in meeting the potential minimal level of the prerequisite skills needed to accomplish a formal learning experience.

Such categories include:

- a. Attention disorder e.g. hyperactivity, hypo-activity, attention fixation, impulsivity, and distractibility,
- b. Memory disabilities,
- c. Perceptual disabilities e.g. discrimination disabilities, closure disabilities, visuo-motor problems, perceptual speed disabilities, and sequencing disabilities,
- d. Thinking and language disabilities e.g. expressive aphasia, receptive aphasia, alexia, agraphia, etc.

On the other hand, academic learning difficulties are mainly experienced in school in the form of formal reading, handwriting, spelling, and arithmetic difficulties despite the opportunities and manifestation of the potential to learn (Taura, 2014).

The common names given to these difficulties are:

- i. Dyslexia—reading difficulties
- ii. Dysgraphia—handwriting difficulties
- iii. Dysphonia—spelling difficulties and



iv. Dyscalculia—arithmetic difficulties (Umar, 2023).

1. **Dyslexia:** The term dyslexia refers to reading retardation and it is used to identify children who have severe difficulty in learning to read (Lerner, 1997). Reading difficulty is one aspect of academic learning difficulties (Kirk & Gallagher, 1986).
2. **Dysgraphia:** According to Messa (2001) dysgraphia is “a partial inability to remember how certain alphabetical and numerical symbols are made”. Richard (1994) defines dysgraphia as “a problem with expressing thought in written form”.
3. **Dysphonia:** Spelling difficulties are sometimes known as dysphonia. It is defined as a learning disorder with an impairment in written expression and requires the specification of whether spelling accuracy, grammar and punctuation accuracy, clarity or the organization of written expressions are compromised (American Psychology Association, 2013).
4. **Dyscalculia:** Shalev (2008) defined it as “a specific learning disability affecting the normal acquisition of arithmetic skills in spite of normal intelligence, emotional stability, scholastic opportunity, and motivation.

### **English Language Teaching**

Teaching English language to learners with LD may be ineffectual in an unmotivated environment. Consequently, a motivated environment cultivates successful learning and fuels the students’ esteem to be interested in what they are learning. According to (Scheidecker and Freeman 1999:116) motivation is the most complex and challenging issue facing teachers today however, it is a key factor in successful teaching strategies, and its implication is increased for learners with LD.

### **Motivation Defined**

Motivation has long been one of the most investigated areas due to its profound impact on L2 learning (Erdil-Moody & Thompson, 2020:387-8). Therefore, the multiplicity of existing literature on motivation vindicates its benefits to L2 classroom teaching/learning situations. It is a driving force that leads to action (Richards and Schmidt, 2013); energy that directs one’s behaviour towards a certain goal (Rodgers & Loitz, 2009) that every diligent teacher aspires his/her learners to achieve. In the words of Vibulphol (2016:64) “Motivation ‘kick starts’ the process that ‘lubricates’ the parts, and ‘fuels’ the engine to keep it running.”

Similarly, Dörnyei & Ushioda (2011:3) maintain that “the word motivation derives

from the Latin verb *movere* meaning to move” and it is the motivation that moves a person to make certain choices, engage in action, expend effort, and persist in action. Green (2002:989) sees it as an “internal state that activates, guides, and maintains behaviour”. Alfrough, Rahimi & Zarafshan, (2014:50) explain it as an internal state that arouses, directs, and maintains behaviour. From these explanations put forward by Green (2002) and Alfrough, et al (2014), it is unequivocal that motivation has three phases, namely:

- i. Activation,
- ii. Direction, and
- iii. Maintenance.

This is why Williams and Burden (1997) argue that motivation can be seen on a continuum that involves three stages:

- a. Reasons for doing something
- b. Deciding to do something, and
- c. Sustaining the effort.

Thus, motivation concerns the direction and magnitude of human behaviour as the choice of a particular action, the persistence with it, and the effort expended on it (Dörnyei & Ushioda, 2011:4). Therefore, motivation is what especially learners with LD need to have in ever English language classroom to thrive.

### **Types of Motivation**

“Motivation is classified into two main categories: intrinsic and extrinsic (Ahmed & Al-Ward, 2020:695)”. According to Palmer (2005), extrinsic motivation is from a behaviourist perspective while intrinsic motivation is from a social-cognitive perspective. He thus argues that “the former emphasizes the influence of environmental factors such as rewards, whereas the latter emphasizes the importance of students’ beliefs about themselves and their learning environment”. Therefore, intrinsic motivation comes as a result of the learners’ interest in language learning. And this kind of motivation fosters learning more. Intrinsic motivation can be either integrative or instrumental (Gardner, 2010).

### **Strategies that Increase Motivation among Students with Learning Difficulties**

Erdil-Moody & Thompson (2020:399), state that “motivational strategies are techniques that teachers use to foster learners’ desire to achieve their L2-related goals and to help them maintain their persistence and enthusiasm for L2 learning”. Consequently, teachers, who use motivational strategies in their classrooms, have been found to impact students’ English learning motivation (Dörnyei, 2001; Dörnyei & Guilloteaux, 2008; Vibulphol, 2016; Chen & Vibulphol

(2019) Hence, according to Palmer (2005:11), to enhance learners' motivation, teachers should:

1. Challenge students by setting tasks at a moderate level of difficulty so they can regularly experience success;
2. Use novel or discrepant experiences to arouse curiosity;
3. Use fantasy;
4. Increase the meaningfulness of content and tasks by relating them to the students' lives;
5. Use a variety of different types of activities and tasks;
6. Allow students to be active participants in the lesson;
7. Allow students a realistic level of choice in work partners, activities, and task formats;
8. Allow students to work individually or collaboratively in situations that do not encourage competition;
9. Provide assessment feedback, and use praise that rewards effort and improvement (these should be given privately, to avoid social comparison);
10. Model enthusiasm, thinking, dealing with errors, and dealing with challenges; and
11. Be supportive, reassuring, and attentive to the students.

Even though the above motivational strategies are general, they can still benefit those learners with LD. Contrarily, according to Dörnyei & Otto's (1998) process model of L2 motivation, motivational strategies can be classified under four major consecutive stages:

- a) Creating the basic motivational conditions
- b) Generating initial motivation,
- c) Maintaining and protecting motivation and
- d) Encouraging positive retrospective self-evaluation (Erdil-Moody & Thompson, 2020).

These stages can be assumed as a continuum of motivational strategies, having 'creating the basic motivational condition' and 'encouraging positive retrospective self-evaluation' at the polar extremes of the continuum. The following are some strategies that are more connected to learners with LD.

### **1. Scaffolding Instruction Strategy (SIS)**

This strategy involves teaching that reinforces learners to learn some language aspects by designing lessons that interest them and reflect their lives and experiences. The teachers should systematically build on students' experience and prior knowledge when teaching a new skill and then remove the support gradually as students become more proficient (Namkung & Peng, 2018:5).

Jonassen, (1991) posits that constructivism theory focuses on the learners' experiences of the real world, prior knowledge, mental structures, and beliefs; it emphasizes knowledge construction and meaningful context. Therefore, the ideal L2 self can be a robust motivation (Dörnyei & Ushioda, 2009) with which teachers would be able to help learners with LD create an ideal L2 self by getting to know "who they are and what unique life experiences, dreams, and worries they bring into the classroom" (Dörnyei & Kubanyiova, 2014: 157). Murphy (1999:365) aptly admonishes that "the success of teaching rests largely on the student's involvement in the learning process". Consequently, failure to involve them or make the content revolves around them and reflect their lives can be "one of the most demotivating factors for learners" (Dörnyei & Ushioda, 2011:116; Kikuchi, 2015).

## **2. Autonomy and Controlling Strategies**

Autonomy and controlling styles are two different styles of motivational strategies that have been found to enhance learners' motivation and learning, but in different ways (Chen & Vibulphol, 2019). Accordingly, learners in autonomy-supportive classrooms were found to engage in activities as a part of self-development, learning, and psychological well-being while those in

controlling-style classrooms performed in class feeling pressured or obligated (Reeve, 2009; Chen & Vibulphol, 2019). Therefore, learners with LD should be taught in a style that satisfies their self-development, learning, and psychological well-being, this is because learners' intrinsic motivation (IM) and involvement in classroom activities will be increased when their psychological needs, including autonomy, competence, and relatedness, are fulfilled (Chen & Vibulphol, 2019) as this will be beneficial to learners with spelling difficulties in order to improve their spelling proficiency through provision of learning list of words.

## **3. Extrinsic Motivation Strategy (EMS)**

Teachers need to create conducive extrinsic motivation that may enhance students' intrinsic motivation (Ahmed & Al-Ward, 2020). It is an extrinsic motivation when learners are motivated only for fear of being punished/lagging behind or getting a reward. What follows up is that learning becomes temporary once there is no such fear or love of a reward. However, sometimes learners start a class with extrinsic motivation alone but subsequently become motivated intrinsically as learning becomes more fun and rewarding. English language teachers have a tremendous role to play in creating an atmosphere for their learners to maximise

both extrinsic and intrinsic motivation. According to Ormrod (2008), behaviourism can benefit those learners:

- Who have previously experienced failure in an academic setting;
- With special need due to developmental delays, learning disabilities, socio-emotional issues or behavioural issues;
- Whom nothing else has worked for them

#### **4. Gamification Strategy (GS)**

Gamification is a pedagogical strategy that favours student engagement and motivation (Rincon-Flores, Mena & Lopez-Camacho, 2022:1). It helps develop and strengthen transversal skills such as collaboration, self-regulation of learning, and creativity (Caponetto, Jeffrey, & Ott, 2014; Dichev & Dicheva, 2017). Gamification involves the use of relevant computer applications compatible with both PC and phones, many of which are in the form of games that are language-activity-friendly and can motivate learners with LD to be more motivated in English language classroom. This strategy can help different learners with learning difficulties be it spelling, reading, writing and calculation.

#### **5. Direct Instruction Strategy (DIS)**

In this strategy, the teacher is very explicit about what students are to learn. The learners are given very clear and straightforward

instruction whereas the teacher monitors them to accomplish a task and at the end of the lesson provides constructive feedback. This strategy can benefit learners who struggle with spelling and reading difficulties. According to Namkung & Peng (2018:5), this strategy involves:

- A focused lesson, in which complex skills are broken down into smaller, targeted parts,
- A clear explanation of the targeted skill,
- Teacher-led step-by-step demonstrations (I do), guided practice (we do) with corrective feedback,
- And independent practice (you do) with immediate feedback.

DIS has been found as an alternative way of teaching learners with intellectual disabilities (Swanson, 2001; Alexander, 2006; Blik, Harskamp & Naayer, 2016). This approach is also suitable for learners with very low problem-solving skills (Kroesbergen, 2002; Reid & Lienemann, 2006; Melzer, 2007; Blik, Harskamp & Naayer, 2016). Namkung & Peng (2018) argues that DIS is effective for students with learning disabilities because they often do not develop efficient learning strategies on their own.

## **6. Strategy Instruction (SI)**

Strategic instruction is also important to learners with LD; according to Namkung & Peng (2018:5), it includes:

- Teaching study skills (e.g., note-taking, summarizing, and self-questioning),
- Mnemonics to assist with remembering and recalling a specific strategy,
- And academic content-specific strategies, such as using self-regulated strategy development to improve writing.

## **7. Cooperative Learning Strategy (CLS)**

According to (Dörnyei & Ushioda, 2011:27), cooperative learning strategy is a generic name for a number of related methods of organizing classroom instruction in order to achieve common learning goals via cooperation and they make it clear that in a cooperatively organized classroom, students work in small groups in which each member shares responsibility for the outcome and is equally rewarded which can be contrasted to a 'competitive' structure in which students work against each other and only the best ones are rewarded. Therefore, collaborative classroom activities among regular students demonstrate higher academic performance (Valiente, Lemery-Chalfant & Reser, 2008; Brophy, 2010). However, learners with disabilities were reported with low levels of participation in classroom collaborative

activities (Bradley, Doolittle & Bartolotta, 2008; Chung, Cater & Sisco, 2012). The students' lack of participation in collaborative tasks could be due to low motivation towards academic tasks or could be associated with reasons other than motivation and their lack of participation could also be due to the severity of their disabilities (Simeonsson, Carlson, Huntington, McMillen, & Brent, 2001). And impairment in social interaction (Weiss & Harris, 2001), or lack of availability of assistive technology needed to enable their participation (Lee & Templeton, 2008). Collaborative classrooms could be generally suitable for those learners with social-emotional difficulties with the teachers' close monitoring to improve their situations.

### **The Potential Implications of Strategies for Learners with LD**

It is worthy of note that the above strategies are essential in fostering learners' motivation and therefore, school administrators may need to provide additional resources to ensure that teachers are able to implement the strategies effectively as this will inevitably be a motivating factor for learners with LD to be motivated in English language classrooms. Erdil-Moody & Thompson (2020:387) posit that learning motivation has long been demonstrated to have a substantial impact on

second language acquisition. It is obvious that L2 teachers play a major role in learner motivation with their use of motivational strategies in classes (Dörnyei, 2001; Dörnyei & Kubanyiova, 2014; Erdil-Moody & Thompson, 2020). However, motivational strategies vary in their effectiveness and appropriateness in different EFL contexts (e.g., Dörnyei, 2001; Guilloteaux & Dörnyei, 2008; Erdil-Moody & Thompson, 2020).

Keeping teachers' pedagogical practices in L2 classes as the focus of investigations, recent research guided by Dörnyei's (2001) Motivational Teaching Practice in the L2 Classroom (MTP) model has highlighted results indicating that the motivational strategies that teachers use in the L2 classroom have a strong positive impact on student's motivation (e.g., Dörnyei & Kubanyiova, 2014; Guilloteaux & Dörnyei, 2008; Erdil-Moody & Thompson, 2020). Learners with LD lack IM, they are often unmotivated and demotivated. Unmotivated learners with LD are here defined as those language learners with LD that lack IM in learning the language. While demotivated learners are those with LD that lose motivation because of a lack of EM. Both of them need to be re-motivated by using appropriate strategies that are fun and rewarding.

## **Conclusion**

In conclusion, this paper explores the implications of motivation in teaching English language to students with LD. It looks at the importance of creating an environment in which students can feel motivated to learn English, and how this can help them overcome their learning difficulties. It also discusses the different strategies that can be employed to support learners with LD, including scaffolding instruction strategy (SIS), autonomy and controlling strategy, extrinsic motivation strategy (EMS), gamification strategy (GS), direct instruction strategy (DIS), strategy instruction (SI) and cooperative learning strategy (CLS). Therefore, the paper provides an in-depth review of motivation in teaching English language to students with LD thereby examining the various ways in which motivation can be used to improve student learning, as well as the benefits of motivating students. Finally, it explores the implication of creating an environment in which students can feel motivated to learn English, and how this can help them overcome their learning difficulties.

## **Recommendations**

This paper provides the following as major recommendations:

- a. English language teachers need to be aware of the different motivational levels among their learners with LD and ensure that they find ways to motivate and create an environment that can encourage them to progress and perform better in the English language classrooms.
- b. The strategies for motivating learners with LD have positive impacts on learners' motivation and academic achievement.
- c. Learners with LD should be taught using strategies that not only initialize but also nurture their internal motivation in order to enhance sustainable learning of English in and outside the classroom.
- d. To be successful, teachers must take into account the psychological needs of learners with LD.
- e. There is need for the teachers to make sure that unmotivated and demotivated learners are identified and re-motivated.

FINAL DRAFT BJEA VOL 9 NO 3



## REFERENCES

- Ahmed, W.A. & Al-Ward, A.S. (2020). Motivational teaching practices from EFL learners' perspective at tertiary level in Yemen. *Indonesian Journal of Applied Linguistics*, 9(3), 695-703.
- Alfrough, T., Rahimi, A. & Zarafshan, M. (2014). Foreign language learning demotivation: A construct validation study. *Procedia-Social and Behavioral Sciences*, 136, 49–53.
- Alexander, P. A. (2006). *Psychology in learning and instruction*. New Jersey: Pearson Education.
- American Psychology Association, (2013). *Diagnostic and statistical manual of mental disorders*, 5<sup>th</sup> edition. Washington, DC.
- Benson, P. (1997). The philosophy and politics of learner autonomy. In P. Benson and P. Voller (eds) *Autonomy and Independence in Language Learning*. London: Longman, 18-34.
- Blik, H., Harskamp, E.G. & Naayer, H.M. (2016). Strategy instruction versus direct instruction in the education of young adults with intellectual disabilities. *Journal of Classroom Interaction*, 51(2), 20-35.
- Bradley, R., Doolittle, J. & Bartolotta, R. (2008). Building on the data and adding to the discussion: The experiences and outcomes of students with emotional disturbance. *Journal of Behavioral Education*, 17(1), 4-23.
- Brophy, J.E., (2010). *Motivating students to learn* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates. doi:10.4324/9781410610218
- Caponetto, I., Jeffrey, E. & Ott, M. (2014). Gamification and education: A literature review. *Proceeding European Conference Games Based Learning*, 1, (50-57).
- Chen, X., & Vibulphol, J. (2019). An exploration of motivational strategies and factors that affect strategies: A case of Chinese EFL teachers. *International Education Studies*, 12(11). Published by Canadian Center of Science and Education.
- Chung, Y.C., Cater, E.W. & Sisco, L.G. (2012). Social interactions of students with disabilities who use augmentative and alternative communication in inclusive classrooms. *American Journal on Intellectual and Developmental Disabilities*, 117(5), 349-367.
- Dichev, C. & Dicheva, D. (2017). Gamifying education: What is known, what is believed and what remains uncertain: A critical review. *International Journal of Educational Technology Higher Education*, 14(9).
- Dörnyei, Z. (2001). (Ed) *Motivational strategies in language classroom*. Cambridge University Press.
- Dörnyei, Z. & Ushioda, E. (2009). *Motivation, language identity and the L2 self*. Bristol: Multilingual Matters.
- Dörnyei, Z. & Ushioda, E. (2011). *Teaching and researching motivation*, 2nd ed. Harlow: Longman.
- Dörnyei, Z. & Kubanyiova, M. (2014). *Motivating learners, motivating teachers: Building vision in the language classroom*. Cambridge: Cambridge University Press.
- Erdil-Moody, Z. & Thompson, A.S. (2020). Exploring motivational strategies in higher education: Student and instructor perceptions. *Eurasian Journal of Applied Linguistics*, 6(3).
- Fulk, B.M., et al. (1998). Motivation and self-regulation: A comparison of students with learning and behavior problems. *Remedial and Special*

- Education*, 19(5), 300-309. doi:10.1177/074193259801900506
- Gardner, R.C. (2010). *Motivation and second language acquisition: The socio-educational model (Vol. 10)*. New York: Peter Lang.
- Green, S.K. (2002). Using an expectancy-value approach to examine teachers' motivational strategies. *Teaching and Teacher Education*, 18, 989–1005.
- Guilloteaux, M.J. & Dörnyei, Z. (2008). Motivating language learners: A classroom-oriented investigation of the effects of motivational strategies on student motivation. *TESOL Quarterly*, 42(1), 55-77. Doi:10.1002/j.1545-7249.
- Kikuchi, K. (2015). *Demotivation in second language acquisition*. Bristol: Multilingual Matters.
- Kirk, A.S. & Chalfant, J.C. (1984). *Academic and developmental learning disabilities*. Newtown: Allyon & Bacon.
- Kirk, A.S. & Gallagher, J.J. (1986). *Educating exceptional children*. Boston: Hilton Mifflins.
- Kroesbergen, E.H. (2002). *Mathematics education for low-achieving students: Effects of different instructional principles on multiplication Learning*. Doetinchem: Graviant.
- Jonassen, D.H. (1991). Evaluating constructivist learning. *Educational Technology*, 31(9), 28- 33.
- Lee, H. & Templeton, R. (2008). Ensuring equal access to technology: Providing assistive technology for students with disabilities. *Theory into Practice*, 47(3), 212-219.
- Lerner, J. (1997). *Learning disabilities: Theories, diagnosis and teaching strategies*. Boston: Houghton Mifflin.
- Melzer, L. (ed.) (2007). *Executive function in education: From theory to practice*. Guilford Publications.
- Messa, R.L. (2001). Teaching learners with mild disabilities. *Integrating Research and Practice, 2nd Edition*. Belmont, CA: Wads Worth.
- Murphy, J.J. (1999). Common factors of school-based change. In: Hubble, M., Duncan, B. and Miller, S., eds., *The Heart and Soul of Change: What Works in Therapy*. Washington, D.C.: American Psychological Association, pp. 361–386.
- Namkung, J. & Peng, P. (2018). Learning disabilities. In *The Sage Encyclopedia of Educational Research, Measurement, and Evaluation*. <http://dx.doi.org/10.4135/9781506326139.n385>
- Ormrod, J. (2008). *Human Learning* (5<sup>th</sup> ed.). New Jersey, NY: Person Education, INC.
- Palmer, D. (2005). A motivational view of constructivist-informed teaching. *International Journal of Science Education*, 27, 1853–1881.
- Pawlak, M. (2012). Individual differences in language learning and teaching: Achievements, prospects, and challenges. Pawlak (ed) *Second Language Learning and Teaching*. London: Springer Heidelberg New York Dordrecht.
- Reeve, J. (2009). Why teachers adopt a controlling motivating style toward students and how they can become more autonomy supportive. *Educational Psychologist*, 44(3) 159-175.
- Reid, R. & Lienemann, T.O. (2006). *Strategy instruction for students with learning disabilities*. New York: Guilford Press.
- Richards, J. C. & Schmidt, R.W. (2013). *Longman dictionary of language teaching and applied linguistics*. Routledge.

- Richard, R. (1994). The source for dyslexia and dysgraphia. East Moline. II: Lingun System.
- Rincon-Flores, E.G., Mena, J. & Lopez-Camacho, E. (2022). Gamification as a teaching method to improve performance and motivation in tertiary education during covid-19: A research study from Mexico. *Educational Science*, 12(49). <https://doi.org/10.3390/educsci12010049>
- Rodgers, W. M. & Loitz, C.C. (2009). The Role of motivation in behaviour change: How do we encourage our clients to be active? *ACSM's Health & Fitness Journal*, 13(1), 7-12.
- Scheidecker, D. and Freeman, W. (1999). *Bringing out the best in students: How legendary teachers motivate kids*. Thousand Oaks, CA: Corwin Press.
- Shalev, R.S. (2008). Developmental dyscalculia. *Journal of Child Neurology*, 19, 765-771.
- Sideridis, G.D., Morgan, P.L., Botsas, G. & Padeliadu, D.F. (2006). Predicting LD on the basis of motivation, metacognition, and psycho pathology: An ROC analysis. *Journal of Learning Disabilities*, 39(3), 215-229. doi:10.1177/00222194060390030301
- Simeonsson, R.J., Carlson, D., Huntington, G.S., McMillen, J.S. & Brent, J.L. (2001). Students with disabilities: A national survey of participation in school activities. *Disability & Rehabilitation*, 23(2), 49-63.
- Sivan, E. (1986). Motivation in social constructivist theory. *Educational Psychologist*, 21(3).
- Strandridge, M. (2002). Behaviourism. In M. Orey (ED.), *Emerging Perspectives on Learning, Teaching, and Technology*. Retrieved from <http://projects.coe.edu/epltt/>
- Swanson, H.L. & Deshler, D. (2003). Instructing adolescents with learning disabilities: Converting a meta-analysis to practice. *Journal of Learning Disabilities*, 36(2), 124-135.
- Taura, U.A. (2014). The plight of the learning disabled children in Nigerian schools: Implication for inclusive education. *National Journal of Special Needs Education (NJSNE)*, 1(1), 45-52.
- Umar, A.U. (2023). Effects of direct instruction approach on spelling proficiency of pupils with spelling difficulties in Gobirawa Primary School, Fagge, Kano State. Unpublished M.Ed. Dissertation. Bayero University, Kano. Department of Special Education.
- Valiente, C., Lemery-Chalfant, K. & Reser, M. (2008). Prediction of children's academic competence from their effortful control, relationships, and classroom participation. *Journal of Educational Psychology*. 100(1). 67-77.
- Vibulphol, J. (2016). Students' motivation and learning and teachers' motivational strategies in English classrooms in Thailand. *English Language Teaching*, 9(4) <http://dx.doi.org/10.5539/elt.v9n4p64>
- Weiss, M. J. & Harris, S. L. (2001). Teaching social skills to people with autism. *Behavior Modification*, 25(5), 785-802.
- Williams, M. & Burden, R. (1997). *Psychology for language teachers*. Cambridge: Cambridge University Press.

## Influence of Parental Involvement and Career Maturity on Academic Achievement among Secondary School Students in Kano, Nigeria

By

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### ABSTRACT

The study examines the influence of parental involvement and career maturity on academic achievement among senior secondary school students in Kano, Nigeria. The specific objectives of the study include to determine parental involvement and career maturity predict academic achievement and whether parental involvement and career maturity differ based on school types and career pathways. The study used a sample of 400 senior secondary school II (SSII) students from 28 private and public secondary schools drawn through stratified random sampling technique. Parental involvement scale, career maturity-altitudinal scale with satisfactory psychometric properties were used in generating data while academic achievement was obtained from academic record of students. Data was analysed using inferential statistics comprising of Multiple Regression Analysis (MRA), Analysis of Variance (ANOVA) and Independent t-test. The results show that parental involvement and career maturity are not predictors of academic achievement, parental involvement vary between private and public school students with students of private schools having better parental involvement than their counterpart in public schools; there is significant difference in parental involvement based on career pathways (science, commercial and arts) with science students having better parental involvement than others and finally no significant difference in career maturity among students from the three career pathways. It is concluded that parental involvement is not instrumental to school success among secondary school students in Kano Metropolis and students are yet to make career choice. It is recommended that parents are encouraged to improve their involvement in the education of students in other career pathways and students' intervention should be provided to help students make career choice.

**Keywords:** *parental involvement*, career maturity, academic achievement, students, secondary school

### Introduction

The multidimensional contributions of parents in the educational life of their children cannot be underestimated. Home remains fundamental to student's success in school as it is the origin of academic development, beliefs and approaches towards education which is then transferred to school (Vandenberg, 2008). Development of cognition relies heavily on

the parental contribution into academic affairs of a child. Parents serve as role model to their children as they set the path that children follow. However, parents get involved in educational pursuit of the children monitoring of school work, provision of material support, attending parent-teachers conferences etc all for the purpose of helping the children to

accomplish the academic tasks. . Parents motivate their children for better school outcomes being. an essential factor for excellent outcome (Love, Love & Northcraft, 2010). Students that are motivated tend to have strong interest, gain knowledge of the course contents of and necessary skills beyond expectation (Bergin, 1999).

Beside, parental factor as a key driver of positive school outcome, career related variables play vital role in promoting school success among adolescents. Carer development constructs describes the manner in which individual makes appropriate choices towards developing a career. Accuracy of self-knowledge and career information are necessary inputs required for informed career decision making that leads to the attainment of congruence between the personality of individual and that of the environment. This congruence enables individual to develop an identity which Holland, Daigher and Power (1982) referred to vocational identity defined as "possession of a clear and stable picture of one's goal, interest and talent".

Career-related variables help individuals to make choices and arrive at a particular career choice decision. What is also important apart from career choice is the individual's imagined effect of engaging in a career popularly referred to career

outcome expectation. Evidences shown that career related variables interact to provide good fit and are significantly and positively associated with academic achievement (Dennis (1998). Adolescents with high GPA are associated with higher level career maturity and low GPA with adolescent students with relatively low GPA. In addition, adolescents with high intellectual capacity scored higher in career maturity scales (Wesbrook, Sandful and Donnelly, 1990).

Despite the significant contributions of parental and career related factors toward a positive school outcome, recommendations from the 2-Day National Consultative Summit on Education organised by the Federal Ministry of Education (2011) failed to recognised these fundamental factors in efforts to find solutions to the lingering problem of poor academic accomplishment of secondary school students in Nigeria for consecutive years that deter substantial number of students to further education at institutions of higher learning, brings academic traffic jump and congestions in national examinations (e.g. JAMB) as well as intense competition for admission into higher institutions of learning. According to the report from 2 day consultative summit, poor synergy between examination bodies and federal ministry of education regarding public examination, facilities for

conducting and techniques for writing examination are not adequate, inconsistency in government policies, education politicization in some state and poor implementation of National Policy on Education (NPE); inadequate coverage of syllabus, deficiencies in teaching and poor supervision were the factors responsible for poor school outcome (FME, 2011).

It is evident that, the summit recommendations focus more on the issues related to the policies and system ignoring home and career development factors as essential among other factors that significantly contribute to child educational success. Therefore the purpose of the study is to examine parental and career-related factors as predictors of school outcome among secondary school students, in Kano state. The outcome of the study will be useful to parents and school as it will further portray the significance of commitment and involvement in child education being among the critical success factor of their children in school toward accomplishment among students.

## **Literature**

### **Academic Achievement**

Academic achievement is fundamental in the educational process. Lent, Brown and Hackett (2000) maintains that academic achievement is the central mechanism through which adolescents get to know

their potentials, abilities and competencies which are integral components towards developing one's career aspirations. The relevance of academic achievement in school as an integral part of a career development process cannot be underestimated as it is a vital element in forming self-image (Erickson, 1968), a key factor that determines attainment educational aspiration and utilization of post-secondary educational opportunities (Looker, 2002), and plays as a predictor of career aspiration of secondary school adolescents (Salami, 2008). Ning & Downing (2010) assert that academic excellence is measured through which school grades and standardized test scores and remains a significant predictor of academic achievement.

Studies report the relationship between academic achievement, genders and age of the student. Linver, Davis-Kean and Eccles (2002) found that young women have slightly higher grades than young men. Gibb, Fergusson and Horwood (2008) examined male and female school achievement and a significant difference was found between gender while the effect size was typically small. Similarly, Barca (2003) found that gender moderates the relationship between age and academic achievement among sixth graders. Jabor, Machtmes, Kungu, Buntat and Nordin

(2011) found that early adolescents (below 19) have higher average GPA than late adolescents (19 and above) while female had higher GPA score in mathematics than male counterparts. However, the effect size is small in among age group and gender. Abubakar and Oguguo (2011) examined age and gender as predictors of academic achievement among mathematics and science students in the college and a linear relationship between age-CGPA and gender-CGPA was found and gender was a better predictor than age.

### **Parental involvement**

Parental involvement is one of the essentials for educational improvement is closer link between home and school (Brinkley, 1992). Review of Educational Research (1997) identified three major factors of parental involvement in the education of their children.

- (1) Beliefs about what is important, mandatory and tolerable to do on behalf of the children
- (2) The degree to which parents believe that they have positive influence on the education of their children
- (3) Perceived that the children and school in which children attend want them get involved.

Traditionally, parental involvement in education is perceived to deals with contribution to home-based academic

activities (e.g. homework), school-based (attending PTA meetings) (Olatonye and Ogunkola, 2008) and in modern time, parental involvement manifest in the parents interest in school activities and active participation in school work of children (Uzoehina and Obidike, 2008). Akinwunmi (2004) maintains that a major factor that plays a significant role towards improving child effectiveness through quality education is the parents' school involvement. Studies (e.g. Domina 2005) have proven that attending meetings and conferences, volunteering and checking homework positive relate to academic achievement.

Besides involvement in home and school based activities, material support is another dimension of involvement that has strong affect in education of children. Desforges and Abouchaar (2003) argue that parental involvement is negatively affected with material deprivation. Parental involvement decreases with increase deprivation which is associated with lower social class families. A great deal of different in parental involvement is accounted by deprivation between the social classes. Sacker, Schoon and Bartley (2002) found that the material effect of material deprivation on achievement and adjustment of adolescents at the age of 16 doubles that parental involvement and conclude

‘significantly undermining the positive effects of parental involvement on children’ (p.871).

One of the immediate outcomes of parental involvement is academic achievement. William and Jeynes, (2013) meta-analyzed 77 studies consisting of over 300, 000 students out of which 36 (47%) involved data from secondary school. The findings show that parental involvement positively correlates with academic achievement and are consistent in all the outcome measures involving grades, standardized test score, teacher rating etc. However, the study also discovered that parental involvement requires large investment of time for reading and communication with a child in one hand and parental style and expectation on the other hand have great impact on student educational outcome better than having household rules, parental attendance and participation at school. Shute, Hansen, Underwood & Razzouk (2011) reported that parental involvement and academic achievement correlates via parents and children communication about school activities and plans; high expectation and or aspiration for children school and authoritative style of parenting. However, positive correlation between parental involvement and academic achievement has also been reported in various studies (Bridgeland, (2008), Herrold (2008),

Bouffard and Weiss (2008), Marzano (2008) etc

### **Career Maturity**

Career maturity involves “the ability to make independent and responsible career decisions based on the thoughtful integration of the best information available about oneself and the occupational world” (Reardon, Lenz, Sampson & Peterson, 2000 p. 17). Two dimensions of career maturity are identified comprising of attitude and cognitive dimensions (Savickas, 2002). The attitudinal dimension is perceived as the change in individual competencies to choose an efficient occupational choice whether one continues with the chosen career while the cognitive dimension on the other hand, stands for awareness that one needs to make a decision and one's attitude toward vocational choice (Savickas, 2005). However, the attitude dimension of career maturity is associated with definite and realistic career choices as well as the consistency of the choice over time. Matured individuals attitudinally tend to be intelligent, better adjusted, high achievers and more successful in jobs (Crites, 1978); adolescents that successfully complete the development tasks are likely to achieve greater maturity in later life (Zunker, 2002). and individual with competences in knowledge about the world of work;



abilities and skills make the right career decision (Super, Savickas, & Super, 1996). Seligman (1994) provides a broader concept of maturity to comprise of increasing self-awareness, knowledge of relevant alternatives and increasing congruence between self-image, abilities, interests, values, personality) as well as career goals. Other components of career maturity identified include increasing realism for career goals; competence for career planning and success, improving career-related attitudes (achievement orientation, independence, planfulness, commitment, motivation, self-efficacy), and success and satisfaction with one's life career development (Seligman (1994).

Studies have shown that career maturity correlates with academic achievement. Career maturity and academic achievement exists largely due to the significant level of self-awareness, knowledge of occupation and developed planning potentials (Zunker, 2002), career maturity is among the predictor variables that significantly influences school achievement (Yon, Joeng & Goh, 2012), that students with high intellectual capacity scored higher in career maturity scales (Wesbrook, Sandful & Donnelly, 1990) and career maturity correlates among talented with academic achievement, career interest and academic

interest among senior high school talented students in science and math

### **Methodology**

The study used senior secondary school II students in Kano metropolis being a geographical zone with large number of students in the state. Students of 28 secondary schools 18 public and 10 private school constitutes the population of the study with an estimated population of over 7, 000. The study used 5% margin error approach drew 400 samples Cochran (1977) maintains that "one method of determining sample size is to specify the margins of error for the items that are regarded as most vital to the survey. An estimation of the sample size needed is first made separately for each of these important items". He argued that 400 samples are adequate enough to take care of non-responsive bias and result of the survey can be generalized to the population within the limits of random error.

Stratified random sampling procedure was used in selecting the representative of the population based on career pathways-science, commerce and arts career pathways to form the strata. Stratified random enables the researcher to identify the subset of the population being a representative of the general population being under investigation. The study focuses on SSII students as mentioned

earlier, therefore, the population of these students was divided across the three career pathways (Science, Commerce and Arts) forming the groups.

In using the stratified random sample, the sample size was divided by the strata (Creswell, 2008). The use of stratified random sampling is very relevant due to different career pathways being pursued by students, which make them distinct from one another. Sekaran & Bougie (2010) contend that stratified random sampling remains the most efficient and a good choice when differentiated information is required regarding various strata within a given population that differ clearly in their respective parameters.

#### ***Parental Involvement Scale***

Parental Involvement Scale (PIS) developed by Régner et al. (2009 as cited in Read (2010) was used in collecting data on parental involvement. The instrument measures perceptions about the parental involvement in academic life of a child. The instrument contains 16 items that tapped the perception about the involvement of parents in the education of children. The scale contains two subscales, supportive and monitoring constructs. The instrument has a reliability of .75 for monitoring and .73 for supporting. The scales of the instrument range from never as '1' to '5' as always.

#### **(1) Career Maturity**

The Attitude Scale of the CMI-R consists of 25 diverse statements with an overall score from 1 to 25 for career maturity attitude. The instrument has a scale of agree and disagree. The highest score is an indication of highly developed attitudes toward career decisions. Individuals that score above 20 are well prepared for career planning activities and advance exploration techniques; individual with scores of 16-19 are considered to be developing at a normal pace while individuals with score 15 and lower are yet to be ready to make choice of career and need career intervention (Busacca & Taber, 2002).

#### **Data Analyses**

##### **Results**

The data were analysed and results show that the respondents have an average age of 16.55 (SD = 1.06) indicating that majority of the respondents are within early adolescent stage. In terms of gender, majority were female accounting for 56% while male counterpart accounted for the remaining 44%. However, the descriptive results revealed that both parental involvement and career maturity have satisfactory average total means (M =3.82 and 5. 80; SD = .682 and 2.03). The result of career pathways of the respondents revealed that students from science career pathways were the majority accounting for 183 representing 41%, followed by Arts

students accounting for 121 representing 30% while the least were students of commercial pathways that attracted 117 representing 29%. Meanwhile, in terms of school type, majority of the respondents were from public schools accounting for 324 representing 81% while the remaining 76 that accounted for 19% were from private school,

**Parental Involvement and Career Maturity as Predictors of Academic Achievement**

Table 1 indicates the result of Multiple Regression Analysis (MRA) for the prediction of academic achievement among students. The predictor variables were parental involvement and career maturity. The result shows that an insignificant multiple regression analysis was found ( $F = 0.13$ ,  $p = .008$ ), indicating that parental involvement and career maturity are not predicting school academic success in the study.

**Table 1: Multiple Regression Analysis for the Prediction of School Academic Success**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	75.388	2.111		35.716	.000
Parental Involvement	.024	.428	.003	.056	.956
Career maturity	-.299	1.982	-.008	-.151	.880

a. Dependent Variable: School Academic Success,  $F = 0.13$ ,  $R = .008$

**Parental Involvement and Career Maturity based on the School Type**

Table 2 presents independent t-test that examine whether parental involvement and career maturity among students based on the school type. The results show that parental involvement differ between students of private and public schools ( $t(398) = 2.41$ ,  $p = .016$ ) indicating that parental involvement vary significantly between the students in different schools. However, descriptive statistics revealed

that students of private schools enjoy better parental involvement ( $M = 3.99$ ;  $SD = .510$ ) that their counterparts in public school ( $M = 3.78$ ;  $SD = .711$ ).

Meanwhile, the results for Career Maturity show that no significant difference was found between students in private and public schools ( $t(398) = .877$ ,  $p = .381$ ) indicating that students of both private and public schools have the same degree of Career Maturity.

**Table 2: Mean, SD, t and p Values for the Difference PI and CM between public and private**

	School type	N	Mean	Std. Deviation	t	p
Parental Involvement	Private	76	3.9967	.51071	2.41	.016
	Public	324	3.7882	.71177		
Career Maturity	Private	76	.6568	.12771	.877	.381
	Public	324	.6404	.15152		

**Parental Involvement and Career Maturity based Career Pathways**

Table 3 demonstrates the results of one way ANOVA for the difference in parental involvement and Career Maturity among students in science, commercial and arts

career path ways. The results show that a significant difference was found among students in 3 different career pathways ( $F(397) = 5.393, p = .005$ ), indicating that parental involvement differ based on career pathway.

**Table 3: One-way ANOVA for the Difference in Parental Involvement and Career Maturity among students on Pathways**

		Sum of Squares	df	Mean Square	F	Sig.
Parental Involvement	Between Groups	4.917	2	2.458	5.393	.005
	Within Groups	180.958	397	.456		
	Total	185.875	399			
Career Maturity	Between Groups	.060	2	.030	1.393	.249
	Within Groups	8.596	397	.022		
	Total	8.656	399			

However, post hoc results show that significant difference was between students in science and those in commercial and arts career pathways. Descriptive statistics revealed that science students enjoy more parental involvement than their counterparts in commercial and arts pathways ( $M = 3.96, 3.73$  and  $3.73$ ;  $SD = .618, .684$  and  $.735$ ).

Meanwhile, the Post hoc result for Career Maturity revealed that no significant difference in level of career maturity among students in science, commercial and arts career pathways. The descriptive statistics further support the findings ( $M = .635, .635$  and  $.662$ ;  $SD = .144, .142$  and  $.154$ )

**Table 4: One-way ANOVA Descriptive Statistics**

Variable	Pathways	N	Mean	SD
Parental Involvement	Science	162	3.9622	.61869
	Commercial	117	3.7361	.68481
	Arts	121	3.7366	.73559
	Total	400	3.8278	.68253
Career Maturity	Science	162	.6353	.14456
	Commercial	117	.6356	.14257
	Arts	121	.6621	.15474
	Total	400	.6435	.14729

### Discussions and Conclusions

The descriptive results for parental involvement indicates satisfactory result revealing parents are adequate involved in education of their children while that of career maturity indicates that students are developing at a normal pace having scores of 16-19 (Busacca & Taber, 2002).

The findings of the study further indicate that parental involvement is not predicting academic achievement of secondary school students in Kano taking into consideration the results ( $\beta = .003$  and  $-.008$ ;  $p = .958$  and  $.880$ ), indicating insignificant relationship between parental involvement and academic achievement. The finding of the study is consistent with Jethro & Aina (2012), Ibrahim, Jamil & Abdullah (2012), Fabeminiyi (2011), Apebdende, Akpo & Ife (2010), Bridgeland (2008) who also found insignificant relationship. The inconsistent result led to the conclusion that, parental involvement does not predict adolescents' academic achievement. The finding reveals that parental involvement in

adolescents' education does not predict their academic achievement demonstrating the likelihood that parental involvement is higher in elementary school children than in adolescents' education. The finding suggests that parents need to improve on the level of involvement in education of their children through adequate communication with adolescent children about school activities and plans (Shute et al 2011), affective support in form of enabling home environment that encourage learning thereby expressing expectation (Jethro and Aina, 2012), checking school work and participation in school activities (e.g. PTA meeting) etc.

However, the finding involving career maturity and academic achievement is also not positive, indicating that career maturity does not predict academic achievement. The finding is consistent with Khamsiah (2006) and inconsistent with other studies e.g. Hong (2002) and Yon, Joeng and Goh (2012). The finding reveals that career maturity is not a significant predictor of

academic achievement. However, the low level of career maturity based on the descriptive results signifies that students are yet to make a career choice and need intervention. Based on the descriptive result provides justification for career maturity not significantly predicting academic achievement. Taking into cognizance, the

average age of the students (16.58 years, SD =1.09), it is clear that the students are within the early adolescence stage, which Ginzberg (1951) refers to tentative (11-17 years) characterized by recognition of one's interest, abilities.

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REFERENCES

- Abubakar, R. B. & Oguguo, O. D. (2011). Age and gender as predictors of academic achievement of college mathematics and science students. A paper presented at International Conference on Teaching, Learning and Change conference organised by the International Association for Teaching and Learning (IATEL)
- Akinwunmi, S.T. (2004) Parental involvement in education: issues and prospects. In J. B. Babalola and S. O. Adedeji (Eds.). *Contemporary Issues in Educational Management*. Ibadan: Awemark. Pp. 380 – 384.
- Barca, D. (2003). The relationship of age and gender of elementary school children to academic achievement. *ETD Collection for Pace University*. Paper AAI3095127 . Accessed on the 17<sup>th</sup> January, 2013 <http://digitalcommons.pace.edu/dissertations/AAI3095127>
- Bergin, D. A. (1999). Influences on classroom interest. *Educational psychologist*, 34(2), 87-98.
- Bouffard, S. & Weiss, H. (2008). Thinking Big: A New Framework for Family Involvement Policy, Practice, and Research. *The Evaluation Exchange* , XIV(1&2), 2–5. Retrieved online from [www.hfrp.org](http://www.hfrp.org).
- Bridgeland, J., DiIulio, J., Streeter, R., & Mason, J. (2008). *One dream, two realities: Perspectives of parents on America's high schools*. Washington, DC: Civic Enterprises.
- Brinkley, L. (1992. August/September). Principles of parents' involvement. *Reading Today*, p, 13.
- Busacca, L. A., & Taber, B. J. (2002). The Career Maturity Inventory-Revised: A revised preliminary psychometric investigation. *Journal of Career Assessment*, 10, 441-455.
- Creswell, J. W. (2008). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (3<sup>rd</sup> ed.). Upper Saddle River, New Jersey: Pearson Prentice Hall, Inc
- Crites, J. O., (1978). *Career Maturity Inventory: Administration and use manual*. Monterey, CA: McGraw-Hill.
- Desforjes, C. & Abouchaar, A. (2003). The Impact of Parental Involvement, Parental Support and Family Education on Pupil Achievements and Adjustment: A Literature Review. Department for Education and Skills, *Research Report RR433*. Available at [www.dfes.gov.uk/research](http://www.dfes.gov.uk/research)
- Domina, T. (2005). Leveling the home advantage: Assessing the effectiveness of parental involvement in elementary school. *Sociology of Education*, 78, 233–249.
- Erickson, E. (1968). *Identity: Youth and Crisis*. New York: Norton.
- Federal Ministry of Education (FME) (2011) National Summit on Education Leadership Newspaper Friday, 16 December 2011
- Gibb, S. J., Fergusson, D. M. & Horwood, L. J (2008). Gender differences in educational achievement to age 25. *Australian Journal of Education*, 52(1), 63–80
- Herrold, K., & O'Donnell, K. (2008). *Parent and family involvement in education, 2006-07 school year, from the national household education surveys program of 2007*
- Jabor, K. T., Machtmes, K., Kungu, K., Buntat, Y. & Nordin, M. S. (2011). The Influence of Age and Gender on the Students' Achievement in Mathematics. 2011 International Conference on Social Science and Humanity, Singapore.
- Jeynes, W. (Ed.). (2013). *Family Factors and the Educational Success of Children* (2<sup>nd</sup>ed.). Routledge. <https://doi.org/10.4324/9781315877426>

- Lent, R. W., Brown, S. D., & Hackett, G. (2002). *Social Cognitive Career Theory*. In D. Brown & Associates (Eds.), *Career choice and development* (4th ed., pp. 255 - 311). San Francisco: Jossey-Bass.
- Linver, M. R., Davis-Kean, P. & Eccles, J. E. (2002, April). *Influences of Gender on Academic Achievement*. Presented at the biennial meetings of the Society for Research on Adolescence, New Orleans, LA. Accessed on 17<sup>th</sup> January, 2013 [http://www.rcgd.isr.umich.edu/it/New/sra02\\_fullpaper.doc](http://www.rcgd.isr.umich.edu/it/New/sra02_fullpaper.doc)
- Looker, E.D. (2002), Why Don't They Go on? Factors Affecting the Decisions of Canadian Youth Not to Pursue Post-Secondary Education. Millennium Scholarship Foundation Publication, Montreal, Canada.
- Love, E. G., Love, D. W., & Northcraft, G. B. (2010). Is the end in sight? Student regulation of in-class and extra-credit effort in response to performance feedback. *Academy of Management Learning & Education*, 9, 81–97.
- Marzano, R. (2008). *What works in schools?* Alexandria, VA: Association for Supervision and Curriculum Development.
- Ning, H. K., & Downing, K. (2010). Connections between learning experience, study behaviour and academic performance: a longitudinal study. *Educational Research*, 52(4), 457-468.
- Olatonye, R. A. & Ogunkola, B. J. (2008) Parental involvement, interest in schooling and science achievement of junior secondary students in Ogun State. *College Teaching Methods and Styles Journal*, 4 (33).
- Reardon, R. C., Lenz, J. P. & Peterson, G. W. (2000). *Career development and planning: A comprehensive approach*. Belmont, CA: Brooks/ Cole.
- Régner, I., Loose, F., & Dumas, F. (2009). Student's perception of parental and teacher academic involvement: Consequences on achievement goals. *European Journal of Psychology of Education*, 24(2), 263-277.
- Sacker, A., Schoon, I., and Bartley, M. (2002). Social inequality in educational achievement and psychological adjustment throughout childhood: magnitude and mechanisms. *Social Science and Medicine*, 55, 863-880.
- Salami, S. O. (2008). Role of personality, vocational interests, academic achievement and socio-cultural factors in educational aspirations of secondary school adolescents in southwestern Nigeria. *Journal of Career Development International*, 13 (7), 630-647
- Savickas, M. L. (1990). The use of career choice measures in counseling practice. In Watkins, E. & Compebell, V. (Eds.). *Testing in counseling practice*. Hillsdale, NJ: Erlbaum.
- Savickas, M. L. (2005). The Theory and Practice of Career Construction. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 42–70). John Wiley & Sons, Inc.
- Sekaran, U & Bougie, R. (2010). *Research methods for business (5<sup>th</sup> ed.): A skill building Approach*. West Sussex: John Wiley & Sons Ltd.
- Seligman, L. (1994). *Development career counseling and assessment* (2<sup>nd</sup> ed.). California: SAGE Publications, Inc.
- Super, D. E., Savickas, M. L. & Super, C. M. (1996). The life-span, life-space approach to careers In D. Brown, L. Brooks & Associates (Eds.), *career choice and development* (3<sup>rd</sup> ed.). San Francisco: Jossey –Bass
- Uzoehina, G. & Obidike N. D. (2008) Parental involvement in primary education in Anambra State.



- Journal of Childhood and Primary Education*, 4 (2)
- Vandenberg, D. (2008). Education, religion, and a sustainable planet. *Educational Studies*, 43(1), 58–72.
- Yon, K. J., Joeng, J. & Goh, M. (2012). A longitudinal study of career maturity of Korean adolescents: the effects of personal and contextual factors. *Asia Pacific Education Review* 13 (4), 727-739 Accessed on the 16<sup>th</sup> January, 2013 from <http://rd.springer.com/article/10.1007/s12564-012-9232-y>
- Zunker, V. G. (2002). *Career counseling: Applied concepts of life planning* (6<sup>th</sup> ed.). Pacific Grove, CA: Brooks/Cole

FINAL DRAFT BJEAVOL9No3

**A Comparative Analysis of UTME and Direct Entry Biology Education Graduates' Academic Achievement in Federal University of Kashere, Gombe State**

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**ABSTRACT**

This study compared the academic achievement scores of Unified Tertiary Matriculation Examination and Direct Entry graduates of Biology Education in Federal University of Kashere, Gombe state. A causal-comparative research design was used for the study. Two research questions and two hypotheses guided the study. The population of the study consisted all the 42 graduates from Biology Education program of the Department of Science Education from 2017-2020. The entire population of 42 graduates was used as the sample for the research. The data used for the study was graduates' CGPA at graduation. The Research Questions were answered using Mean and Standard Deviation. While the hypotheses were tested using t-test for independent samples Statistic at 0.05 level of significance. The findings showed that a significant difference exist in the academic achievement of the UTME and Direct Entry students. The DE graduates had higher academic achievement scores than the UTME graduates. It further revealed that the graduates do not differ in their academic achievement based on gender. The study concluded that Biology education graduate admitted through DE mode achieved better than their counterparts admitted through UTME. It was recommended among others that universities should consider the implementation of specific measures that would enable them to attract a higher quality of DE applicants to Biology education because they appear to be more psychologically and mentally prepared to take courses in education. Furthermore, Secondary school leavers should be encouraged to acquire some pre-degree course before enrolling to read education related courses.

**Keywords:** *Biology Education, Academic achievement, Unified Tertiary Matriculation Examination, Direct Entry.*

**Introduction**

Science is an important field of study that plays a big role in national development. A

society that embraces scientific literacy promotes rapid growth in all sectors of the

economy, thereby enhancing national productivity and development. Biology being the scientific study of life is considered a natural science with a broad scope but has several unifying themes that tie it together as a single, coherent field (Hillis, Sadava, Hill & Price, 2014). They added that, all organisms are made up of cells that process hereditary information encoded in genes which can be transmitted to future generations.

Biology Education is a branch of science education that deals with the application of principles of education in teaching and learning of Biology (Okenyi, 2012). Okenyi continued that it is the art of teaching and training in order to inculcate or transfer the knowledge of Biology to students. The National Commission for Colleges of Education (NCCE) (2012) outlined the objectives of Biology Education to include: producing knowledgeable, highly motivated, professional and effective teachers of biology who will be able to develop in students an appreciating and understanding of biological process and principles; developing confidence in biology teachers and enhance their ability to adapt to changing situation in science and technologically oriented society; to view biology as a process of inquiry into the living world; to successfully undertake a B.Ed/B.Sc. (Ed) degree programme; to

demonstrate excellence and professional competence in teaching secondary school Biology; to inculcate positive scientific attitude and value in the society and promote positive disposition towards Biology, science and the scientific enterprise; and to apply concepts and methods acquired in new areas of study and in everyday situation. Biology education is therefore an aspect of teacher education that equips pre-service teachers (Biology Education students) with the requisite skills to teach biology at secondary school levels. Teacher education is a program that is directed towards the development of teacher proficiency and competence that would enable and empower the teacher to meet the requirements of the profession and face the challenges therein (Rani, 2017). The National Council for Teacher Education (2018) has defined teacher education as a program of education, research and training of persons to teach from pre-primary to higher education level. Consequently, it can be safe to see teacher education as all the formal and non-formal activities and experiences that help to qualify a person to assume responsibilities of a member of the educational profession or to discharge his responsibilities more effectively. Hence, it can be put forward that the quality of a nation depends upon the quality of its citizens, the quality of its

citizens depends to a large extent upon the quality of their education, and the quality of their education depends upon the quality of their teachers. To this end, the place of quality teacher education in the academic achievement of students in a nation cannot be overemphasized.

Academic achievement is an important variable in an academic system because it provides the basis for measuring academic progress. Umar, Manklibet and Dung (2019) see academic achievement as outcomes that indicate the extent to which a person has accomplished specific goals that were the focus of activities in instructional environments, specifically in schools, colleges, universities. Similarly, Covay and Carbonaro as cited in Yilshik, et al (2020) opined that academic achievement is the extent to which a student has achieved their educational goals in terms of Cumulative Grade Point Average (CGPA) and completion of educational course such as High school and Bachelor's degrees and so on. Adediran, Oyediran and Olufemi (2018) asserted that, academic achievement is one of the major factors considered by employers in hiring workers especially for the fresh graduates. Thus, students have to put the greatest effort in their study to obtain good grades and to prepare themselves for future opportunities in their

career at the same time to fulfil the employer's demand.

Nothing important happens without a cause or in total isolation of associated factors. Hence, the level of academic achievement of students is dependent upon the influence of a number of psychological, sociological, environmental and personal factors (Mushtaq & Khan, 2012). These multifaceted factors could include availability of learning facilities, attitude to learning, students' learning skills, peer influence, family support, students' self-concept, mode of entry, gender (Al-Husaini & Shukor, 2023). In support of the foregoing, Kpolovie *et al.* (2014) opined that the factors affecting students' achievement include; attitude of students toward schooling, interest in learning, study habit, attribution or locus of control, self-efficacy, personality, motivation, creativity, sociability, age, persistence, and intelligence. This study therefore assessed biology education graduates' academic achievement based on their mode of admission and gender.

The academic achievement of students admitted into the universities has been of great concern to all who have interest in the education industry in Nigeria (Lawal, 2014). There are a number of routes through which students gain admission into Universities in Nigeria. Okewole, Olajide,

Agboola (2015) revealed that so far, there are three categories of students being admitted into university undergraduate programs in Nigeria. These include those that pass through the UTME conducted by Joint Admission and Matriculation Board (JAMB), Direct Entry (D.E) admission and those who pass through Remedial Programme (RP) being run by university respectively. According to Osakude (2011), JAMB Direct Entry is mainly for those that already possess a diploma certificate with a minimum of lower credit, Nigeria Certificate in Education with a minimum of merit, IJMB or equivalent and wish to go for a degree programme in the university.

Okewole, et al (2015) asserts that all the three categories of students being admitted into university undergraduate programs in Nigeria have different academic experiences and hence the basis for variation in their modes of entry into the university. The authors stressed that DE admission is Nigeria's official advanced entrance into universities by using certificates such as Nigeria Certificate in Education (NCE), National Diploma and other Higher Certificates such as the IJMB. The authors further argued that contrary to expectation that all students admitted into the university irrespective of the mode of entry will be able to cope with the academic rigors, some students usually fail to perform

well. Some of the students usually drop out on the way without graduating from the university. Hence, the researchers wish to compare the achievement scores of these students at graduation based on their mode of entry and to also find out if their gender has influence on their achievement.

Gender refers to the characteristics of women, men, girls and boys that are socially constructed. APA dictionary (2015) defined gender as an understanding of the socially constructed distinction between females and males based on biological composition, including the roles and expectations for females and males in a culture. Similarly, Joseph, John, Eric, Sada and Olubunmi (2015) see gender as the range of physical, biological, mental and behavioural characteristics pertaining to and differentiating between the feminine and the masculine population. Joseph et al maintained that gender is one of the factors that have considerable effects on the academic achievement of students especially in science subjects.

Researchers have perceived gender gaps in students' academic achievements differently. Daluba (2013) and Omwirhiren (2013) revealed that males perform better than their female counterparts in sciences. In the same vein, Joseph et al (2015) also found gender differences in academic achievement among students in science

with the males scoring higher than the females. However, Mohammed (2014) and Voyer and Voyer (2014) reported that female students have a little but significant advantage over their males counterparts in science achievement. On the other hand, Ajai and Imoko (2015), Nbina and Avwiri (2014) have revealed a no significant difference in achievement scores of male and female students. But Fatade *et al.* (2012) argued that gender should not be a potent and deciding factor in performance between male and female pre-service teachers in the Mathematics and science courses.

There have been divergent reports on the predictive strength of modes of entry in forecasting performance in university examinations. Mohammed, Abel and Philemon (2019) posited that the students admitted into the universities through UTME are not usually well prepared cognitively and socially to cope with the expectation of the universities. The authors maintained that students admitted directly from secondary schools (through UTME) require monitoring and mentoring to ensure better academic performance. Otherwise such students tend to have lower grades relative to their counterparts admitted through DE. Nande and Nande (2020) opined that Direct Entry is the best determinant of high degree of

accomplishment in the final year bachelor of education degree examinations. The authors added that Entry qualification forms the foundation for success in terms of academic achievement. On the other hand, Emaiku (2012) revealed no significant difference in the mean academic achievement of students who were admitted into the university through unified tertiary matriculation examination, remedial program and direct entry admissions. However, Lawal (2014) had showed that there is no significant relationship between the performance of students and their mode of entry. Lawal maintains that students' academic success is largely a function of the amount of efforts put into study and not necessarily as a result of mode of entry into the university. Thus, the need to critically investigate the academic achievement of UTME and D.E students by comparing the performance of Biology education students based on mode of admission and subsequently recommend the particular mode of entry to which much priority should be given when admitting students into the universities. To this end, the study compared academic achievement of the UTME and D.E biology education graduates and also determine whether any difference exist in the achievement based on gender.

### Statement of the Problem

There has been rising concern in many quarters on the quality of graduates churned out by universities in Nigeria. The Universities are accused of producing graduates with low quality in terms of communication skill, and technical skills as well as poor grades over the recent years. This trend has become a matter of concern to stakeholders including the government, institutions of higher learning and the lecturers. This problem could be associated with the mode of admission and types of students who are being admitted into the universities in recent years among many other factors. Researchers have made divergent assertions on which mode of admission into Nigerian universities is better. For instance, Okewole *et al.* (2015) revealed that students admitted through UTME perform better than those admitted through DE. On the other hand, Nande and Nande (2020) posit that Direct Entry qualification is the best determinant of high degree of accomplishment in the final year bachelor of education degree examinations. In the same vein, the researchers have also observed that unequalled achievement exist between students admitted through UTME and those admitted through DE in Federal University of Kashere (FUK). The DE students appear to outperform their UTME counterparts. The perceived differences in

achievement could be partly attributed to poor academic background, overcrowded lecture rooms, their modes of entry amongst others. It is based on these assertions that the present research sought to critically assess the academic achievement of FUK graduates with a view to determine whether any differences exist in their academic achievement based on their modes of entry. In the light of the above therefore, this research investigated the differences that exist between the academic achievement of students admitted through Direct Entry and those admitted through Unified Tertiary Matriculation Examination in Biology Education Program in Federal University of Kashere (FUK).

The purpose of the study was to assess the academic achievement of UTME and DE Biology Education graduates in FUK. Specifically, the study sought to:

1. Assess the academic achievement of DE and UTME Biology Education graduates of FUK and to determine whether any difference exist in their academic achievement.
2. Determine whether any differences exist in the academic achievement of Biology Education graduates of FUK based on gender.

### Research Questions

To compare the academic achievement of D.E and UTME graduates, the following research questions guided the study.

1. What differences exist between the academic achievement of DE and UTME graduates of Biology Education in FUK?
2. What differences exist in the academic achievement of Biology Education graduates of FUK based on gender?

### Research Hypotheses

HO1: There is no significant difference between the academic achievement of UTME and DE graduates of Biology Education in FUK.

HO2: There is no significant difference in the academic achievements of Biology Education graduates of FUK based on gender

### Methodology

The study design is causal-comparative research design. This design was used since both the cause and effects have already occurred and there is no manipulation of the variables. Hence, the data involved in the study were collected from the students' examination records without treatment or any manipulation of subject.

The population of the study consists of all the 42 students who graduated from Biology Education program of the Department of Science Education, Federal University of Kashere, Gombe State from 2017-2020. The entire population of 42 was used as the sample for the research. This is because the population size was manageable for this research (Canonizado, 2021). Table 1 shows the sample of respondents.

**Table 1: Population of the Study based on gender, mode entry and year of graduation.**

Year	2017		2018		2019		2020	
Gender	DE	UTME	DE	UTME	DE	UTME	DE	UTME
Male	2	1	2	0	4	2	6	11
Female	2	0	0	0	2	0	4	6
Total	4	1	2	0	6	2	10	17
<b>Overall</b>	<b>Total:</b>							<b>42</b>

Source: The Exam Office, Department of Science Education, Federal University of Kashere.

The instruments used for the study was the students' academic record containing the mode of entry, gender, year of graduation and the Cumulative Grade Point Average (CGPA) of the graduates at the graduation from 2017 to 2020 obtained from the Exam Office of the

Department of Science Education, Federal University of Kashere with the approval of the university. The data used for the study was the students' CGPA at the end of 400 levels collected in respect of their mode of entry, gender, and year of graduation. The results had



been moderated by both the internal and external examiners and subsequently approved by the University Senate. Hence, reliability test was not conducted by the researchers. The Research Questions were answered using descriptive statistics specifically the Mean and

Standard Deviation. While the hypotheses were tested using an independent sample t-test Statistic at 0.05 level of significance. The data were analysed using the SPSS statistical package version 16.0.

## Results

**Table 2: Academic achievement of Direct Entry Biology Education graduate from 2017 to 2020 in FUK**

Year	N	First Class	Second Class Upper	Second Class Lower	Third Class	Pass	Total
2017	4	0 (0%)	3 (13%)	1 (5%)	0 (0%)	0 (0%)	4
2018	2	0 (0%)	1 (5%)	1 (5%)	0 (0%)	0 (0%)	2
2019	6	1 (4%)	3 (14%)	2 (9%)	0 (0%)	0 (0%)	6
2020	10	0 (0%)	7 (32%)	3 (13%)	0 (0%)	0 (0%)	10
TOTAL	22	1 (4%)	14 (64%)	7 (32%)	0 (0%)	0 (0%)	22 (100%)

Source: The Exam Office, Department of Science Education, Federal University of Kashere.

Table 2 shows that in the years under study, the biology education graduates admitted through DE had 1(4%) first class honours,

14(64%) second class upper, 7 (32%) second class lower, 0 (0%) third class, and 0(0%) pass degree.

**Table 3: Academic achievement of UTME Biology Education graduate from 2017 to 2020 in FUK**

Year	N	First Class	Second Class Upper	Second Class Lower	Third Class	Pass	Total
2017	1	0 (0%)	0 (0%)	1 (5%)	0 (0%)	0 (0%)	1
2018	0	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0
2019	2	0 (0%)	1 (5%)	1 (5%)	0 (0%)	0 (0%)	2
2020	17	0 (0%)	4 (20%)	9 (45%)	3 (15%)	1 (5%)	17
TOTAL	20	0 (0%)	5 (25%)	11 (55%)	3 (15%)	1 (5%)	20 (100%)

Source: The Exam Office, Department of Science Education, Federal University of Kashere.

Table 3 shows that biology education graduates admitted through UTME in the years under consideration had 0(0%) first class, **Research question 1.** What differences exist between the academic achievement of DE and

5(25%) second class upper, 11(55%) second class lower, 33 (15%) third class, and 1(5%) pass degree. UTME graduates of Biology Education in FUK?

**Table 4: Mean and Standard deviation of Academic Achievement of UTME and DE Biology Education graduates in FUK**

Mode of Entry	N	Mean	Std. Dev	Standard Error	Mean Diff
DE	22	3.82	0.59	0.13	0.78
UTME	20	3.04	0.65	0.15	

Table 4 revealed that the biology education graduates admitted through DE had a CGPA mean score of 3.82 and standard deviation of 0.59. Those admitted through UTME on the other hand had a CGPA mean score of 3.04 and standard deviation of 0.65. The standard deviation of 0.59 and 0.65 were small in magnitude indicating that their performances are not far from their respective means. The mean difference of the two groups was 0.78, showing that difference exist in their

performances with the DE graduates having the higher mean score. This implies that graduates who admitted through DE performed better than those admitted through UTME in Biology Education Program of FUK within the time under study.

**Research question 2:** What differences exist between the academic achievement of male and female Biology Education graduates in FUK?

**Table 5: Mean and Standard deviation of Academic Achievement of male and female Biology Education graduates in FUK**

Gender	N	Mean	Standard Dev.	Standard Error	Mean Diff.
Male	28	3.47	0.76	0.14	0.08
Female	14	3.39	0.68	0.18	

Table 5 above revealed that the male graduates had a CGPA mean score of 3.47 with a standard deviation of 0.76. While the female graduates had a CGPA mean score of 3.39 and a standard deviation of 0.68. The standard deviation of 0.76 and 0.68 were small in magnitude indicating that their performances are not far from their respective means. The mean difference CGPA mean score of 0.08 in favour of the male students shows that a slight

difference exists in their achievements. This reveals that the male students performed slightly better than the female in Biology Education Program in FUK within the period under consideration.

**Hypothesis One**

Ho1: There is no significant difference between the academic achievement of DE and UTME graduates of Biology Education in FUK.

**Table 6: t-test analysis of the difference between the academic achievement of UTME and DE graduates of Biology Education in FUK**

Variables	N	Mean Score	Standard Dev.	t-value	d. f	A	P-value	Remark
DE	22	3.82	0.59	4.09	40	0.05	0.00	Significant
UTME	20	3.04	0.65					

Table 6 revealed a p-value less than alpha level ( $p = 0.00 < \alpha = 0.05$ ). Since the p-value (Sig. 2-tailed) of 0.00 is less than the chosen alpha

of 0.05. The null hypothesis of no significant difference between the academic achievement of UTME and DE graduates of Biology

Education in FUK is rejected. This implies that the academic achievement of UTME and DE students within the years of study differs significantly with the DE graduates performing better than the UTME students.

**Hypothesis Two.**

Ho2: There is no significant difference between the academic achievement of male and female Biology Education graduates in FUK.

**Table 7: t-test analysis for testing the difference between the academic achievement of male and female Biology Education graduates in FUK**

Variables	N	Mean Score	S. D	t-value	d. f.	A	P-value	Remark
MALE	28	3.47	0.76	0.35	40	0.05	0.73	Not Sig.
FEMALE	14	3.39	0.68					

Table 7 revealed a p value of 0.72 higher than alpha level 0.05 ( $p = 0.72 < \alpha = 0.05$ ). Since the p-value (Sig. 2-tailed) of 0.72 is greater than the chosen alpha of 0.05. The null hypothesis of no significant difference between the academic achievement of male and female graduates of Biology Education in

FUK is retained. This implies that though the male graduates have slightly higher mean score than the female, the difference is not significant at 0.05 alpha level. Hence, the academic achievement of male and female graduates within the years under review was similar.

**4.3. Discussion of Results**

Research question one in table 4 revealed that graduates admitted through DE overwhelmingly performed better than those who were admitted through UTME. The finding corroborates with the findings of Mohammed *et al.* (2019) who found a significant relationship between the performance of students and their mode of entry with the DE graduates performing better than the other modes of entry into the Nigerian universities. In the same vein, Fatade *et al.* (2012) revealed that students admitted through Direct Entry mode made better quality degree in Mathematics and science education courses

in Nigerian universities. The finding further agrees with the findings of Nande and Nande (2020) which revealed that Direct Entry qualification can be used to predict a better academic achievement in Vocational and Technical Education Department. However, the outcome of the study does not agree with Okewole *et al.* (2015) who found out that UTME students performed better than the DE students in various departments in the Institute of Education in Obafemi Awolowo University, Ile-Ife in the reviewed sessions. The years DE graduates spent in school during their pre-degree course (most especially NCE courses) and the experience garnered could have helped them to develop high interest in studying

courses related to education and to also set both their academic and social priorities right when they get admitted into the university. Hence, it is expected that they don't get distracted easily, unlike their counterparts admitted through UTME who often appear to spend most part of their first year in the university struggling to adjust the new way of life on campus instead of concentrating on their academic pursuit. This could have accounted partly to why DE graduates performed better than their UTME counterparts.

Findings from research question two revealed that the male graduates performed slightly better than the female graduates. This is in line with the outcome of Joseph et al, (2015) who revealed that there is a gender difference in academic achievement among students in sciences with the male students scoring higher than the females. However, the result does not agree with Ajai and Imoko (2015), Nbina and Avwiri (2014) who have revealed no significant difference in achievement scores of male and female students. Factors such as gender stereotype, students' Intelligent Quotient, amount of efforts put into study by individual students could be responsible for the marginal difference recorded in the academic achievement of male and females graduates.

The research hypothesis one revealed that graduates admitted through DE performed better than those who admitted through

UTME. Hence, the hypothesis which states that there is no significant difference between the academic achievement of UTME and DE graduates of Biology Education in FUK was rejected because the difference in their CGPA mean score was significant at 0.05 level of significant, with the DE students performing better than those admitted through UTME. The outcome is in conformity with Lawal (2014) who reported that the Direct Entry students usually graduate with better CGPA than the UME students. The result also tallies with Okewole *et al.* (2015) who found that Direct Entry students were academically superior to other students. However, the result is inconsistent with Emaiku (2012) who revealed no significant difference in the mean academic achievement of students who were admitted into the university through unified tertiary matriculation examination, remedial program and direct entry admissions. The better performance of DE graduates against the UTME students is perhaps because those admitted through DE had been exposed to some rudiments of the curriculum (content) and methodology of teaching during their NCE, ND or IJMB training before gaining admission into the university. Hence, they tend to have experiences and rudiment knowledge of the Biology Education courses being learned in the university. This could have gone a long way in helping them develop mental readiness (linear effect) and at the same time helping them to have psychological readiness

to concentrate and comprehend their courses easily. Meanwhile, many Biology Education students admitted through UTME seem to lack the requisite background knowledge to study those courses despite having at least a credit pass in the respective core science subjects in their SSCE results which many of them seem unable to replicate such results in the University. This situation could be because most secondary school leavers today seem to lack important background rudiments required for taking up degree courses owing to poor state of secondary education in the country today. Furthermore, most of the students who are admitted through UTME do seem to have low interest to study any course related to Education. But usually accept the admission as last choice when they fail to get admitted into their preferred course.

From research hypothesis two, it was found that no significant difference exists in the academic achievement of male and female graduates of Biology Education in FUK. Though the male graduates achieved slightly better than the female students, the difference was not significant at 0.05 alpha level. This finding supports Yilshik, et. al (2020) who revealed that no significant difference exists between male and female students' academic achievement in Biology. It is also in agreement with Ajai and Imoko (2015) who found out that male and female students do not differ significantly in their academic achievement in

mathematics. The finding also conforms to the position of Fatade *et al.* (2012) who posited that gender should not be a factor or benchmark of predicting the academic performance of pre-service teachers in the Mathematics and other science courses. However, the findings contradict Joseph et al, (2015) who revealed that there is a gender difference in academic achievement among students in science with the male students scoring higher than the females. The slight difference in their performances in favour of the male graduates could be as a result of some advantages that male students may have over the females despite being exposed to the same learning experiences in the course of the studies. These advantages may be due to the accessibility to many lecturers, tutors with a very minimal restriction of time and space whereas the female students may not feel safe to directly interact with some of their lecturers especially after school hours due to cultural and religious restrictions in this part of country since most of the lecturers in the department are males.

### **Conclusion**

The study concluded that biology education graduates admitted through direct entry mode achieved better than their counterparts admitted through Unified Tertiary Matriculation Examination. This clearly shows that the exposure DE graduates had in their pre-degree programs usually impacted

positively on their psyche, emotion, and intellect, making them more prepared for university education. Hence, perform better than their colleagues who were admitted through UTME.

It was further concluded that the biology education graduates do not differ significantly in their academic achievement based on gender. The male and female graduates had similar achievement in the academics. This shows that both the male and female graduates could have put in much effort in their studies which resulted in similar academic achievements.

### **Recommendations**

The study recommended that:

1. Universities should consider the implementation of specific measures that would enable them to attract a higher quality of Direct Entry applicants to

Biology education because they appear to be more psychologically and mentally prepared to take courses in education.

2. Concerted efforts should be made to give orientation to newly admitted students to help them adjust to face the rigors of university education.
3. Deliberate attempts should be made to provide purposeful mentorship to newly admitted students in the faculty of education to make them see the need of reading courses in education in order to bridge the teacher need gap in the country.
4. Secondary school leavers should be encouraged to acquire some pre-degree training course before enrolling to read education related courses. This could help to bridge some academic inherent gaps owing to poor state of secondary education in the country today.

REFERENCES

- Ajai, J. T., & Imoko, B. I. (2015). Gender difference in mathematics achievement and retention scores. A case of problem-based learning method. *International Journal of Research in Education and science*, 1(1), 45-50.
- Al-Husaini, Y. & Shukor, A. N. S. (2023). Factors affecting students' academic Performance: a review. *European Journal of Military Studies* 12, 284-294. Retrieved on 4/9/2023 from [www.researchgate.net](http://www.researchgate.net)
- American Psychological Association. (2015). *APA dictionary of psychology* (2<sup>nd</sup> ed.). Washington DC: Author.
- Caninizado, I. C. (2021). When to use total Population sampling in a research study. Hubpages Newsletter. Retrieved on 4/9/2023 from [www.discovery.hubpages.com](http://www.discovery.hubpages.com)
- Hillis, D. M., Sadava, D., Hill, R. W. & Price, M. V. (2014). *Principles of Life* (2<sup>nd</sup> ed.). Sunderland Mass: Sinauer Associates. 253–272.
- Joseph, A., John, O., Eric, I., Sada, Y., & Olubunmi, A. (2015). Effects of gender on student's academic performance in computer studies in secondary schools in New Bussa, Borgu LGA of Niger State. *Journal of Education and Practice*, 6(33), 1-7
- Kpolovie, P. T., Joe, A. I. & Okoto, T. (2014). Academic achievement prediction: Role of interest in learning and attitude towards school. *International Journal of Humanities Social Sciences and Education (IJHSSE)*, 1(11), 73-100.
- Lawal, T. E. (2014). Comparative Study of Academic Performance of UME and Direct Entry students at graduation in science education section, Ahmadu Bello University Zaria. *International Journal of Humanities Social Sciences and Education (IJHSSE)*, 2(2), 1-13.
- Mohammed, B. A. (2014). An evaluation of the efficacy of conceptual method of teaching practical chemistry: the case of secondary schools in Zaria
- Daluba, N. E. (2013). Effects of demonstration method of teaching on students' achievement in Agricultural science. *World Journal of Education*, 3(6), 1-7.
- Emaiku, S. O. (2012). Assessment of the impact of students' mode of admission into university and their academic achievement in Nigeria. *International journal of academic research in progressive education and development*, 1(4), 118-131.
- Fatade, A.O., Nneji, L. M., Awofala, A. O. A. & Awofala, A. A. (2012). Mode of entry and gender as determinants of Nigerian pre-service teachers' performance in degree mathematics and science courses. *International Journal of Mathematics Trends and Technology*, 3(3), 28-29.
- Educational Zone of kaduna state, Nigeria. *African Journal of Education and Technology*, 4(1). 112-118
- Mohammed, A., Abel, A. & Philemon, H. (2019). Relationship between Entry Qualification and Students' Academic Achievement in Gombe State Tertiary Institutions, Nigeria. *Science Arena Publications Specialty Journal of Knowledge Management*, 4(4): 37-43.
- Mushtaq, I. & Khan, S. N. (2012). Factors affecting students' academic performance. *Global Journal of Management and Business Research*, 12(9), 17-22.
- Nande, B. K. & Nande, V.M. (2020), Entry Qualification as Predictor of Academic Achievement in Technology Education Programme in Benue State University, Makurdi. *Journal of Technology, Industrial Studies and Science*, 3(12), 240-248.
- Nbina, J. E. & Awwiri, E. (2014). Relative effectiveness of context-based teaching strategy on senior secondary students' achievement in Inorganic Chemistry in Rivers state. *AFRREV STECH*, 3(2), 159-171.

- NCCE (2012). *Minimum Standard for Nigeria Certificate in Biology, 7th Edition*. Abuja: NGCDC.
- NCTE. (2018). *Manual on Teacher Education*. Retrieved on 21/6/2023, from [www.scribd.com](http://www.scribd.com)
- Okenyi, C.I. (2012). Science and Technology Education for Entrepreneurship Development. *Proceeding of the 7th National Conference of Schools of Sciences, S FCE, Eha-Amufu*. 15-19.
- Okewole J. O., Olajide, O. O. & Agboola O.S (2015). Comparative Study of Academic Performance of a Group of Undergraduate Students in the Institute of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria. *International Journal of Humanities Social Sciences and Education (IJHSSE)*, 2(2), 1-13.
- Olufemi, O.T., Adediran, A. A. & Oyediran, W.O. (2018). Factors Affecting Students' Academic Performance in Colleges of Education in Southwest, Nigeria. *British Journal of Education*, 6(10), 43- 56.
- Omwirhiren, E. M. (2013). An investigation into the relative effectiveness of laboratory and lecture instructional strategies. *International Journal of Psychology*, 33, 433-449.
- Osakude, J. O. (2011) Effectiveness of university matriculation examination and post-university matriculation examination on the academic performance of Nigerian undergraduate students. *Journal of Education and Practice*. 2(4). 59-65.
- Rani A (2017). Problems and Solution of Teacher Education. *International Journal of Academic Research in Education*, 5(1): 15-19.
- Umar, S. A., Manklibet, K. K. & Dung, M. D. (2019). Influence of locus of control and gender on students' achievement in Integrated science in Colleges of Education in Plateau and Nasarawa states. *African Journal of Curriculum and Instructional Technology*, 3(1), 179-189.
- Voyer, D. & Voyer, S. D. (2014). Gender difference in scholastic achievement: a meta-analysis. *Psychological Bulletin*, 140(4).1174-1204
- Yilshik, O. M., Ezekiel, D. P. & Umar, S. A. (2020). Relationship between secondary school students' self-concept and academic achievement in biology in Plateau State Central Senatorial Zone, Nigeria. *Journal of science, technology, mathematics and education (JOSTMED)*, 16(2), 176- 18



**The Roles of ICT in Social Studies Curriculum Implementation in Colleges of Education, Nigeria**

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**ABSTRACT**

The study investigated “The Roles of ICT in Social Studies Curriculum Implementation in Colleges of Education, Nigeria”. Survey research design method was used. A total of 220 lecturers constituted the population of the study were used in the study. All the 220 were used as sample for the study because of the size of the population. The study used structured questionnaire titled “Awareness of Lecturers’ Compliance on Information and Communication Technology in Colleges of Education Questionnaire (ALCOICTCE- Q) as data collection instrument. The instrument was validated by experts and statisticians for content and face validity. The researcher pilot tested the instrument and it was certified as statistically fit for the main work. Hence an index power of 0.78 were realized. Analysis of Variance to test the null hypotheses. The study among other things found that no significant difference in the Lecturers average level of compliance score on Information and Communication Technology for effective Social Studies Curriculum contents implementation in Colleges of Education with regards to gender. The study recommends that evidence of ICT compliance by Social Studies Lecturers should form part of the necessary requirements for promotion and other benefits. This will encourage lecturers of Social Studies (male and female) to know more on Information and Communication Technology resources.

**Keywords:** *ICT, Social Studies, Curriculum, Colleges of Education.*

**Introduction**

The National Policy on Education considers education as “an instrument per excellence”. According to the policy, the National aims and objectives of education in Nigeria includes the inculcation of National

consciousness and National unity; the inculcation of the right type of values and attitudes for the survival of the individual and the Nigerian society; the training of the mind in the understanding of the world around us

and the acquisition of appropriate skills, abilities, and competences both mental and physical as equipment for the individual to live in and contribute to the development of his society (FGN, 2013). The use of information and communication technology as a tool for enhancing students' learning, lecturers' instruction, and as catalyst for improving access to quality education in formal and non-formal settings has become a necessity. The introduction of Information and Communication Technology (ICT) in teaching remains one of the important dimensions of human technological advances in contemporary times. It is regarded as one of the main innovation in the education sector due to the fact that it has the potential to bring about substantial system-wide benefits in terms of improving the quality of teaching and learning process, Aminu, (2017).

The information and communication technology (ICT) has come to stay as indispensable aid in the Social Studies curriculum delivery. Association for educational communication and technology in the United States of America (AECT) defines educational technologies as complex, integrated processes involving people, procedures, ideas, devices and organization for analyzing problems and devising, implementation, evaluating and managing

solution to those problems involving in all aspect of learning (Jamila & Saadatu 2015). ICT can also be described as electronic technologies used for information storage and retrieval. According to the Online Oxford Dictionary (2004), Information and Communications technology or Information and Communication Technology, usually abbreviated as ITC, is often used as an extended synonym for information technology (IT), but is usually a more generally term that stresses the role of unified communications and the integration of telecommunications (telephone lines and wireless signals), computers, middleware as well as necessary software, storage and audio visual systems, which enable users to create, access store, transmit and manipulate information). It is an increasingly powerful tool for participating in global markets, promoting political accountability; improving the delivery of basic services; and enhancing local development opportunities (UNDP, 2006). To Ogunsola (2005) ICT "is an electronic based system of information transmission, reception, processing and retrieval, which has drastically changed the way we think, the way we live and the environment in which we live". It can be used to access global knowledge and communication with other people (Ogunsola,

2005). Students who use ICTs gain deeper understanding of complex topics and concepts and are more likely to recall information and use it to solve problems outside the classroom (Apple Computer, 2002). In addition, through ICT. Students extend and deepen their knowledge, investigation, and inquiry according to their needs and interest when access to information is available on multiple levels (CEO Forum on Education and Technology, 2001).

Lecturers are that professional man or woman, who has been specially trained to teach at any level of education. Generally, a school teacher is expected to have received professional training in education that will enable him or her to teach effectively at primary, secondary or tertiary levels of education Omooba, Obi and Olabode (2008). A lecturer is something more than all these gadgets put together. He has to bring about socialization of the individual he has to promote socially desirable attitudes and interest and mould the personality of the students. The effective domain is almost reserved for his care. At present the teacher is not able to devote his energy and time to this important task as most of his time and energy is consumed by his routine job as an information giver. We always talk of

education for three H's – the head, the hand and the heart. But it has almost remained a mere slogan. Programmed learning, teaching machines and other gadgets will set teacher free from routine work. These are labour saving devices for the teacher so that he may function more effectively in a field of his own choice (Aggarwal 2009).

The importance of ICT is quite evidence from the educational perspective. Though the chalkboard, textbooks, radio/television and film have been used for educational purpose over the years, none has quite impacted on the educational process like the computer. While television and film impact only on the audiovisual faculties of users, the computer is capable of activating the senses of sight, hearing and touch of the users. ICT has the capacity to provide higher interactive potential for users to develop their individual, intellectual and creative ability. The main purpose of ICT “consists just in the development of human mental resources, which allow people to both successfully apply the existing knowledge and produce new knowledge” (Shavinina, 2001). Oduma (2013) likened ICT to a utility like water and electricity which plays a major role in education and has impacted on the quality and quantity of teaching and learning as well as research in educational methodology to

initiate a new age in education. Internet as a digital tool of ICT has strengthened teaching and learning as it provides powerful resources and services for students, thereby enabling them meet their educational needs, it also allows for networking among students and teachers to facilitate exchange of ideas and improve opportunities for connecting schools to the world as learning is expanding beyond the classroom, so real life context can be established (Dotimi and Hamilton-Ekeke, 2013).

Utilization of computers and web innovation in instruction is a significant consideration toward instructors everywhere throughout the world (Williams, 2010). Specialists in the field of education like Wodi and Dokubo (2008), are of the feeling that when legitimately grasped, ICT holds a awesome guarantee in enhancing educating and learning apart from increasing work power opportunities. In an expanding and fast changing universe of worldwide business sector rivalry, mechanization, and expanding democratization, fundamental learning is vital for a person to be able reach to the knowledge and to apply that knowledge. Such ability is provided only by the Information and Communication Technology, the capacity to get to and adequately use information is no more an

extravagance but a need for any improvement (Stephen, 2013).

### **Information and Communication Technology as aids to Teaching and Learning Social Studies in Schools.**

The role of Information and communication technology in teaching and learning of Social Studies is rapidly becoming one of the most important and widely discussed issues in contemporary education policy. Technology integration into Social Studies classrooms is a veritable way of making teaching and learning more meaningful and impactful (Zao, 2007). Technology integration enhances the learning environment for learners; supplements teachers' instruction in classrooms; provides administrative tools for teachers and administrators; increases access to education and inclusive education in schools; creates a communication platform; and provides a passport to gaining competitive edge in the global economy (Jhurree, 2005). Despite the promise of technology integration, however, the evidence suggests that Social Studies teachers are among the least likely to use technology in the classroom (Acikalin, 2010). Yet, "Without teachers who can integrate technology, students' exposure to technology remains limited and inequitable" (Gorder, 2008). Students formed the largest

part of any academic community and their viewpoint has to be respected. Considering the role they play in any activity that take place in the school settings, psychologist argued that student should be seen as dynamic and integral members of the learning community not just as aloof beneficiaries or even a mere consumers. Amajuayi (2012) is in the feeling that ICT evacuates issues concerning space and time where students can correspond with their teacher and exchange information anywhere, anytime. As a rule the students can bring from a worldwide pool of learning as ICT makes serving and sharing of information simpler. The learners can exclusively and/or together make notes and presentations therefore enlist their advancement and use it for examinations along these lines they are additionally prepared for future support in worldwide exploration and correspondence. Once more, partners in the field of instruction technology agreed that ICT in training will promote students cognitive qualities through their order thinking, critical reasoning, enhanced relational abilities and profound comprehension of the learning apparatuses and ideas to be taught. Promoting a strong, intuitive educating and hence give learning instruments to students particularly those with exceptional needs. Utilizing computer

produced design to outline connections of numerous types particularly methods that can't be represented manually by individual. (Amajuoyi, 2012). Educators, according Ahmad (2010), recognize its capacity to make both autonomous and collective learning environment in which learners can understand more effectively. In fact, the finding of a study conducted by Yunus, Salehi and John (2013) has show that teaches have a positive perception that the uses of visual aids arouse students' interest towards learning. Moreover, ICT is of great importance in improving communication skills for computer mediated communication (CMC) provide learners with the opportunities to communicate not only locally but globally for they feel less secured to communicate (Sweeny, 2010).

In view of the problems of technology access and use, Khan, Hassan and Clement (2012) recently concluded that schools in developing countries are far from reaping the benefits of technology integration. This lag has been attributed, among others, to poor infrastructure that supports technology integration, lack of resources for technology procurement, misplacement of priority by political leadership, inadequate knowledge and skills for technology deployment, and teachers' poor attitude and beliefs about

technology integration (Khan, et al, 2012). Consequently, school success is largely measured by learners' performance in pen-and-paper tests and lecturers are under pressure to cover topics of the overly packed curriculum, rather than give attention to technology use to promote learners' understanding. Research findings suggest that lecturers in these climes focus less on interactive teaching-learning activities that enhance learners' ability to transfer knowledge gained in the classroom to solving out-of-class problems as demanded by Social Studies education (Taiwo, 2009). In Nigerian schools, like in many other low-resource environments, the mode of instructional delivery in Social Studies classrooms is yet far from being technology-driven. About 70% of Social Studies teachers rely on the traditional methods of teaching (Okobia, 2012). The traditional Social Studies teachers 'talk' and 'chalk' while students listen, read and answer questions from the textbooks and regurgitate facts. At best, most of the teachers employ visual media such as textbooks, newspapers, graphs, and chalkboard which do not fully promote learners' active participation and interaction in the Social Studies classroom (Adomi & Kpanghan, 2010; Okobia, 2011). The Federal Government of Nigeria

recognizes the benefits of integrating modern technology into education; hence the National Policy on Education emphasizes the use of Information and Communication Technology (ICT) to facilitate learning at all levels of education. In particular, the policy stresses that primary school pupils should be introduced to the basic computer skills (FGN, 2004). The Federal and States' Ministries of Education in Nigeria have funded training programmes targeted at improving Social Studies teachers' technology skills (Obakhume, 2011; Okobia, 2012).

However, only a few Social Studies lecturers use educational technology for classroom instruction. Most of the Lecturers who have access to computers use them for personal and administrative purposes, rather than for instructional or pedagogical activities (Okobia, 2011, 2012). In order to achieve the basic objectives of Social Studies teaching, researchers and educators have argued that teachers should adopt and integrate appropriate technology to facilitate student-centred pedagogy (Obakhume, 2011; Okobia, 2012). The use of technology has had an immense impact on the educational systems worldwide. However, the extent to which the potential of educational technology is being maximized by tertiary institution lecturers in Social Studies classrooms has not

been sufficiently examined especially in the low-resource countries (Fong, 2009; Khan, Hassan & Clement, 2012). Thus, this study was designed to provide further empirical evidence on technology use for instruction in Social Studies classrooms and the motives underlying technology integration among tertiary institution lecturers in Nigeria. The study explored the gap in the literature by investigating the adoption and infusion of educational technology in the classroom among Nigerian Social Studies lecturers borrowing from the technology acceptance model and self-determination theory.

Effective use of technology has the potential of improving students' learning in Social Studies. Social Studies lecturers should therefore strive to develop students' technology literacy in order to prepare them for the challenges of citizens of the 21st global society (Friedman, Bolick, Benson, & Porfeli, 2009). The present crop of students is a generation immersed in a digital age because they comfortably depend on technology in their daily lives. If Social Studies teachers would prepare students for the responsibility of citizenship, the learners must be able to critically explore their world by interacting with emerging technologies (Cogan, Grossman, & Lei, 2000; Hicks, Tlou, Lee, Parry & Doolittle, 2002). Deim (2000)

and Doolittle and Hicks (2003) agree that the use of technology has positive effects on the learning of social studies. The evidence indicates that integrating technology into Social Studies classrooms promotes active students' inquiry (Whitworth & Berson, 2003), students' active participation and engagement, and involvement in critical thinking (Lei & Zhao, 2007). Technology-based learning facilitates the development of students' problem-solving skills and communication capabilities. Through technology integration, students also have the opportunity to gain access to expansive knowledge as they actively engage in the instructional process. The influence of technology on the education system underscores the relevance and importance of emerging technologies in the teaching and learning of Social Studies. If teachers are to maximize the potential these technologies, they must be infused into the instructional process (Whitworth & Berson, 2003).

### **Research Questions**

The research question is formulated for this study.

What is the difference in lecturers' average level of compliance score in the use of Information and Communication Technology for effective Social Studies Curriculum Contents Implementation in Colleges of Education?

### **Research Hypothesis**

In the light of the research question raised, the null hypothesis is postulated and shall be tested at 0.05 level of significance. There is no significant difference in the lecturers' average level of compliance score on Information and Communication Technology for effective Social Studies curriculum contents implementation in Colleges of Education with regards to gender;

### **Methodology**

The population of this study comprises of all Social Studies lecturers in 10 Colleges of Education offering Social Studies as a course in North-West Zone of Nigeria. There are a total number of 220 lecturers consisting of 180 males and 40 females based on the official data obtained from the colleges. The study used purposive sampling techniques. This is due to the fact that the population of the study is easily accessible and manageable (220). Hence, the entire population is covered. This is aimed at adding credibility to the study. According to Alfa (2016) and Abubakar, Salihu & Usman (2016) it is possible to get deep insights into the phenomenon you are interested in when total population is used. With such wide coverage of the population of interest, there is also a reduced risk of missing potential insights from members that are not included.

The study used four point modified likert scale structured questionnaire titled "Assessment of Lecturers' Compliance on Information and Communication Technology in Colleges of Education Questionnaire" questionnaire, according to Ahmad (2015) is the statement which the respondents have to react in writing so as to find out their feelings, and opinion on the designed items in the questionnaire. The instrument is designed into two sections based on four point modified Likert scale. The research instruments were duly validated by experts and have reliability coefficient index power of 0.78 were realized respectively. The study adopted the suggestions of Danjuma and Muhammad (2011) which opined that an instrument is reliable if its reliability co-efficient lies between 0.64 and 1.

### **Data Analysis Procedure**

The data is analysed using mean and standard deviation, t-test independent sample and Analysis of Variance statistical tools. The hypothesis is validated at 0.05 level of significance and 95 percent confidence level.

### **Result**

This null hypothesis was tested using inferential statistics of independent samples t-test. The result of the analysis is presented in Table 14.



**Table 1: Summary of independent samples t-test on Lecturers' Compliance of using ICT by gender**

Sex of the respondents	N	Mean	SD	T	Df	p-value	Decision
Male	165	94.0061	8.47701	1.231	191	0.22	Retained
Female	28	91.7857	10.69911				
<b>Total</b>	<b>193</b>						

Table 1 presents the lecturers' average level of compliance scores in making personal use of Information and Communication Technology for effective Social Studies Curriculum Implementation with regards to gender. This was because the mean compliance score for male lecturers was (M=94.0061, SD=8.47701) which was higher than that of female (M=91.7857, SD=10.69911). The mean difference was 2.22035 in favour of male lecturers. The 95% confidence interval of the difference was from -1.33751 to 5.77820. The analysis provide that t=1.231, p=0.22; the null hypothesis which stated no significant difference was retained. By implication, male respondents had higher mean compliance scores than the female respondents; Gender does not affect the compliance level of Lecturers in understanding the policy dimension of the use of Information and Communication Technology for effective teaching and learning of Social Studies in Colleges of

Education in the North-West Geo Political Zone, Nigeria.

### Summary of Major Findings

In the light of the foregoing, the study discovered that:

Male respondents had higher mean compliance scores than the female respondents; Gender does not affect the compliance level of Lecturers in understanding the policy dimension of the use of Information and Communication Technology for effective teaching and learning of Social Studies.

### Discussion

It was discovered in the study that no significant difference in the lecturers' average level of compliance scores in understanding the policy dimension of the use of Information and Communication Technology for teaching and learning for effective Social Studies Curriculum Implementation with regards to gender. This was because the calculated mean compliance score for male lecturers was (M=94.0061, SD=8.47701) which was higher than that of female (M=91.7857, SD=10.69911). The

analysis provide that  $t=1.231$ ,  $p=0.22$ ; the null hypothesis which stated no significant difference was retained.

### **Conclusion**

In the light of the foregoing, it is concluded that:

Gender does not affect lecturers' compliance in understanding the policy dimension of the use of Information and Communication Technology for Effective Social Studies Curriculum Implementation. This implied gender does not significantly affect the compliance of Social Studies Lecturers' in using ICT in Colleges of Education in North-West, Zone-Nigeria.

### **Contribution to knowledge**

A break through arising from the finding of this study that gender does not affect lecturers' compliance in understanding the policy dimension of the use of Information and Communication Technology for Effective Social Studies Curriculum Implementation. This implied that gender does not significantly affect the compliance of Social Studies Lecturers' in using ICT in Colleges of Education in North-West, Zone-Nigeria. Both male and female lecturers can use ICT effectively.

### **Recommendations**

From the outcome of this study, the following recommendations are made:

Evidence of ICT awareness by Social Studies Lecturers should form part of the necessary requirements for promotion and other benefits. This will encourage lecturers of Social Studies (male and female) to know more on Information and Communication Technology resources.

REFERENCES

- Abdullahi, M.B. (2021) Assessment of Lecturers' Awareness and Compliance on Information and Communication Technology for Effective Social Studies Curriculum Implementation in Colleges of Education, Nigeria. Unpublished (Ph.D) Thesis submitted to Department of Social Studies, ABU, Zaria, Nigeria.
- Adomi, E. E., & Kpangban, E. (2010). Application of ICTs in Nigerian Secondary schools. Library Philosophy and Practice. Retrieved January 15, 2013, from <http://unllib.unl.edu/LPP/adomi-kpangban.htm>
- Acikalin, M. (2010) The Influence of Global Education on the Turkish Social Studies Curriculum. *The Social Studies*, 101, 254–259
- Ahmad, J. (2010). Media Technology and English Language Teaching: *International Journal of Research in all subjects in Multi-Language*, vol. 2 issue 2.
- Alfa, M.G. (2016). *Assessment of the Management of Staff Schools in Federal Tertiary Educational Institutions in Kaduna State, Nigeria*. Unpublished (M.Ed) Thesis submitted to Department of Foundation and Curriculum, ABU, Zaria, Nigeria.
- Aminu, M. (2017). Evaluation of Availability, Organization and Utilization of Multimedia Resources for Teaching Social Studies in Colleges of Education in North-Central Nigeria. Unpublished (Ph.D) Thesis, submitted to Department of Social Studies, ABU, Zaria, Nigeria.
- Cogan, J.J., Grossman, D., & Lei, M. (2000). Citizenship: The democratic imagination in a global context. *Social Education*, 64 (1), 48-52.
- Dotimi, D.A. & Hamilton-Ekeke, J-T. (2013) Information and Communication Technology (ICT) – E-Learning in Nigerian Tertiary Institutions, *The Librarian and Information Manager* 6(1): 44-59.
- Engin Isin & Evelyn Ruppert. (2015). *Being Digital Citizens*. London: RLI.
- Federal Republic of Nigeria. (2004). *National Policy on Education*. Lagos NERDC, Government Press.
- Fong, M. W. L. (2009). Digital divide: The case of developing countries. *Issues in Informing Science & Information Technology*, 6, 471-478.
- Friedman, A., Bolick, C., Berson, M. & Porfeli, E. (2009). National educational technology standards and technology beliefs and practice of Social Studies faculty: Results from a seven year longitudinal study. *Contemporary Issues in Technology and Teacher Education*, 9(4), 476-487.
- Gorder, L. M. (2008). A study of teachers' perceptions of technology integration in classroom. *The Delta Pi Epsilon Journal*, 50(2), 63-76.
- Jamila A.A & Saadatu S.H (2015). The Role of Information and Communication Technologies (ICT) in Education for Sustainable Development in the 21<sup>st</sup> Century. *Proceedings of African Conference*. Faculty of Education, Ahmadu Bello University Zaria, 362-369.
- Jhuree, V. (2005). Technology integration in education in developing countries: Guidelines to policy makers. *International Education Journal*, 6(4), 467-483.
- Khan, S. H., Hassan, M., & Clement, C. K. (2012). Barriers to the introduction of ICT into education in developing countries: the example of

- Bangladesh. *International Journal of Instruction*, 5(2), 61-80.
- Lei, J. & Zhao. (2006). Technology uses and student achievement: A longitudinal study. *Computers and Education*. Available at: <http://www.science-direct.com> {Accessed on 12 May 2006}.
- Obakhume, A. A. (2011). Assessment of school teachers' use of Information and Communication Technology (ICT) in Oyo metropolis of Nigeria. *Journal of Educational and Social Research*, 1(5), 131-136. *The Caribbean Educational Research Journal* 131
- Okobia, E. O. (2012). The teacher factor in enhancing quality assurance in the teaching/learning of social studies. *Review of European Studies*, 4(4), 148-156.
- Okobia, E. O. (2011). Social Studies teachers' perception of the junior secondary school Social Studies curriculum in Edo state. *European Journal of Educational Studies*, 3(2), 303-309.
- Omooba, B.T., Obi, G.E. & Olabode J.A. (2008) *Topical Issues on Contemporary Social Studies Education*. Zaria: Nasif Prints and Enterprises
- Sweeny, M.A. (2010). 21<sup>st</sup> Century Learning: Preparing Students Today. Retrieved July 8, 2017 from <http://www.scilearn.com/blog/21st-century-learning-preparing-students-today>.
- Stephen, U.S. (2013). Availability, Accessibility and Utilization of Information and communication Technology in Physics Teaching in Akwalbom State, Nigeria. Department of Science Education, University of Uyo, UyoAkwalbom State.
- Taiwo, S. (2009). Teachers' perception of the role of media in classroom teaching secondary schools. *The Turkish Online Journal of Educational Technology*, 8(1), 75-83.
- UNESCO, (2007). The UNESCO ICT in education program. United Nations educational, scientific and cultural organization (UNESCO): Bangkok ,Thailand. Available from [www.unescobkk.org/education/ict](http://www.unescobkk.org/education/ict).
- Whitworth, S., & Benson, J. M. (2003). Computer Technology in Social Studies: An examination of the effectiveness literature 1996-2001.
- Williams, K. (2010). Using Information Technology: A practical introduction to computer and communication. *J. Science Teach. Nig.*, 4(1), 174-180.
- Yunus, M., Salehi, H. & John, D.S. (2013). Using Visual Aids as a Motivational Tool in Enhancing Students' Interest in Reading Literary Text. From <http://www.arxiv.org/ftp/arxiv/papers/1305/1305.6360.pdf>.

**Mathematics as an Essential Tool in Tackling the Crucial Economic Issues and Insecurity in Nigeria**

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**ABSTRACT**

Everyone requires Mathematics as an indispensable for peace and development. This paper articulates the role of Mathematics as an essential and useful instruments for addressing the economics and insecurity challenges in Nigerian government. However, despite all of these accomplishments, it is unfortunate to report that the impact of Mathematics education on the lives of many citizens remains underappreciated. The study reveals that most careers require a strong understanding of Mathematical knowledge as a crucial in tackling the key challenges of economics, unemployment reduction, poverty alleviation, hunger, sickness and the sustainable use of natural resources as well as insecurity that the world faces today. It was recommended that if Mathematics teachers are given the mammoth task of teaching the basic abilities that the pupils require, the current worldwide tsunami of unemployment will be decreased and overdependence on white collar jobs will be reduced. Hence, it will also help in the checking of insecurity such as terrorism, kidnapping, banditry, armed robbery, bunkering, Maritime Security, porous border and pipeline vandalisation.

**Keywords:** Mathematics, Economics, Essential tool and insecurity.

**Introduction**

Education is a social strategy for promoting creativity and citizenship. Promoting creativity entails assisting people in realizing their full potential, while promoting citizenship entails informing people about their rights and obligations in society, both of which are essential features of a country where people's lives and property are protected. The purpose of

education according to Scratch (2014), is to instil values in the hearts of our students who will be the future drivers of democracy, such as care and compassion; selfless commitment; fairness and justice; honesty and trustworthiness; integrity; respect; responsibility; understanding, tolerance, and inclusion (cooperation). The importance of education in achieving

national goals and bringing about changes in society for the better and more effective functioning of society is well understood and recognized that no nation can rise above the level of education received by its citizens. Similarly, the standard of education in any society influences the quality of life in that society (Onwuka & Moseri, 2017).

Mathematics has played a vital role in the development of all human civilization. It was originated together with origin of human civilization. It is a product of human practical experience of means, needs and the application of mathematics discipline in human endeavor. Mathematics is the key of all sciences. Today's world largely depends on science, and science in turn depends on mathematics (Lutfuzzaman, 2018). Many people considered it as a theoretical subject. But the truth is, it is a universal language. Modern mathematics, consisting of arithmetic, algebra and geometry has an important role in the field of education (Ghosh, 2019). The National Policy on Education (FRN, 2018) made mathematics a core subject at all levels of Education. Similarly, the admission requirements for all Science, Technology and Engineering programs has mathematics as one of the fundamental subjects needed to be passed at credit level. Mathematics has been made compulsory by the National Policy on Education (FGN,

2018) because of its important in the various fields of science and technology, yet it is the most readied subject. The study of mathematics is a product of human practical experience of means, needs and it continued to develop along with the development of civilization. Its role in the area of Economics and tackling in securities, poverty among others is over emphasized.

In addition, it is the essential tasks and principles of any government like Nigeria as democratic state is to provide security for its citizens. As a result, no issue lends more meaning and legitimacy to democratic rule than security Onodugo et al., (2016). Security is essential to the existence of any group of people; it is regarded as a right, which is why it is always included in the constitutions of most sovereign states (Adegbami, 2019). Nigeria, for example, clearly states in Section 14 (2) (b) of its 1999 constitution that "the security and welfare of the people shall be the primary purpose of the government." Not ensuring the security of individual people's lives and property is detrimental to any democratic society's considerable growth and socioeconomic development. The degree of peace and stability gained considerably improves the level of development of any democratic society. Nigeria as a democratic has responsible among other things, the

administration of justice, the promotion of economic growth and development, the protection of civil liberties, the provision of public goods and services, and so on (Way, 2017). And in order to develop a democratic society that is generally free of insecurity or has the ability to manage insecurity when it comes, it must be relatively free of insecurity and mathematics can play a role.

### **Mathematics Education**

Mathematics Education can be seen as a field of study is concerned with the tools, methods and approaches that facilitate the practice of teaching and learning mathematics. It is also referred to as the practice of teaching and learning of Mathematics in a way of solving problems involving learning the algorithms and formulas necessary for computations. It is a platform to learn and teach mathematics with better way. Mathematics education provide avenue where students or learners learn various concepts in mathematics which in turn help them in developing their critical thinking and problem solving skills. These also are very crucial in tackling problems in the world of today. According to Idahosa (2015) in Alata (2016), a country cannot develop significant technology without science, just as science cannot develop without mathematics. Mathematics education is a continuous process of

research that facilitates the teaching, learning, and acquisition of mathematical abilities in order to promote national growth. Mathematics education has the ability to make a positive difference in people's lives and is a crucial tool for better comprehending a variety of other disciplines. Mathematics is an indispensable tool for the transformation of technological development into reality, according to Otunu-Ogbisi and Ukpebor (2010), because it communicates the idea of growth, expansion, and improvement in goods and services resulting from practical applications of science to reduce poverty, crime, economic challenges and security issues. Without Mathematics, according to Solvers Esangbedo (2008), there can be no proper development.

### **Mathematics and Economic Challenges**

According to Adams (2019) causes of Nigeria's economic challenges include Ineffective leadership, Foreign exchange policy, Corruption, Unemployment over reliance on oil, Inflation and Insecurity. Mathematics is the foundation of science and technology, which serves as a springboard for national progress. Today, mathematics has a huge impact on science and society. Although the effect is quiet and appears to be concealed, it has shaped our world in several ways. Mathematical concepts aided the technological

revolution, which has changed the way we think and live today. The following are some of the areas where mathematics plays a critical role in shaping Nigerian economy:

**Information and Communication**

**Technology:** Mathematics is a global language which affect all human lives. Its application in the modern world of today is overemphasis. The world has become a global village as a result of today's information and communication technology (ICT). Numerous advances in pure mathematics such modelling, Complex number, Numerical analysis, Calculus, Set and logic etc have enabled these advancements in science and technology. The ability to forecast weather, quantify the effects of environmental risks, project the consequence of electrons, and so on has improved, thanks to mathematical sciences. Mathematics methods, structures, and concepts have become critical to the society's technological operation. Indeed, in this day of hi-tech, the internet, and super motorways, no nation can achieve anything important, particularly in economic development, without technology based on science and mathematics. In this age of research and technology, any meaningful economic development is heavily reliant on science and technology (Alata, 2016).

**Poverty Alleviation:** Poverty is a state in which an individual is unable to meet his or

her own basic necessities. It might also be defined as a situation in which someone who has progressed to the point of being able to meet his fundamental necessities in life is nevertheless reliant on others to do so. This means Mathematics will serve as an indicators of basic necessities to determine the percentage of people living in poverty and look ways forward to reduce it which the application of Mathematics knowledge is paramount important.

**Government:** Mathematics aids the government in determining the population of a country which crucial for general planning purpose such as determining the provision of social amenities that should be supplied and constituency delimitation. Traffic controllers use mathematics to understand distances and measurements to direct airplanes and vehicles at moment's notice. Government use mathematics to assess and analyze data at ministry of education, undertake budget and makes other economic planning. It also develops the skill and willingness to think like a leader when it comes to resolving social, political, and economic issues.

**Engineering:** Engineering is the study of how things work (chemical, electrical, civil industrial and material). Mathematics offers the models, symbols, physics, and logic required in the mechanization processes (Fakinde, 2019). Calculus is used often in



every branch of engineering. Traveling by plane, for example, would be impossible without the mathematics of airflow and control systems.

**Agriculture, Food Security and Unemployment:** Mathematics aids farmers in measuring their land and estimating specific harvests in certain areas. It enables farmers to decide the number of seeds to plant, the quantity of water to use, the appropriate fertilizer to use, and an equal amount of chemical to use in order to produce healthy crops. According to Otunu-Ogbisi and Ukpebor (2010), food security refers to everyone having enough food at all times to live a healthy and active life. Food security is attained, according to Professional Organization for Science and Technology (POST, 2016), "when all people have physical and economic access to sufficient, safe, and nutritious food for a healthy and active life at all times." In other words, People's access to sufficient quality and quantity of food is referred to as food security. Poverty, health, food production, political stability, infrastructure, market access, and environmental dangers all have an impact on food security. Improved food security is critical for global hunger and poverty reduction as well as economic development (Parliamentary Office of Food Security). Hunger, according to POST (2016), can lead to poverty, disease, a loss

of social cohesion, and violence. Low agricultural output rates are one of the immediate causes of hunger and food insecurity. Mathematics may help to maintain food security in the agricultural sector. Mathematical models such as linear optimization can be used in the domain of food production, processing and storage methods. These models can also be used in analyzing production rates and forecasting percentage increases in agricultural products. Using fuzzy logic as a mathematical tool, one can create an economic mathematical model for evaluating the amount of food security in the context of import substitution Olabanji & Ese (2014). This is a model that will allow the country to determine the level of food imports that will not jeopardize local production, thereby ensuring food security and stability. Similarly, mathematical models of time series equations and nonlinear equations can be used to guarantee and monitor agricultural commodity prices (Ebelechukwu, Onah, Oche, Kareem & Ejike, 2017). This will ensure that prices are not determined arbitrarily and absurdly, and that they remain within the reach of the common citizen. This measure guarantees that food is both available and affordable. Thus, the use of these models helps to create jobs for mathematicians and others while also

improving agricultural outputs, which adds significant value to the country's GDP. Another option to use math to combat food insecurity is to create a food insecurity survey tool that allows data on food insecurity in a community or a country to be collected, analyzed, and communicated. Because the lack of good data on food insecurity is a problem in and of itself. The survey data, coupled with census data, is utilized to evaluate the results in order to draw inferences and make judgments.

**Medicine and Physical Sciences:**

Mathematics is utilized in medicine to analyze data on the causes of sickness and how doctors carefully give the right amount of medications to patients. Also medical technicians and nurses need mathematics to treat patients, interpret medical tests, and operate medical equipment. Physical sciences such as chemistry, physics, oceanography, and astronomy rely heavily on Mathematics to build theories and so on. In fact, mathematics serves as an indispensable tool in both Medicine and the physical sciences, facilitating accurate analysis, prediction, and understanding of complex phenomena that are vital for the advancing these fields and improving our understanding of the natural world.

**Entrepreneurship and Banking:**

Successful entrepreneurship necessitates some mathematical abilities as

entrepreneurs can benefit greatly from having a basic understanding of mathematics (Scheper, 2015). Scott (2013) observed that entrepreneurs who are proficient in mathematics manage their entrepreneurial activity more efficiently than their rivals who are not. Basic mathematics is required to carry out the day-to-day operations of any business, such as determining unit costs, total costs, budgets, finance, and credit; costs versus cash; annual reports, income, payroll taxes, and deductions; and understanding annual reports, income, payroll taxes, and deductions. Mathematical models are essential and relevant for business planning and forecasts in some higher-level businesses. Linear and nonlinear programming tools such as the Lagrangian multiplier, Simplex algorithm, and Karush–Kuhn–Tucker conditions could be used in some of these models (Wikipedia, 2020). Math improves the efficiency of an entrepreneur's job and provides increased production. Furthermore, in banking, Simple or compound interest rates are used to determine the terms of loans, overdrafts, and Commission On Transaction (COT). When a share price is obtained and stochastic calculus is utilized to derive the appropriate value of the stock's derivatives, mathematical consistency is also necessary.

### **Mathematics, Security and Insecurity**

Nigeria as a democratic state should ensure strong protection of fundamental human rights, including the right to free movement, peaceful assembly and association, and the right to the security of one's life and property. These attributes are essential for the typical citizen of any country, and ensuring that they are operational is what makes a truly democratic state.

Security has long been a part of human survival and subsistence, and it can be defined as freedom from threat or violence that could result in the loss of lives and property (Adegami, 2013). Therefore, Security should be seen as the absence of any dangers to citizens' lives and means of subsistence, as well as the absence of bodily injury, diseases, unemployment, and human rights violations wherever they may be found inside a sovereign nation. However, Nigeria, like many other countries, suffers from insecurity. For instance, It has faced numerous insecurity in the north east as a result of Boko Haram's actions, Banditry in North west and militancy in Delta areas. The militants in the Niger Delta actually contributed to a drop in oil production, which had an impact on the economy (African Development Bank Group (ADB), 2017).

Insecurity refers to violations of peace and security, whether historical, religious, ethno-regional, civic, social, economic, or political, that have contributed to periodic conflicts resulting in wanton devastation and loss of life and property, such as in Nigeria (Onwuka & Moseri, 2011). There are various underlying reasons that contribute to insecurity, including ethnic, religious, politically motivated violence, systematic and political corruption, economic-motivated violence, a poor security system and poverty and unemployment are among the reasons of insecurity in Nigeria Olabanji and Ese (2014). These elements may be sufficiently separate to generate a sense of insecurity, or they may be mixtures of one or two. Insecurity has thus become a multi-headed hydra with several causal elements, necessitating a multi-faceted solution inherent in a modern democratic democracy. Any sort of security challenge poses a threat to a country's economy and One-way mathematics can help handle some of these security issues, such as effective cyberspace monitoring. Companies that supply goods and/or services for defensive and offensive applications across IT, telecoms, and industrial equipment make up the cyber security market, and mathematics plays an important part in these fields.

Specifically, the following are not only but a few impact of mathematics in a country's security according to Charles (2014).

**Economic Security:** Economic security is determined by using economic indices to assess a country's economic well-being. These indexes are calculated using mathematical skills. The Gross Domestic Product (GDP) is a key metric for determining a country's economic health (GDP). A negative GDP indicates that the economy is in recession, which means that it is unhealthy, whereas a positive GDP indicates that the economy is healthy. Human Capital Index (HCT), Education Index (EI), Mean Years of Schooling Index (MYSI), Expected Years of School Index (EYSI), Income Index (II), and Consumer Price Index (CPI) are other economic metrics that need math abilities. Components of ratio, percentages, ordinal counting, and algebra of numbers are fundamental mathematics to be able to interpret any nation's economy.

**Data Security (Cryptography):** Cryptography is the practice of concealing information by transforming it into an unreadable text. It allows you to store sensitive information or send it through unsecured networks (like the internet) in a way that no one except the intended recipient can access it. Cryptography according to Wikipedia the free

encyclopedia (2018) is the practice and study of techniques for secure communication in the presence of third adversaries. When it comes to the transfer of computer passwords, electronic e-commerce, private communications, and Automatic Teller Machine (ATM) cards, data security is a major concern (Jiang, 2013). Military information and intelligence, electronic commerce, banking and payments, and electronic building access are all applications of cryptography. It's one of the most important aspects of online safety.

**Signals Intelligence:** Signals intelligence is a new technology based on the transmission of a series of numbers that is very significant in all sorts of signal transmission. Wavelet analysis is an interesting new way for solving tough civil and security challenges that uses mathematical and physics principles. Wavelets are a strong statistical tool that can be utilized in a variety of applications, including Signal processing, Data compression, Fingerprint is used to detect the qualities of rapid changing of values, In the description of internet traffic.

**Financial Security:** Financial security is a transferable asset of any form, such as cash, evidence of ownership interest in an organization, or a contractual right to receive or deliver cash or another financial

instrument (Abubakar, Charles-Ogan, and Albert, 2014). Personal financial stability necessitates mathematical abilities such as counting and budgeting. For easy evaluation of ATM cards and fraud detection, skills such as number identification and precise money value are also required. Savings, assets and liabilities, and bonds are all valued with numbers in banks.

### **Conclusion**

Everyone requires Mathematics and the level of Mathematical knowledge required is determined by the learner's career, aim, and life stage. Carpenters, electricians, mechanics, and plumbers, for example, estimate their work. Mathematical knowledge and skills are also directly applicable to various professions such as computer services, government administration, defense, architectural activities and technical consulting, banking and financial services, building, and education. These Mathematical abilities and expertise have aided in the creation of direct jobs for individuals and Mathematicians within these industries, reducing unemployment and, as a result, crises and insecurity.

### **Recommendation**

1. Government should give adequate and sufficient attention to education, particularly mathematics teachers and students at all levels through seminars, workshops, in service training and scholarship grants for effective and sound mathematics education.
2. Government and school's authorities should encourage mathematics teachers to relate their teaching to real life problems base on Mathematical skills, models and equations that are necessary needed in tackling Economics and insecurity challenges in the country and beyond.
3. Developmental infrastructures such as computer laboratory, conducive classrooms, and provision of sufficient and qualified mathematics teachers, improved condition of services as well as commensurate remuneration should be put in place.
4. Government should ensure that unqualified mathematics teachers are educationally upgraded or flush out of the school system.

## REFERENCES

- Adam (2019) Entrepreneur and mathematics. Retrieved from gaebler.com on February 23rd, 2022
- Adegbami, A (2019) Insecurity: A Threat to Human Existence and Economic Development in Nigeria. Public Policy and Administration Research 3(6) Retrieved February 3rd, 2022 from <http://www.iiste.org>
- Alata, S. M (2016): The Role of Mathematics Education in Transforming Nigeria Society. Ilorin Journal of Humanities. 9(14).
- Charles & Ese (2014): The place of mathematics in the fight Against Insecurity in a Democratic Society. Capital Journal of Education Studies 6(3) 71-82.
- Ebelechukwu, Onah, Oche, Kareem, Ejike & African Development Bank Group (ADB) (2017). Nigeria Economic Outlook. Retrieved February 23<sup>rd</sup> 2022 from <https://www.afdb.org/en/countries/west-africa/nigeria/nigeria-economic-outlook/>
- Fakinde, R.A (2019). Mathematics on Service Subject, Journal of STAN (12), 3, pp. 82-93
- Ghosh, S. K. (2019). Ganit Shikkhon. Kolkata: Soma Book Agency.
- Idahosa. M.O. (2015), Mathematics Education in Nigeria: A means to self-reliance knowledge Review-A Multidisciplinary Journal of NAFAK. 11(3). 44
- Lutfuzzaman, A.A.K.M (2018). Developing a Quality Mathematics Education Culture in Bangladesh, Bangladesh Forum for Educational Development, 5 (2), 25-34.
- National Policy on Education (FRN, 2018)
- Olabanji & Ese (2014): The place of mathematics in the fight Against Insecurity in a Democratic Society. Capital Journal of Education Studies 6(3) 71-82.
- Onodugo, I. C, Okoro, E.O, Ndibe, N.B (2016) Insecurity and its effects on Nigerian sustainable development. *International Journal of Academic Research and Development* 1(1) 01-06. Retrieved February 20, 2022, from [http://www.academic-journal.in/archives/2016/vol1/issue1/1\\_1-11.1](http://www.academic-journal.in/archives/2016/vol1/issue1/1_1-11.1)
- Onwuka & Moseri (2017). Transforming the Nigerian Nation through Science, Technology And Mathematics Education. Discussion Paper presented at 2nd annual Conference of school of Sciences, Federal College of Education Obudu, Cross River State. 26th - 29th March, 2017
- Otunnu Ogbisi R.O. & Ukpebor, S.J.N (2010). Mathematics Education: A tool for Technological Development in Nigeria ABACUS: journal of Mathematical Association of Nigeria, 43 (1):46-53 Scott S. (n.d). Parliamentary Office of Science and Technology (POST) (2006). Food security in developing countries. Retrieved February 23rd, 2022, from <https://www.parliament/post>
- Scheper, S. (2015). Entrepreneurship and Math. Retrieved February 2, 2022, from <http://www.gaebler.com/Entrepreneurship-and-Math.htm>
- Scratch, D. (2014) The Purpose of Education in a Democratic Society Retrieved February, 2022, from <https://www.social-work-helper.com/2014/12/12/purpose-education-democratic-society/>
- Way, A. L (2017). Politics & Government: The Essentials. Retrieved February 2nd, 2022, from <https://www.pro-conservative.net/CUNAPolSci201PartOneB2.shtml>
- Wikipedia (2020). Linear programming tool for business forecasting; Wikipedia, free Encyclopedia

**The Roles of the Government and Other Educational Stakeholders in the Funding of Primary Education in Nigeria**

By

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**ABSTRACT**

Primary education forms the cornerstone of Nigeria's education system, moulding young minds and laying the groundwork for future academic, professional, and personal pursuits. In Nigeria, like in many countries, funding primary education involves a complex interplay of roles and responsibilities between government and a diverse range of stakeholders. Effective education funding is essential for smooth educational system operations. Government, community, NGOs, civil society, parents, religious bodies, and more are educational stakeholders. This paper discussed on the concept of education, primary education and funding of primary education. Challenges of facing the funding of primary education stemming from inadequate funding, decaying infrastructure, and a shortage of qualified educators. Conclusion was drawn and it was recommended among others that to address funding challenges and enhance primary education in Nigeria, there is need for increased public investment, private sector engagement, enhanced NGO involvement, community empowerment, and transparent resource allocation.

**Keywords:** *Primary education, funding, Nigeria, government, stakeholders, quality education*

**Introduction**

Education is widely recognized as a critical driver of sustainable development and social transformation. In Nigeria, a nation characterized by a diverse population and a range of socio-economic challenges, the funding of education has emerged as a pivotal factor in determining the quality, accessibility, and inclusivity of the educational system. It is true and conceivable that any investment in education is better and more long-lasting than any investment made in any other field. This is because education is a resource that can help in meeting all of a

person's needs. Society escapes illiteracy and poverty through education. It teaches people to be conscious of themselves and their surroundings and to behave in a more positive and beneficial way. In actuality, education is necessary for someone to be good, moral, accountable, and upright. As a result, you improve as a farmer, health care provider, manager, or educator. Without prioritizing education, a country cannot accomplish any substantial and meaningful objectives that may contribute to its progress. Priority could be given to investing heavily in

education so that it is possible to state unequivocally that Nigeria is actively battling issues like child trafficking, drug addiction, illiteracy, insurgency, unemployment, and a host of other social vices.

Primary education forms the bedrock of a nation's educational system, shaping young minds and preparing them for future academic, professional, and personal endeavors. In Nigeria, as in many other countries, the funding of primary education involves a complex interplay of roles and responsibilities between the government and a diverse range of educational stakeholders.

In light of this, educational development was the primary focus of Nigerian leaders as their country attained independence. At the time of our independence, our great founders understood the value of education in fostering a strong country. They understood that education would enable Nigerians to generate the labor force and workforce required for the nation's industries, civil service, and all branches of government. To generate more effective military and police forces, education was also necessary. They also understood the importance of education in growing private businesses and industries (Omolewa 1995). As a result, it was intended that roadside mechanics, carpenters, and tailors would extend their education and

training. The main challenge, however, was the high cost of education as a social service, necessitating substantial financial support from all levels of government as well as other stakeholders in order for its policies and programs to be implemented successfully. For this reason, the government and other interested parties must work together to make sure that everyone has access to appropriate and equal educational opportunities at every level.

### **Conceptual Definitions**

#### **Concept of Education**

There is no single definition that is acceptable for education as a concept. There are differences in the terminology used to define education. This is due to the fact that a phrase can vary from generation to generation or from one civilization to another in terms of what it means, does, and what exactly makes it up. However, according to Fafunwa (1992), education is "the process by which society instructs the younger generation to acquire knowledge, skills, morals, beliefs, and competency with the aim of passing on their values to the next generation" (p.23). According to Odo (2012), education can be thought of as a process that equips and prepares individuals with the knowledge and skills they need in order to successfully integrate into the society in which they live.



According to Jumare (2015), education also refers to "training in terms of vocation, intellect, and moral values on an individual to help him and the society he lives in." To this aim, education can be seen as a process of creating a character with the pertinent knowledge, skills, and morality required in the development of a unique personality for the good of both the individual and the society in which they live.

Therefore, Education is a multifaceted and dynamic process that encompasses the acquisition of knowledge, skills, values, and attitudes through structured learning experiences. It is a fundamental human right and a cornerstone of personal, societal, and economic development. Education occurs in various formal and informal settings, such as schools, colleges, universities, vocational training centers, and through self-directed learning. The concept of education goes beyond the transmission of information; it involves fostering critical thinking, creativity, and the development of well-rounded individuals capable of contributing meaningfully to society.

### **Concept of Primary Education**

Primary education is the initial and foundational stage of formal education, typically spanning from ages 6 to 11, although this can vary by country. It is the

first level of schooling that children undergo, setting the stage for their future educational journey and overall development. Primary education plays a pivotal role in shaping young minds, fostering essential skills, and building a strong educational foundation upon which further learning is built.

### **Funding of Primary Education**

Any educational system must have sufficient funding in order to run smoothly. In the majority of nations, all levels of government finance education in schools. For the efficient implementation of its programs, education is a social service that involves and needs adequate financial support from all levels of government. The ultimate aim of the government is to ensure that education is good and adequate at all levels. However, funding for education may go beyond monetary or material assistance, such as purchasing textbooks, school supplies, and uniforms. It might cover whatever the government isn't already doing for education to the greatest extent possible. Educational funding include among others:

- Recruitment of teaching and non-teaching staff and payment of their salaries
- Payment of school fees by parent or guardian

- Provision of facilities such as library books, ICT facilities, school buses, etc.
- Provision of capacity building
- Providing school with good nutrition (NTI, 2009; NEDRC (2008), & FRN (2004)

**Educational Stakeholders:**

These are people or Organizations that have interest in education and also have serious concern about a society or nation's educational or school system. They include among others Government, Community, teachers, Parent/ Guardian, Students/ learner, civil societies, Religious bodies, School proprietor, Non- governmental individuals, International communities (Jumare, 2015).

**Nigeria's Government and the Problems with Funding for Education**

In a time when science, technology, and industry are advancing at a rapid pace all over the world, Nigeria is still trailing behind and has an education system that is appallingly deficient. A decade after the nation achieved political freedom, despite the lip service paid to it, the education sector was ignored by subsequent governments, leading to the disintegration of the system we have today. The state of the classrooms, the lack of laboratories and libraries, the lack of relevant textbooks in the libraries that are present, the poor quality of the teachers and students, and

the ongoing strikes in the educational system all point to this (Adeyanju, 2015). It is true that leaders who were backward, dim-witted, and small-minded hurt Nigeria's educational system. The most shocking thing is that many of the political figures, lecturers, and teachers who have undermined Nigeria's educational system come from underprivileged backgrounds and have risen to positions of power in local, state, and federal governments as a result of government-funded educations that their parents could not have paid for (Muhammad, 204). Looking back in time to see the importance placed on education since independence can help us comprehend the rapid fall and degradation of education and those responsible for it.

**Funding of Educational in the First Republic:**

Nationalist politicians gave high priority to education development and extension during the battle for independence because they recognized its value as a tool for achieving national liberty and development. Early in the 1950s, the Regional Governments implemented educational policies and programs that significantly increased the number of children enrolled in elementary schools. This government initiative led to a 64% rise in enrollment in the nation between 1960 and 1973. Secondary school enrolment

climbed from 135, 364 in 1960 to 448,907 in 1973, a 232% rise, while the number of secondary schools increased from 883 in 1960 to 1, 499 in 1973, a 70% increase. Higher education institutes have grown in number as well. In 1973, there were six universities, up from two in 1960 (Omolewa, 1995). And the number of students enrolled climbed from 1,395 in 1960 to 23, 173 in 1973, a 1,561 percent rise (Abba, 2004).

*There is no short cut to education and cheap way of providing the kind of educational system that this region must have. The government is firm in its intention of providing such a system and will prosecute its task with the utmost figure and determination until the end is achieved. (Muhammad, 2004:37)*

Alh. Muhammadu A. Magaji, a retired Zaria N.A Educational Officer, expressed deep concern during an interview with Analysis Magazine regarding the deterioration of Nigeria's educational system. He lamented the current state of education, comparing it with the past, and emphasized the importance of education alongside freedom and justice. He remarked that it is perplexing that an essential institution like education is allowed to crumble by those who have benefitted from it. Reflecting on the 1950s, Magaji noted that the government then demonstrated a strong commitment to education. Significant resources were allocated to education, and schools were well-maintained with abundant teaching equipment and

It's interesting to note that the Northern Region recognized the significant educational gap between itself and the Western and Eastern Regions, as well as the need for increased financing and a strong commitment to education. This was highlighted on the White paper on educational development in Northern Region in 1961 which stated that:

materials. Notably, even primary schools provided boarding facilities with well-nourished meals, uniforms, exercise books, textbooks, and weekly pocket money for students. However, over time, the state of education deteriorated due to changing regimes and policies.

During the Murtala/Obasanjo Regime, the Universal Primary Education (U.P.E.) Programme was launched in 1976. The federal government initially provided financial support to state governments for each classroom, but this support dwindled over time. The subsequent Second Republic saw a shift in funding responsibility to state governments and later to local governments, resulting in unpaid teacher salaries, strikes, and deteriorating conditions.

The Buhari Regime initiated measures to reduce government expenditure on education, including reintroducing tuition fees and removing meal subsidies. The introduction of the Structural Adjustment Programme (SAP) by subsequent regimes further weakened the education sector, leading to job cuts, reduced funding, and inadequate resources. Consequently, education's value diminished as quality declined, exacerbating issues of illiteracy and poor infrastructure.

The current state of education in Nigeria remains challenging. Despite claims of substantial spending, evidence of improvements is lacking. Dilapidated structures persist, and teacher morale is low. The Nigerian education system is plagued by high dropout rates and a large number of illiterate adults. Efforts to improve the situation require qualified teachers, effective policies, and collaborative action among stakeholders.

In conclusion, Nigeria's education system is facing a crisis characterized by inadequate funding, deteriorating infrastructure, and a lack of qualified teachers. Urgent and concerted efforts are necessary to reverse this decline and ensure a brighter future for the country's education and its population.

### **The Roles of Educational Stakeholders in Funding Education in Nigeria**

The success of any well-meaning educational system is hinged on adequate funding of the system. The funding of education is a joint responsibility of the federal state and local governments and others stakeholders (Ngwo, 2002). There exist the following educational stakeholders in the Nigerian educational system:

- Government
- Private sectors
- NGOs and Civil Society
- Community and parents
- International Organizations and Donors,
- Alumni Associations,
- State and Local Governments (Abolarin, 2015)

#### **Government:**

The provision of 1999 constitution stated categorically in section 18 (1)-(3) that government shall direct its policy towards provision of adequate and equal educational opportunities at all levels. Government shall promote science and technology government shall also strive to eradicate illiteracy and to this end government shall as when practicable provide:

- a) Free, universal and compulsory primary education
- b) Free university education

c) Free adult literacy programme

However, government as the leading stakeholder in the educational sector assists in funding school programmes in different ways which include but not limited to the following:

- Employment of teaching and not teaching staff and payment of their salary
- Funding in monitoring of educational policy implementation
- Building and maintenance of school infrastructures
- Provision of teaching aids
- Building and maintaining of educational inspectoral units
- Funding of Capacity building
- Providing school with good nutrition
- Provision of facilities and equipment such as laboratories, libraries books, ICT facilities etc.
- Awarding scholarship to students who excel but without financial base
- Provision of counseling services etc (Ngwo, 2002)

However relevant sectorial bodies such as the Nigerian Education Bank and the Education Tax Fund have been established to respond to the funding needs of education. Other funds from which the burden of financing education can be eased are:

- a) Petroleum Tax Development Fund
- b) Industrial Training Fund
- c) National Science and Technology Fund. (National Policy on Education, 1998; & 2002)

**Private Sector**

The private sector holds a crucial role in supporting primary education in Nigeria through financial contributions and strategic partnerships. Private organizations, corporations, and philanthropic individuals often establish and fund primary schools, contributing to the expansion of educational opportunities. Their investments in infrastructure, resources, and teacher training alleviate the burden on the public sector and enhance access to quality education.

**Non-Governmental Organizations(NGOs) and Civil Society**

NGOs and civil society organizations play a vital role in funding primary education by channeling resources, advocating for policy changes, and implementing targeted interventions. These entities often focus on marginalized and underserved communities, providing financial assistance, scholarships, and school supplies to ensure equitable access to education. Their grassroots initiatives address gaps in funding and

promote community involvement in education.

### **Parents and Communities**

Parents and local communities are integral stakeholders in funding primary education. They contribute through the payment of school fees, fundraising, and volunteering. Community-driven efforts, such as constructing school buildings and providing land, demonstrate a sense of ownership and commitment to education. Active parental engagement not only supports funding but also fosters a conducive learning environment.

### **International Organizations and Donors**

International organizations, bilateral partners, and donor agencies play a significant role in financing primary education in Nigeria. They provide grants, loans, and technical assistance to enhance educational infrastructure, teacher training, and curriculum development. Collaborations with international stakeholders leverage additional resources and expertise to improve the quality and accessibility of primary education.

### **Alumni Associations**

Alumni of primary schools contribute to funding by giving back to their alma maters. These contributions support infrastructure development, scholarships, and teacher

training. Alumni associations create a sense of continuity and pride in the educational institutions, motivating others to invest in primary education.

### **State and Local Governments**

State and local governments share the responsibility of funding primary education in Nigeria. They allocate budgets for education, covering teacher salaries, school infrastructure, and other operational expenses. Ensuring equitable distribution of resources and prioritizing education funding at the local level are critical for enhancing primary education access and quality.

### **Conclusion**

In conclusion, the funding of primary education in Nigeria is a shared responsibility that involves a diverse range of educational stakeholders. These stakeholders play vital roles in ensuring access to quality education and fostering the development of a strong educational system. The private sector, NGOs, civil society, parents, communities, international organizations, alumni associations, and government bodies all contribute to funding and sustaining primary education.

However, despite these efforts, challenges persist. Inconsistent funding, inadequate resources, and policy inconsistencies continue to hinder the optimal development

of primary education in Nigeria. It is imperative for all stakeholders to collaborate, innovate, and prioritize education to address these challenges effectively.

**Recommendations:**

To address the funding challenges and ensure the sustainable development of primary education in Nigeria, the following recommendations are proposed:

1. The Nigerian government should allocate not less than 25% of its annual budget to education (this in line with the UN recommendation for the funding of education by developing nations of the world). This should be done with specific focus on primary education. Adequate funding will enable the improvement of infrastructure, teacher training, and learning resources.
2. Encourage increased involvement of the private sector in funding primary education through partnerships, sponsorships, and the establishment of schools in underserved areas.
3. NGOs and civil society organizations should continue to advocate for education and contribute to funding through initiatives such as scholarships, teacher support, and community-driven projects.
4. Empower local communities to take ownership of their schools by involving

them in decision-making processes, fundraising activities, and maintenance efforts.

5. Alumni associations should be encouraged to contribute financially and participate in initiatives that improve primary education infrastructure, teacher quality, and overall learning experience.
6. State and local governments should prioritize transparent and equitable distribution of education funds to ensure that resources reach the grassroots level where they are needed the most.
7. Collaborate with international organizations and donors to secure funding for educational initiatives and capacity-building programs.

REFERENCE

- Abba, A. (2004) “*Denial of Education: the Great Betrayal*”, in Analysis Vol. 2 No. 2 March 2004.
- Abolarin, E. E (2015). *The Role of Principal in the Present Political Dispensation*. A Paper Presented at 58th All Nigerian Confederation of Secondary Schools.
- Adeyanju, F.B (2015). *Good School-Community Relationship: A Tool for Effective Implementation of the New Education Curriculum in Nigeria*. A Paper Presented at 58th All Nigerian Confederation of Secondary Schools
- Federal Republic of Nigeria (2009). 1999 Constitution of Federal Republic of Nigeria (As amended)
- Federal Republic of Nigeria (1998). *National Policy on Education*. 4th Edition NERDC Press
- Federal Republic of Nigeria (2002). *National Policy on Education*. 4th Edition NERDC Press
- Fafunwa, A.B. (1996). *History of education in Nigeria*, Heinemann press Limited, Lagos
- Jumare, A.M (2015). *An introduction to Educational Management and Ethics*, For Diploma, Colleges of Education Undergraduate Students and Educational Managers Concepts Design and Print, Zaria
- Muhammad, B. (2004). “The Wrecking of Education in Nigeria” in Analysis Vol. No 4
- National Teacher Institute Kaduna (2009). *Manual for Re-training of Basic Education Teachers and managers: Capacity Building Programme for Kaduna State Teachers*.
- Nigerian Educational Research and Development Council (2008). *The Nine years Basic Education Curriculum at Glance*, NERDC Press.
- Ngwo, P. (2002). “*Toward Appraisal of the National Policy on Education*”. *Research in Art and Social Science Education*, Department of Art and Social Science Education, Ahmadu Bello University Zaria
- Omolewa M, (1995). *Certificate History of Nigeria*. Longman
- Odo E. (2002). *Democracy and Education: The Nigeria Experience*. Principal ANCO PSS Journal
- Universal Basic Education (UBEC) (2007). *The Universal Basic Education Programme The Challenge of Implementation*. A Paper presented at the Annual General Lecture of Zaria Education Development Association



**Assessment of ICT Competencies among Business Education Lecturers in South-West Nigeria: Implication for Quality Teaching and Learning**

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**ABSTRACT**

The need to ensure qualitative teaching and learning in business education necessitated this study on evaluating ICT competency of Business Education lecturers in South-West Nigeria. One research question guided the study while three null hypotheses were tested. Descriptive survey design was adopted for the study. Population was 550 lecturers and students and the sample size was 302. A validated questionnaire containing 24 items was used for data collection. The reliability coefficients of the two sections of the instrument were 0.85 using Cronbach's Alpha Reliability Coefficient. Arithmetic mean and standard deviation were used to analyze the data relative to the research questions while Z-test was adopted to test the null hypotheses at 0.05 level of significance. It was found that extent of ICT competencies of lecturers was low. It was further found that gender did not significantly influence the mean rating of respondents on the three areas covered but status and institution ownership did. It was recommended among others that management of the universities should support lecturers of business education by engaging them in retraining programmes to enhance their competences for effective utilization of ICT resources in order to equip the graduates with relevant competences for the 21st century global labour market which demands a quality work force that can use new technology as a means to increase productivity and creativity. Lecturers who succeed in making use of ICT in their work processes do not only contribute to improved learning outcomes in their students, but also benefit personally from enhanced work productivity.

**Keywords:** ICT, business education, ICT competencies, teaching and learning

**1. Introduction**

Education has for long been recognized as a basic instrument of the economic growth, social development and technological advancement of any society or nation. It is in recognition of this fact that government are required to commit immense resources to ensure the provision of education for their citizens and also tailored their policies towards ensuring that it is made accessible to the generality of their citizenry. It is the

key to upward mobility that led to the progressive modernization of societies. Education indeed empowers any nation to rise to the challenges of social, cultural, economic and technological change. As a result, virtually all countries of the world are bracing up for the challenges of modern life. Nigeria should not be an exception. Nigerian tertiary institutions should embrace the challenges in teaching and

learning with technology by creating learning environment that promote active learning, critical thinking, collaborative learning and knowledge creation.

Information and Communication Technologies (ICTs) have become key tools and have a revolutionary impact on how people see and live in the world. ICT encompasses a combination of technologies for collecting, storing, processing, communicating and delivering of information related to teaching and learning processes (Johnson, 2007). It has become so important that every country, organization or institution no matter how highly or lowly placed want to identify and embrace it. In education, it involves the application of digital equipment to all aspects of teaching and learning. The place of ICTs in education and the world in general cannot be ignored, this poses enormous challenges to business education lecturers and society at large. ICT has a wider spectrum of application with enormous relevance to universities teaching and learning activities. It is pertinent to note that, today's introduction of ICT into teaching and learning is a good development with tremendous potentials for qualitative teaching on tertiary education in general and business education in particular. Supporting this, the Federal Ministry of Education (FME, 2011a)

affirmed that quality learning outcome depends on the quality of teaching and learning inputs and the qualitative processing of the inputs which among others include the use of ICT facilities for teaching and learning.

Business education is a broad-based programme having a composite of courses in general education, basic education, business administration and management plus office education. It is the total activity which is planned, organized and developed in favour of the preparation of the youths to function as an economic citizen, a consumer and producer. The specific purposes of business education will lead to the development of vocational competence, personal-use values, adaptability to occupational change, consumer competence, social economic competence and building a foundation for advanced study. It is a multi disciplinary programme that encompasses Accounting, Secretarial Studies now Office Technology and Management (OTM) and Marketing/ Distributive education, (Okorie,2001). Business education prepares the student for business administration and management, Book-keeping and Accounting, marketing and distributive education, office and secretarial education, entrepreneurial education as well as allied courses designed

to develop personal-use skills needed for business success and survival.

However, business education being skill acquiring discipline require the use of laboratories adequately equipped with information and communication technology resources for practical skills acquisition as well as provision of information and knowledge needed for high quality teacher preparation tantamount to teacher effectiveness in the labour market. Today's labour market demands a quality workforce that can use new technology as a means to increase productivity and creativity. Therefore, new teaching competencies are required of universities business education lecturers due to mounting pressure ICTs have placed on educational institutions. The more sophisticated and computerized business offices are the more ICT skills that will be demanded from the lecturers. The current trend in technological development has forced many tertiary institutions to integrate ICTs into their teaching and learning to strive for excellence. It becomes mandatory therefore for all university business teachers to upgrade their competencies and adequately prepare their students for the world of work. Every business education lecturer must have a thorough mastery of the skills,

competencies and knowledge required for teaching effectiveness.

Appropriate use of ICT can catalyze the paradigmatic shift from teacher-centered pedagogy to a more effective learner-centered pedagogy. The focus of tertiary institution however should not be limited to training teachers on how to use ICT but should inculcate the skills and expertise required in using ICT to teach a curriculum that is suited to preparing students for the 21st century world of communication and work

### **Literature Review**

Business Education is an essential element of general education. It is concerned with the impartation of business orientation and knowledge for personal and national development. It involves teaching students the fundamentals, concepts, theories and processes of business. To Osuala (2005), Business Education is an important part of the general education which emphasizes on skills and competencies acquisition for use in offices and business-related occupations. Similarly, Nwanewezi (2010) describes Business Education as encompassing education for office occupations, business teaching, business administration and economic understanding. In all, Abdulkadir (2011) noted that one remarkable characteristic of business education

program is that, its products can function independently as self-employed and employers of labor. To this end, the tenet of business education embraces basic education for teaching career, entrepreneurship, business understanding, office environment and vocational practices. Education in this field occurs at several levels, including primary, secondary and higher education, with the greatest activity in the later. The philosophy of Business Education is to make the Business Educators understand the concept and philosophy of the National Policy on Education as regards business education in national development.

### **Competencies needed for ICT Utilization**

#### **Instructional Delivery**

Competencies in the views of Vathanophas and Thai-ngam (2007) are the certain characteristics or abilities of an individual that enable them to perform appropriate specific actions. It represents the capability that an individual brings to the job and when the responsibilities of the job to produce the desired results require the demonstration of specific actions, the individual draws from inner resources for the capability to respond. In the same context, ICT competence as used in this study therefore, refers to the knowledge, skill and ability of a business education lecturer in a university to make use of the

various ICT tools such as e-mail, facsimile, internet, world wide web, Intranets, extranets, online databases and other networking technologies in delivery qualitative teaching. Skill does not depend solely upon a person's fundamental, innate capacities but must be developed through training, practice and experience, an individual acquired. Skills is the ability to do something well, usually as a result of experience and training. It is a particular ability that involves special training and experience. Experience gained when knowledge acquired from a training programme is put into practice. In the absence of practice, the knowledge gained in a training programme becomes passive.

Skill according to Bolt-Lee and Foster (2003) is the art of possessing the ability to power, authority, or competency etc. to do the task required of an individual on the job. ICT skills are those manual dexterities acquire by an individual through training school or non formal school system. Two fundamental issues are used when a skill is to be acquired, Okoro and Ursula (2012) pointed that the first is the conditions which promote acquisition and the second is the change that will occur when the skill is acquired. However, when an individual set out to learn a new skill, he usually starts with a communicable programme of instruction. Good learners do not jump into

an operation without first receiving the necessary verbal instruction. Thus, the instruction given in bits, units modules in stages, perhaps must be fused together to form a skilled performance. If one invention has influenced learning the most over the past few years it would unarguably be information and communication technology (ICT). The need for ICT skills is no longer a necessity, but imperative to individuals, group and organization in all areas of human endeavors. As the entire world is daily exhibiting and proving right the slogan of being a global village with opportunities, devices and media to reach anywhere in the world on an individual's fingers tips, it is however not an understatement to say that ICT skills is a sine-qua-non to any student who intends to excel in flying colors in his or her chosen course of study. To enhance student's performance especially in business education programme, understanding mastery and utilization of basic ICT skills is needed to ensure the acquisition of required knowledge and values. This will make the recipients of such education (business education) functional citizen in both personal and the world of work.

UNESCO (2007) identified Teacher's ICT knowledge and skills to cover word processing, internet, file navigation, e-mail, presentation packages, spreadsheets,

database and SIS Curriculum manager. Wikipedia (2012) noted that typing is a basic computer skill. Basic computer and word processing skills are required for almost every job. A word processing application can be used in a computer to create, save, modify and print all kinds of documents- letters, reports, worksheets, agenda and much more. Some of the things needed for acquiring computer/word processing skills are computer, improved typing skills; learn to use Mozilla Firefox and Internet Explorer, Review browser and software e-mail programs.

Web usage and Internet browsing skills, this is ability to boot computer system and surf information, Skills in Internet search engines and hyperlinks navigation, to open e-mail account for submission of assignment, skills in downloading and saving learning materials from the Internet or personal study and future use, ability to do conference calls and share knowledge with other students, skills in submitting assignment and exchanging information with the lecturers, skills in using Internet for assignment, research and knowledge update in business education courses, Skills in e-mail document attachment and uploading, updating personal records in the students portal at the college websites, and carrying out registration of courses and lodging complaints at the college website,

skills in anti-virus installation, ability to log-on to window and retrieve learning materials.

Computer application usage skills are skills needed for the use of Microsoft office (Ms-Word, excel and Corel draw) to work on the computer, skills in inserting tables, graphs, bullets and symbols inside documents, skills in editing and formatting documents, ability to use windows icons for carrying out editing of documents, skills in saving documents in different formats such as PDF, RMTL, etc, skills in the utilizations of formulas in excel operation, skills in using graphs for presentation of information, and skills in making graphic designed or do illustrations

Okoye (2012), explained that database is a skill that organizes collection of data for one or more purposes, usually in digital form. It refers both to the way its users view it, and to the logical and physical materialization of its data, content, in files, computer memory, and computer data storage.. The utilization of databases is now spread to such a wide degree that virtually every technology and product relies on databases and DBMSs for its development and commercialization, or even may have such embedded in it. Also, organizations and companies, from small to large, heavily depend on databases for their operations.

According to Menwa in Owa (2005) some Internet networking skills include the following: E-mail, Newsgroup/Tele collaborating, Computer aided telephoning, World Wide Web (www), Surfing the net, Internet Relay Chat, File Sharing and Topic Sharing, Corporate lease access, Video Conferencing, Public Voice Messaging, Radio Paging, Mobile Telephone System, Internet Addressing and Host Addresses. He also expressed that the web can access many forms of internal information. It has a single protocol that allows hypertext documents to be transferred quickly between web browsers and servers. The protocol is called hypertext protocol (http) and some of internet features are: real time information retrieval and transfer; global access; interactive; surfing the net. Owa (2005) enumerated telecommunication competencies to include: log-on, e-mail, Internet, upload, modem, download, log-off, world wide web, tele-conferencing, baud rate, and information high way. Tinio (2011) also explained that teleconferencing refers to interactive electronic communication among people located at two or more different places. According to Akinola (2005) media skills involves multimedia system, which is an exciting mix of graphics, texts animation and photographs on the computer system. It combines movies, sound and animated

graphics to achieve products. With components like sound card, speakers and CD drive on the system the personal computer is turned into a music box, a film editing system, a radio box and a television system respectively. The teacher can use computer as an instructional material by drawing equipment such as filling cabinet, photocopying machine for the students to see and practice on.

Desktop publishing skill can be used for the creation of documents using page layout software on a personal computer. The term has been used for publishing at all levels, from small-circulation documents such as local newsletters to books, magazines and newspapers. However, the term implies a more professional-looking end result, with a more complex layout, than word processing. There are two types of pages in desktop publishing, electronic pages and virtual paper pages to be printed on physical paper pages. All computerized documents are technically electronic, which are limited in size only by computer memory or computer data storage space. Therefore, business education lecturers are required to possess all these information and communication skills for their effectiveness in information dissemination, record management and general work flow. Teachers who succeed in making use of ICT in their work processes do not only

contribute to improved learning outcomes in their students, but also benefit personally from enhanced work productivity.

### **Empirical Studies**

Eneasoba (2014) carried out a study titled assessment of information and communication technology competencies possessed by office technology and management lecturers in tertiary institutions in Anambra and Enugu States. The purpose of the study was to ascertain the extent to which OTM lecturers in tertiary institution in Anambra and Enugu States possess ICT competencies for teaching OTM courses. The major findings of the study revealed that; OTM lecturers in tertiary institution in Anambra and Enugu States possessed computer operation competencies at high extent and networking telecommunication and media competencies at a low extent. This shows that OTM lecturers in tertiary institutions in Anambra and Enugu states ICT competencies are at a low level. It was recommended among others that: office technology and management lecturers should be given sufficient training on how to use ICT in teaching and learning processes to acquire knowledge and skills in integrating the technology in classrooms at mastery level; management of tertiary institution should provide adequate technological resources, technical and

administrative support to encourage office technology and management lecturers to successfully use ICT in classrooms.

The research is relevant to the present study as both researches studied assessment, ICT, competencies and tertiary institutions in Nigeria, both studies adopt the questionnaire for data collection. However, the two research studies differ in sense that Bupo and Ndinechi (2015) studied the ICT competencies by Office Technology and Management lecturers only while the present is being carried out in all South-Western states of Nigeria, the present study being conducted in a different geo political zone promises to add to the body of existing knowledge on the subject matter and will reveal the differences, If any, in the two zones for the attention of relevant stakeholders. The former focused on lecturers of OTM which is a unit in business education programme while the latter focuses on lecturers and students of business education. The above differences are the gaps this research hope to fill.

Apart from this, Bupo and Ndinechi (2015) conducted a study to determine how often business education student in tertiary institutions in Anambra State utilize e-learning. The major findings of the study were that business education students in Anambra state tertiary institutions are competent in the usage of computers to

small extent and that business education students utilize e-learning in the educational process to some extent. It was recommended that the management of tertiary institutions should introduce platforms for e-learning usage. Also, business education learners should be taught on how to apply different forms of e-learning method in their teaching as students are competent in the use of synchronous and asynchronous e-learning modules among others. The above study is related to the present study because it studied utilization of e-learning (a branch of ICT), tertiary institutions, business education students and competency. They differ in the sense that the former only studied students while the latter studies lecturers. The former focused on student competencies and utilization of e-learning while the latter studies lecturers and ICT competencies for qualitative teaching and learning in business education. However, the former study did not state the type of research design used for the study.

### **Statement of the Problem**

In developed countries of the world, ICTs have been found to facilitate qualitative teaching and learning in different fields of education. If ICT resources are adequately provided for business education in tertiary institutions and optimally utilized by competent lecturers, quality teaching and



learning in the programme will be guaranteed. However, studies by the Federal Ministry of Education (2011a) revealed that most teachers still lack the knowledge and skills to use ICT facilities for curriculum instruction; this has been attributed to reasons such as: inadequacy of ICT facilities for the teeming population of teachers and students who need them, other reasons are poor and inadequate infrastructural support such as erratic electricity power supply, poor internet services, low bandwidth and poor maintenance of ICT facilities among others. The resultant effect of these inadequacies is low capacity of teachers to deliver the curriculum which has been largely responsible for low learning achievement and production of poor quality outputs from schools. The extent this reflects the situation in business education programmes in South-West universities is not clearly known. This requires an empirical study to inform and direct remedial actions by relevant stakeholders hence the imperativeness of this study.

#### **Purpose of the Study**

The purpose of this study is to determine the extent Business education lecturers possess ICT competencies for quality teaching and learning in business education programme of universities in South-West Nigeria.

#### **Research Question**

The following research question guided the study:

To what extent do lecturers possess ICT competencies for quality teaching and learning in business education programme of Universities in South-West Nigeria?

#### **Hypotheses**

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

Male and female respondents do not differ significantly in their mean ratings on the extent lecturers possess ICT competences for quality teaching and learning in business education programme in Universities in South-West Nigeria.

Lecturers and students do not differ significantly in their mean ratings on the extent lecturers possess ICT competencies for quality teaching and learning in business education programme in Universities in South-West Nigeria.

Respondents do not differ significantly in their mean ratings on the extent lecturers possess ICT competencies for quality teaching and learning in business education programme in universities in South-West Nigeria based on institution ownership (federal/state).

#### **Methodology**

Descriptive survey research design was adopted for the study. The population for this study consists of 550 (52 lecturers and

498 final year students) of business education from all Universities in South-West Nigeria. The choice of final year students is based on the fact that they have being in university system for more than three academic sessions and can easily form an opinion on any issue relating to their course of study. Sample for the study was 302 (52 lectures and 250 final year students) of business education from universities in the area of study. All the lecturers were used because of the size while stratified random sampling technique was used to select 50 percent of the students from each university that offers business education programme in the South-West Nigeria (Ekiti, Lagos and Ogun states). Instrument used for data collection was a validated five point rating scale questionnaire with a total of 11 items according to the research questions guiding the study. The reliability of the instrument was established through the use of

Cronbach 's Alpha Reliability Coefficient and reliability coefficients of 0.82 was obtained. Arithmetic mean was used to analyse data while the standard deviation was used to ascertain the homogeneity or otherwise of the respondents' rating. Z-test was used to analyse data in respect of the hypotheses at 0.05 level of significance. The use of Z-test was based on the fact that the population mean and standard deviation are known, which implies that the z test can be used directly. A null hypothesis was accepted where the calculated z-value is less than the z-critical value but not accepted where the calculated z-value is equal to or greater than the z-critical value.

### **Results**

Research Question: To what extent do lecturers possess relevant ICT competencies for quality teaching and learning of business education programme in universities in south-west Nigeria

**Table 1: Respondents’ mean rating and standard deviation on extent business education lecturers possess ICT competencies N = 302**

S/N	Items on lecturers possession of ICT competencies	Lecturers		Students		Average		Remark
		Mean	SD	Mean	SD	Mean	SD	
1	Power point to plan for teaching	3.05	1.07	3.10	0.93	<b>3.09</b>	<b>0.94</b>	Moderate Extent
2	Over head projector for delivering lectures	2.00	0.77	2.20	0.77	<b>2.10</b>	<b>0.77</b>	Low Extent
3	E-mail to assess students work/assignment	2.65	1.10	2.66	1.06	<b>2.66</b>	<b>1.06</b>	Moderate Extent
4	Internet for tutorials	2.75	1.09	2.78	1.09	<b>2.77</b>	<b>1.09</b>	Moderate Extent
5	Annotation on audio visual with my story player, etc	1.34	0.56	1.36	0.53	<b>1.35</b>	<b>0.54</b>	Very Low Extent
6	Animations in flash to others listed	2.40	1.24	2.42	1.26	<b>2.42</b>	<b>1.25</b>	Low Extent
7	Facsimile for lecturer-student classroom interaction	2.38	1.07	2.35	1.06	<b>2.35</b>	<b>1.06</b>	Low Extent
8	Multimedia facilities in classroom management and control	1.38	0.49	1.40	0.49	<b>1.39</b>	<b>0.49</b>	Very Low Extent
9	Film strip application as business education teaching aid	1.48	0.61	1.44	0.59	<b>1.44</b>	<b>0.59</b>	Very Low Extent
10	Tele-video conferencing in business education	2.32	1.16	2.40	1.03	<b>2.36</b>	<b>1.04</b>	Low Extent
11	Electronic organizer for information processing	2.04	1.12	2.08	1.07	<b>2.06</b>	<b>1.08</b>	Low Extent
	<b>Cluster mean</b>					<b>2.18</b>		<b>Low Extent</b>

Data in Table 3 show that only three out of the eleven items on lecturers’ ICT competencies listed (1, 3 and 4) with mean ratings of 3.09, 2.66 and 2.77 are of moderate extent while the remaining eight with mean ratings ranging from 1.35 to 2.06 are either of low or very low extent for quality teaching and learning in business education in the universities. The standard deviations for all the items range between

0.49-1.08 this implies that the respondents were far apart in their opinions.

Null Hypothesis 1 : Male and female respondents do not differ significantly in their mean ratings on the extent lecturers possess ICT competences for quality teaching and learning in business education programme in universities in south west Nigeria.

**Table 2: Z-test analysis of the difference between male and female mean rating on the extent of ICT competencies possessed by lecturers**

Gender	N	Mean	SD	z-cal	Alpha Sig.	Df	z-crit.	Remark
Male	151	26.58	2.48	0.79	0.05	299	1.96	NS
Female	150	26.80	2.52					

Data in Table 2 indicate that at the alpha level of 0.05, the calculated z-value is 0.79 which is less than the critical z-value of 1.96. This means that gender has no significant influence on the respondents' opinion on the extent to which lecturers possess ICT competences for quality teaching and learning in business education

programme in universities in south west Nigeria. The null hypothesis was upheld.

Hypothesis 2: Lecturers and students do not differ significantly in their mean ratings on the extent lecturers possess ICT competencies for quality teaching and learning in business education programme in universities in south west Nigeria.

**Table 3: Z-test analysis of the difference between lecturers and students' mean rating on the extent of ICT competencies possessed by lecturers**

Status	N	Mean	SD	z-cal	Alpha sig.	DF	z-crit	Remark
Lecturers	52	27.50	2.45	2.08	0.05	299	1.96	S
Students	249	26.73	2.51					

Data in Table 3 indicate that at the alpha level of 0.05, the calculated z-value is 2.08 which is greater than the critical z-value of 1.96. This means that status has significant influence on the respondents' opinion on the extent to which lecturers possess ICT competences for quality teaching and learning in business education programme

Nigeria. Therefore, the null hypothesis was rejected.

Hypothesis 3: Respondents do not differ significantly in their mean ratings on the extent lecturers possess ICT competencies for quality teaching and learning in business education programme in universities in south west Nigeria based on institution ownership (federal/state)

**Table 4: Z-test analysis of the difference between the mean rating of federal and state-owned institutions respondents on the extent of ICT competencies possessed by lecturers**

Institutions ownership	N	Mean	SD	z-cal	Alpha Sig.	Df	z-crit	Remark
Federal	56	27.71	2.60	2.56	0.05	299	1.96	S
State	245	26.71	2.48					

Data in Table 3 indicate that at the alpha level of 0.05, the calculated z-value is 2.56 which is greater than the critical z-value of 1.96. This means that institution ownership has significant influence on the respondents' opinion. Therefore, the null hypothesis was rejected.

### **Discussion**

Findings of the study show that business education lecturers in universities in South-West Nigeria possess ICT competencies at a low extent. This finding is in consonance with the findings of Emeasoba (2014) that office Technology management (OTM) lecturers in Anambra and Enugu states possess computer operation, networking, telecommunication and media competencies to a low extent. This finding is supported by the works of Yusuf (2005) and Ololube (2006) that teachers demonstration of proficiency in ICT utilization in Nigeria is below expectation and access to ICT resources like internet and computer is mostly limited in campuses of various higher institutions. This report was corroborated by Nworgu (2006), that number of ICT courses offered was inadequate due to inadequate infrastructure and resources which and as a result, teachers on graduation lack knowledge and competencies for ICT utilization in institutions due to proficiency demonstrated by their tutors at low level.

However, the finding is at variance with the view of Ogonia (2008) and Buabeng-Andoh (2012) which stated that business studies teachers and other teachers possess ICT competencies moderately in computer operation than other networking aspect of ICT.

Meanwhile, lack of ICT competencies by lecturers might be as a result of non availability of ICT resources due to poor funding of tertiary institutions as well as inadequate training and development of lecturers in ICT in tertiary institutions. This statement is in agreement with Agbepue ((2016), that there is lack of proper funding for vocational education of which business education is inclusive. Furthermore, findings of the study indicated that male and female respondents do not differ significantly in their mean rating on lecturers' possession of ICT competencies for quality teaching and learning in business education. This finding is in consonance with Okolocha and Ile (2012), Emeasoba (2014) and Akpan (2014) that no significant difference existed between the opinion of male and female respondents on the ICT competencies possess by lecturers. Also in a related study, Soffer and Raban (2016) discovered a significant difference in ICT competencies between male and female teachers. This was supported by the work of Dholakia et al. (2003) that there

was low level of ICT competencies among female teachers. Omenyi, Agu and Odimegwu (2007) attributed this finding to the societal role expectation of the African women which place a lot of restrictions on them.

The study further indicated that status significantly influenced the respondents' mean ratings on the extent lecturers' possess ICT competencies for quality teaching in business education in the area of study. This supports the position of Bupo et al. (2015) that significant difference existed in the mean rating of business education students in Anambra state tertiary institutions in their computer competence level based on the type of institution. Also, this finding is in agreement with Owa (2005) that there is a significant difference in the opinion of respondents on teachers' possession of computer operation competencies base on status. The study also revealed that institution ownership significantly influenced the respondents' mean rating on the extent lecturers' possession of ICT competencies for quality teaching in business education. This finding is in consonance with the research report of Ezenwafor, Mbaezue and Obi (2016) that institution ownership has significant influence on the extent ICTs adoption improve teaching and learning of business education. This could be due to the fact that

institutions owned by the Federal government have access to better funding than state owned institutions. The finding is also, in agreement with that of Ololube (2006) that significant difference existed in the mean rating of business education students in Anambra state tertiary institutions in their computer competence level based on the type of institution.

#### **10. Conclusion**

It is concluded that due to low level possession of ICT competencies by business education lecturers the graduates can hardly be adequately equipped for success in employment and competitiveness in the global workplace of the current era.

#### **11. Recommendations**

Based on the findings, conclusions and implications of the study, the following recommendations are made:

1. Universities management should engage, encourage and sponsor their business education lecturers and laboratory technologist for re-training programmes to update their ICT knowledge, skills and competencies to effectively utilize the resources for quality assurance in their programme
2. University management should make ICT resources adequately available for business education programme to enable their utilization by lecturers and

students for quality teaching and learning.

3. Universities management should enter into partnership with ICT manufacturing organizations to assist in improving the supply of the resources for their academic programmes towards quality assurance.

4. Management of universities should develop sustainable preventive and corrective maintenance culture by servicing and repairing the available ICT resources for optimal utilization by lecturers and students.

FINAL DRAFT BJE A VOL 9 No3

## REFERENCES

- Abdulkadir, A. A. (2011). "The role of Entrepreneurship Education in empowering Nigerian youths." *Business Education Journal*. 8(1), pp. 14-22.
- Agbepue, J. S. (2016). "The role of Vocational Education and Information Technology towards Poverty Reduction and Inhibiting Factors to Poverty Alleviation." *JORIND* (9) June, 2011. Available at [www.Transcampus.Org/Journals](http://www.Transcampus.Org/Journals).
- Akinola, P. L. (2005). "The challenges of reform: ICT in business education." *Business Education Book of Readings*. 1 (5), pp.7-15, 2005.
- Akpan, C. P. (2014). "ICT competence and Lecturers' Job efficacy in Universities in Cross River State, Nigeria." *International Journal of Humanities and Social Science*. 4 (10), pp. 259 – 266.
- Azemikhah, H. (2012). "The 21st century, the competency era and competency theory." 2005 Open Learning Institute of TAFE. Available at <http://www.avetra.org.au/ABSTRACTS2006/pdf>. June 30th, 2012.
- Bolt lee, C., and Foster, S. (2003). The core competency framework: A new element in continuing call for Accounting Education Change in United States. *Accounting Education Journal*. 12 (1), pp. 33-47.
- Buabeng-Andoh, C. (2012). "An exploration of teachers skills perceptions and practices of ICT in teaching and learning in the Ghanaian second cycle schools." *Contemporary education technology*. 3 (1), pp. 36-49.
- Bupo, G. O., and Ndinechi, G. I. (2015). "Business Education students' utilization of e-learning in Anambra state Tertiary Institutions." *International Journal of Scientific Research and Innovative Technology*. 2 (4) pp. 17-20.
- Chukwumezie, F. U. (2005). "Appraisal of Information and Communication Technology Competencies required of senior secondary school Business Education Graduates." *Business Education Journal*. 5(1), pp. 127-130.
- Commission on Information and Communication Technology, National ICT Competency standard for Teachers in Nigeria. Available at [http://www.ncc.gov.ph/nics/files/Nics-Teachers\\_June\\_30th\\_2012](http://www.ncc.gov.ph/nics/files/Nics-Teachers_June_30th_2012).
- Dholakia, R. R., Dlolakia, N., and Kshertri, N. (2003). Gender and internet usage. In H. Bidgol (ed.) *Internet Encyclopedia*, New York: Wiley.
- Eneasoba, N. C. (2014). "Assessment of Information and communication technology competencies possessed by office technology and management lecturers in tertiary institutions in Anambra and Enugu States." *International Journal of Education and Research*. 2 (6), pp. 461-465.
- Ezenwafor, J. I., Mbaezue, N.C., and Obi, M.N. (2016). "Extent ICTs adoption improve teaching and learning of business education in south-east Nigeria." *Ideal Journal of Education and Policy Studies*. 2(5), pp. 147-153.
- Federal Ministry of Education. The state of education in Nigeria: Beyond access. Federal Inspectorate Services, Abuja. 2011a.
- Folorunso, I. O. (2006). "Effects and solutions to inadequacy of instructional equipment for secretarial studies in our tertiary institutions." *COEDAG Journal of Business Education*, 1(1), 1-6. 4(2&3), pp. 10-16, 2006.
- Johnson, O. A. (2007). "Enhancing Quality in Higher Education through Information and Communication Technology in Nigeria." in *Access, Equity and Quality in Higher Education*. J. B. Babalola, G. O. Akpa, A. O. Ayeni & S. O. Adedeji (eds.). NAEAP Publication. Lagos, 2007.



- National Universities Commission. (2011). The role of NUC in quality assurance in Nigeria Universities. *Nigeria Universities System* 12(1): 2. Lagos.
- Nwanewezi, M. C. (2010). "Problems in business education research in ICT era as perceived by business educators." *Business Education Journal*. 7(2). pp. 46-54.
- Nworgu, B.G. (2006). *Educational research: basic issues and methodology*. Wisdom publishers. Ibadan. 2006.
- Ogonnia, F. (2008). Information and communication technology skills possessed by business studies teachers in secondary schools in Enugu Education zones, Enugu State. Unpublished thesis submitted to the Department of Technology and Vocational Education, Enugu State University of Science and Technology, Enugu.
- Okolocha, C. C., and Ile, C. M. (2012). "Business Educators familiarity with the utilization of Hi-tech tools in the preparation of graduates for modern business/marketing in Nigeria." Available at <http://www.researchworld.com/vol.13/issue2/vol3...issue2.../paper-01.pdf> August 27th 2012.
- Okorie, J. U. (2001). *Developing Nigeria's workforce*. Page Environs Publishers. Calabar. 2001.
- Okoro, I. F., and Ursula, O. I. (2012) "The teacher and skills acquisition at basic education from the perspective of cake making in home economics." *International journal of the common wealth research and capacity education initiative (IJCWRCEI)* 3 (3).
- Okoye, O. O. (2012) *Computer basics*. Golden Eagle Publisher. Enugu..
- Ololube, N. P. (2006). "Appraising the relationship between ICT usage and integration and the standard of teacher education programs in a developing economy." *International Journal of Education and Development using Information and Communication Technology. (IJEDICT)*. 2 (3). Pp. 70 – 85.
- Omenyi, A., Agu, N. N., and Odimegwu, C. O. (2007). "Increasing Teacher Efficiency through ICT usage in Tertiary Education." *Nigerian Journal of Educational Administration and Planning (NAEAP)*. 7 (2), pp. 107-119.
- Organization of Economic Co-operation and Development (OECD). (2005). *E-learning in tertiary education. Policy Brief*, 1(1), pp.1- 8.
- Osuala, E. C. (2005). *Business education, principles and Practices*. Anu Books Publishers. Mccrat India
- Owa, F. (2005). "Information and communication technology skills required by business education lecturers and students in colleges of education in Delta State." Unpublished thesis submitted to the Department of Vocational Education, University of Nigeria. Nsukka.
- Soffer, T., and Y. Raban, Y. (2016). "Gender and ICT's Implication for Policy and Strategy." *E-Living Consortium, 2003*. Available at <http://www.eurecon.de/e-living.com/6.../1.pdf>. Retrieved on July 31, 2016.
- Tinio, L. V. (2011). "*ICT in education*." Available at <http://www.en.wikibooks.org/wiki/ICT-in-Education>. August 31st, 2011.
- UNESCO (2007). *Manual for pilot testing the use of indicators to assess impact of ICT use in education*. Available at <http://www.unesco.org/bkk.org/education/ICT/resources>. October 1st, 2011
- Vathanophas, V., and Thai-ngam, J. (2007). "Competency requirements for effective job performance in the public sector." *Contemporary Management Research*, 3(3), (1), pp. 45-70.

**Library Management and Human Resource Development in Delta State University  
Library**

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**ABSTRACT**

The purpose of this research is to show that human resource management (HRM) in academic libraries is primarily concerned with the efficient and effective management of the library's human capital in order to advance the library's mission of serving the institution's students, faculty, and researchers. Delta State University's library administration and HR training were the focus of this research. The study used a correlational survey methodology. A total of 67 library staff members from Delta State University participated in the study. All sixty-seven (67) staff of the Delta State University Library were tallied using the total enumeration method. The "Library Management and Human Resource Development Questionnaire in Delta State Universities (LMHRDQ)" was the survey instrument used. Only 55 out of 67 copies of the survey were usable for statistical purposes. The average and standard deviation were employed to provide insights into the research questions. Staff assessment, training, and encouraging a culture of innovation are all crucial parts of human resource development at the Delta State University library. The study recommended, among other things, improving library staff evaluation, providing training, and cultivating an inventive culture as means to improve employee development.

**Keywords:** *Management*, library management, human resources, human resources development packages, delta state university library.

**Introduction**

The management of human resources is an integral part of a successful university library. Keeping employees enthusiastic, productive, knowledgeable, and motivated is crucial (Padmanabhan & Nityanandam, 2011, cited in Deepa, 2017). The backdrop of this research is human resource development, and the topics being looked at are staff appraisal, training, and innovation

culture. Human resource development is an essential part of the success of any business, company, agency, or institution, and the university library is no exception. In order to better serve customers, businesses often provide their staff with various training and skills. This could be accomplished through attending a conference, workshop, or seminar, receiving on-the-job training,

taking a course online, doing some extra reading, or taking some classes while working. Uchendu (2014) argues that such a program facilitates a smoother onboarding process for new library employees by providing them with the context they need to learn about the library's mission, policies, and procedures. Human resource development includes strategies like participatory management, which libraries can use to get their staff more involved in decision-making. This helps kids learn new things because they have more responsibility. As a result, productivity and efficiency among employees rise. The management of a library is usually responsible for HR training and development.

"Library management" is defined as "the systematic process of determining requirements, motivating staff, preserving resources, and evaluating performance" (Harold, 2015, as referenced in Okwu and Tom-George, 2021). This is done to ensure that library services are utilized to their full potential. In contrast, this research defines library management as the implementation of programs that increase staff capability to acquire, process, and disseminate information resources with the goal of enhancing the efficiency and effectiveness of service delivery. Management concepts, including planning, organizing, staffing,

leading, guiding, controlling, and communicating, are used in the daily operations of a library. Sponsoring staff to attend conferences, workshops, and seminars; providing in-service training; encouraging staff participation in decision-making; providing a comprehensive orientation program; and encouraging staff motivation through appraisal, tally, and reward systems are all tools used by libraries to manage their human resources and provide superior customer service. The university library administration uses these management techniques.

A university library is a specific kind of academic library that exists within a university to further the institution's educational mission. According to Abu et al. (2017), the university library serves as the nerve hub for all academic life on campus. Books, periodicals, online databases, and other information resources are only some of the many types of materials that can be found in a university library. The fact that it connects its users to the world serves its primary function as a storehouse of information. (2014) Onyekweodiri and Agbo For this reason, university libraries are often considered the backbone of their respective universities. The quality of education at a university is directly tied to the library's ability to provide useful information resources and

services. As a result, it is expected that the university's administration will offer human resource development programs for its employees. The structure of the paper is: abstract, introduction, methods, results, discussion of findings, conclusion and recommendation.

### **Statement of the Problem**

Human resources development is the responsibility of library management. It encourages and enables staff to perform effectively. One important aspect of human resources development is to ensure adequate provision of services in university library therefore, recruitment of new entrants into the profession, annual appraisal of the existing staff and staff development programmes could be instrumental to human resources development. The university library management is therefore, expected to provide the needed trainings to develop the staff for effective provision of library services. Despite the roles of library management towards effective human resource development, human resources are not adequately developed thus poorly performing their services. This could be attributed to the methods adopted by the library management for developing human resources in the library. Therefore, the need to survey library management and human resources development or methods in

university libraries in Nigeria becomes imperative. Although studies have been conducted on library management as it relates to human resources development and staff performance, no study to the researchers' best of knowledge has been done on Library management and Human Resources Development in Delta State University Library. This is a gap that the study sought to fill.

### **Objective of the Study**

The main objective of this study is to determine the relationship between library management and human resource development in Delta State University Library.

The specific objectives are to:

1. Ascertain the relationship between staff appraisal and human resources development in Delta State University Library.
2. Determine the relationship between training and human resources development in Delta State University library.
3. Discover the relationship between innovation culture and human resources development in Delta State university libraries.

### **Research Questions**

The following research questions are posed to guide this study:

- i. What is the relationship between staff appraisal and human resources development in Delta State university library?
- ii. What is the relationship between training and human resources development in Delta State University Library?
- iii. What is the relationship between innovative culture and human resources development in Delta State University Library?

### **Hypotheses**

Ho<sub>1</sub>. There is no significant relationship between staff appraisal and human resources development in Delta State University Library.

Ho<sub>2</sub>. There is no significant relationship between training and human resources development in Delta State University Library.

Ho<sub>3</sub>. There is no significant relationship between innovative culture and human resources development in Delta State University Library.

### **Literature Review**

Companies that provide a service to their customers and interact with other people rely heavily on their human resources, as only dynamic individuals are capable of constructing an innovative and expanding business. Keeping its employees' energy,

productivity, expertise, and enthusiasm at a high level is crucial (Padmanabhan & Nityanandam, 2011, cited in Deepa, 2017). Human resource development, on the other hand, entails aiding individuals through planning, performance, feedback, training, periodic review of performance, assessment of developmental needs, and the creation of development opportunities via training, job rotation, responsibility definition, and similar mechanisms in order to increase their skill, knowledge, and competencies.

Thus, the National Library of Australia (2013) defined library management as the problem of managing a library, which includes tasks like planning the creation of materials, classifying those materials, ensuring their safety, allowing users to check them out, and creating and maintaining library computer systems. Okwu and Tom-George (2021) state that in order to effectively manage a library, one must first establish its goals, formulate its strategy, decide on its personnel and services, establish its policies and procedures, and create its budget. It entails everything done to keep the library running well, from hiring and training new employees to implementing cutting-edge techniques. Uchendu (2014) suggested some methods for training and educating library employees, including on-the-job instruction, induction or orientation,

planned visits, collaborative management, presentations, and seminars.

The need for professional training and crash courses was emphasized by Al Qudah (2014). The evaluation, education, and innovative culture of employees are the focus of this study. Agwu (2013) said that developing employees for work performance is an element of corporate culture through appraisal of creativity and risk-taking, attention to detail, outcome orientation, people orientation, team orientation, aggression, and stability. Staff appraisal as a correlate for promotion in federal university libraries in South-South geopolitical zones in Nigeria was studied by Anele (2021), and the results showed a significant relationship between ranking methods, rating scales, and checklist methods. According to Eze's (2009) analysis of college and polytechnic libraries in Anambra and Enugu, the most well-liked staff development plan across the board is performance review. Staff training programs that existed in the university libraries studied by Anyaegbu and Wali (2021) included orientation, computer literacy simulation exercises, in-service workshops, and others. These programs were found to have a positive impact on librarians' job performance. Job rotation, seminars, consulting, publishing, research, study leaves, mentoring, coaching, and

professional associations are all examples of library-specific professional development programs. The research found that librarians' productivity increases as a result of participation in training and development programs. The study concluded that university libraries in south-south Nigeria should routinely invest in the professional development of their librarians. This will encourage staff training and improvement at certain libraries. Researchers have argued that innovation affects how people make decisions and how they interpret and respond to their surroundings, as stated by Inanlou (2017) in her article on innovative culture. Inanlou (2017)'s study on Korean businesses demonstrated that human resource development plays a moderating role in the relationship between company culture and employee engagement. A lack of innovative practices, such as the adoption of different aspects of automation like basic computer operation, maintenance, designing websites, and searching OPAC, was discovered by Barua and Barman (2015), who studied the potential for human resource development in the libraries of higher education institutions in North East India. The article concluded that in order to keep library staff up-to-date on technological developments, it was

necessary to establish sound training programs.

### Research Methods

The methodology used in the study was a survey based on correlational research. A total of 67 people working at the library at Delta State University are included in the sample. The Delta State University Library employs a total of sixty-seven (67) people. To account for all of them, a total enumeration method was used. The "Library Management and Human Resource Development Questionnaire in

Delta State Universities (LMHRDQ)" was the survey instrument. The scale went from 1 (strongly disagree) to 4 (strongly agree), 3 (agree), and 2 (disagree) points. Only 55 of the 67 questionnaires were usable for statistical analysis. The data was analyzed by computing the mean and standard deviation of the scores. Things with mean scores above 2.5 are considered positive, whereas things with mean scores below 2.5 are considered negative. The criterion mean is set at 2.5.

**Table 1: Summary of Mean Scores and Standard Deviation of Staff Appraisal and Human Resources Development in Delta State University Library**

S/N	Item	Mean	SD	Decision
1	Rating scale	2.7	2.5	Agree
2	Promotion	3.2	3.2	Agree
3	Setting of performance targets	2.8	3.1	Agree
4	Establishment of evaluative checkpoints	2.6	2.5	Agree
5	Appraisal of results at the end of the time period	2.9	3.1	Agree
Weighted Mean		2.8>2.5	3.1	Agree

Table 1 displays the average and standard deviation for evaluations of library staff and the growth of human resources at Delta State University. The results show that the means and standard deviations for items 2, 5, 3, 1, and 4 are 3.1, 2.9, 2.8, 2.7, and 2.6, with 3.2, 3.1, 3.1, 2.5, and 2.5, respectively. Since the mean scores are greater than the criterion mean of 2.5, it can be concluded that respondents agreed that library management approaches to human

resources development included promotion, appraisal of results at the end of the time period, setting performance targets, rating scales, and the establishment of an evaluative checkpoint. The evaluation system for human resource growth at Delta State University Library is functioning, as measured by the weighted mean of 2.8. Perhaps this is because of the mandatory annual reviews required by library policy.

**Table 2: Summary of Mean Scores and Standard Deviation of Staff Training and Human Resources Development in Delta State University Library**

S/N	Item	Mean	SD	Decision
1	Sponsorship to Conferences	2.8	2.8	Agree
2	Organising Workshops/Seminars	2.6	2.7	Agree
3	Staff orientation	2.6	2.7	Agree
4	Sponsoring on short courses	2.7	2.8	Agree
5	In-service training	3.0	3.2	Agree
	Weighted Mean	2.7>2.5	2.8	Agree

The result from Table 2 shows the summary of mean scores and the standard deviation of staff training and human resources development in Delta State University Library. All the items have mean scores above the criterion mean. Presenting it in order of magnitude, items 5, 1, 4, 2, and 3 have mean scores of 3.0, 2.8, 2.7, 2.6, and 2.6, with a standard deviation of 3.2, 2.8, 2.8, 2.7, and 2.7, respectively. This

indicates that service training, sponsorship of conferences, sponsorship of short courses, organizing workshops and seminars, and staff training were provided at Delta State University Library. The weighted mean of 2.7 >2.5 indicates that library management has an interest in developing human resources through training.

**Table 3: Summary of Mean Scores and Standard Deviation of Innovative Culture and Human Resources Development in Delta State University Library**

SN	Item	Mean	Mean	Decision
1	Create opportunity for innovation	2.6	2.7	Agree
2	adopt innovative ideas from staff	2.7	2.7	Agree
3	Deploy technological innovations like automation, computers, etc.	2.7	2.8	Agree
4	Rewards innovation from staff	2.8	3.0	Agree
5	Task staff for creative thinking	2.6	2.6	Agree
	Weighted Mean	2.7>2.5	2.8	Agree

Table 3 displays a compilation of mean scores and standard deviations for items 4, 2, 3, 1, and 5 on the innovative culture and human resources development scale at the Delta State University Library. These items received means of 2.8, 2.7, 2.7, 2.6, and 2.6, with standard deviations of 3.0, 2.7, 2.8,

2.7, and 2.6, respectively. This shows that the library's administration recognizes and appreciates its employees for their inventiveness, implements their suggestions and ideas, and uses cutting-edge technologies such as automation and computers. With a mean score of 2.7 on a



weighted scale, library administration clearly values innovation in the workplace. This may be related to the significance of new ideas in today's culture.

**Hypothesis One:** there is no significant relationship between staff appraisal and human resources development in **Delta State University Library**

**Table 4:** Summary of Pearson Product Moment Correlation on the relationship between staff appraisal and human resources development in Delta State University Library

SN	Variables		Staff Appraisal	Human Resources Development
1	Staff Appraisal	Pearson Correlation Sig. (2-tailed) N	1 55	.811 .000 55
2	Human Resources Development	Pearson Correlation Sig. (2-tailed) N	.811 .000 55	1 55

Table 4 summarizes the findings of a Pearson Product Moment Correlation analysis of the connection between employee evaluation and HR strategy in the Delta State University Library. A correlation coefficient of  $r = .811$  indicates a very high degree of association between the two variables. There is a significant relationship between staff appraisal and human resources development in the Delta

State University Library, as indicated by the significant value  $sig. = 0.000 < 0.05$ , which indicates that the null hypothesis that there is no significant relationship between the two is rejected.

**Hypothesis three:** there is no significant relationship between training and human resources development in Delta State University Library

**Table 5:** Summary of Pearson Product Moment Correlation on the relationship between training and human resources development in Delta State University Library

SN	Variables		Training	Human Resources Development
1	Training	Pearson Correlation Sig. (2-tailed) N	1 55	.722 .02 55
2	Human Resources Development	Pearson Correlation Sig. (2-tailed) N	.722 .02 55	1 55

The result from table 4 shows the summary of Pearson Product Moment Correlation on the relationship between training and human resources development in Delta State University Library. It shows the correlation coefficient of  $r=0.722$  which indicates strong and positive relationship. The significant value  $sig.=0.02 < 0.05$  indicates that the hypothesis which stated that there is no significant relationship

between training and human resources development in Delta State University Library is rejected thus, there is a significant relationship between training and human resources development in Delta State University Library

**Hypothesis two:** There is no significant relationship between training and human resources development in Delta State University Library

**Table 6: Summary of Pearson Product Moment Correlation on the relationship between training and human resources development in Delta State University Library**

SN	Variables		Innovative Culture	Human Resources Development
1	Innovative Culture	Pearson Correlation	1	.545
		Sig. (2-tailed)		.000
		N	55	55
2	Human Resources Development	Pearson Correlation	.545	1
		Sig. (2-tailed)	.000	
		N	55	55

The result from table 6 shows the summary of Pearson Product Moment Correlation on the relationship between innovative culture and human resources development in Delta State University Library. It shows the correlation coefficient of  $r=0.545$  which indicates moderate and positive relationship. The significant value  $sig.=0.000 < 0.05$  indicates that the hypothesis which stated that there is no significant relationship between innovative and human resources development in Delta State University Library is rejected thus, there is a significant relationship between

innovative culture and human resources development in Delta State University Library.

**Discussion of Findings**

The major findings of the study are as follow:

1. There is a significant relationship between staff appraisal and human resources development in Delta State University Library with a correlation coefficient value of  $r=0.811$  which indicates strong and positive relationship.

2. There is a significant relationship between training and human resources development in Delta State University Library with a correlation coefficient value of  $r=722$  which indicates strong and positive relationship.
3. There is a significant relationship between innovative culture and human resources development in Delta State University Library with a correlation coefficient value of  $r=545$  which indicates moderate and positive relationship.

### **Conclusion**

Human resources are, without a doubt, essential to the development and smooth functioning of any library. No library can succeed unless it has competent and committed staff working as a cohesive unit to serve its users. In addition to being the first point of contact for library users, they help with regular upkeep and extend the library's reach beyond its physical walls. They provide a wealth of expertise and experience to the library, which is vital in addition to the library's excellent reputation and services. The management of a library is tasked with overseeing both the day-to-day running of the library and the well-

being of its workers. This includes the role of human resource development, which entails encouraging and drawing out staff skills for improved service delivery. Evaluation of staff, orientation of new hires, and the library's culture of innovation were all shown to have a direct bearing on HRD at the Delta State University Library. Therefore, if the library administration adopts these management approaches, there will be an uptick in staff development, and the staff's capacity to carry out their duties effectively will be significantly boosted.

### **Recommendations**

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

1. University library management in Delta State University Library should keep strengthened their appraisal system to further enhance staff development.
2. University library management in Delta State University Library should organize training for staff to help them function effectively in this information age
3. Innovative culture should be strengthened to encourage more innovative practices which will help staff to keep tag of current trends in the profession

REFERENCES

- Abba, T. & Dawha E. (2009). Assessment of personnel training needs in the Ibrahim Babangida Library, Federal University of Technology, Yola Nigeria. *Library Philosophy and Practice* (e-journal). <https://digitalcommons.unl.edu/libphilprac/293/>
- Abu, A. A., Isa, Y.A, Oyedum, G.U., & Bitagi, M.A. (2017, 23<sup>rd</sup> - 27<sup>th</sup> July). *Repositioning of university libraries for national development: A case study of two universities in Niger State*. Compendium of NLA 2017 Conference Papers.
- Adam, G.S., & Fatima, I. L. (2011). An Assessment of public library services in North Eastern Nigeria. *Library Philosophy and Practice*. <https://digitalcommons.unl.edu/libphilprac/2047/>
- Agbo, A.D. & Onyekweodiri, N.E. (2014). Libraries are dynamic tools for national development. *Chinese Librarianship. An International Electronic Journal*, 22, 20-26.
- Agbo, A.D., Umenwa, E. & Onyekweodiri, N.E (2016). Assessment of available resources and library services provided in two medical libraries in South-East Nigeria. *International Journal of Library Science*, 5(1), 1-6.
- Agwu, M. O. (2013). Organizational culture and employee's commitment in Bayelsa
- Akanwa, P.C. (2016). Library resources. In R. U Ononogbo and P.C Akanwa (Eds). *Basic concepts of library practice* (pp 44- 73). Supreme Publishers.
- Al Qudah, H. M. A., Osman, A., & Al Qudah, H. M. (2014). The effect of human resources management practices on employee performance.
- Anele, E. (2021). Staff appraisal as correlates for promotion in federal university libraries in South-South geo political zones in Nigeria (Unpublished doctoral thesis). Department of Library and Information Science, Ignatius Ajuru University of Education, Port Harcourt.
- Aneru, A.A., Yakubu, M., Nweke, P.O., & Makintami, A. (2014). Training librarians for Anyaegbu, M. I., & Wali, N. B. (2021). Influence of staff training and development on
- Arudi, N. (2017). *Staff needs and training programmes of public library in South - South, Nigeria in the Information Age* [Unpublished master's thesis]. Department of Library and Information Science, Imo State University, Owerri.
- Barua, N., & Barman, R. K. (2015). Human resource development in the libraries of institutions of higher education in North East India with special reference to library automation. *Journal of Information Management*, 52(1), 37-44.
- Deepa, B. (2017). The factors of competency development among the working library professionals of the university libraries of North East India challenges and realities. <http://hdl.handle.net/10603/207716>
- Ejimofor, P. N. (2003). Information Resources Management (IRM) in libraries. *The Nigerian Library Link*, 1(1), 159-167. electronic library services in State University Libraries in Nigeria. *Scholarly Journal of Education*, 3(5), 46-51.
- Eze, C. O. (2009). Assessment of staff development programmes in college and polytechnic
- Ifidon, S. A., & Ifidon, E.I. (2007). *New directions in African library management*. Spectrum Books Ltd.

- Inanlou, Z., & Ahn, Y. (2017). The effect of organizational culture on employee commitment: a mediating role of human resource development in Korean Firms. *The Journal of Applied Business Research*, 33(1), 87-94.
- Mu'azu, M.N & Mohammed, Z (2016). Challenges of teaching and learning entrepreneurship education in library and information science schools in Nigeria. *Nigerian Libraries*, 49(1&2), 34-44.
- Okwu, E., & Tom-George, N. (2021). Influence of university libraries management strategies on satisfaction of 21<sup>st</sup> century users in South-South, Nigeria. *International Journal of Information Processing and Communication*, 11(1), 59-68.

- Onifade, A. (2011). Management: office, business, education. Kappco Nigeria Ltd. State civil service, *Journal of Management Policies and Practices* 1(1), 35-4.
- Uchendu, E. M. (2014). *Management and administration of library and information science*. Cel-Bez.
- Ukwuoma, S.C., & Akanwa P.C (2008). Human resources development programmes in Nigerian academic libraries: A comparative study of Universities in Imo State. *Samara Journal of Information Studies*, 8(2), 38-46

FINAL DRAFT BJEAVOL9NO3

**Effects of Field Trip and Discussion Methods on the Academic Achievement of Geography Students in Secondary Schools**

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**ABSTRACT**

The study investigated the effects of Field trips and Discussion methods on academic achievement of geography students in secondary schools in Fagge Local Government Kano State, Nigeria. The study adopted an experimental research design, that is, a Quasi-experimental design with pre-test – post-test. The targeted population comprises of all senior secondary school two (SS II) geography students in the area. The sample for the study consisted of seventy (70) Senior Secondary School II students. The students selected were randomly assigned to experimental and control groups of thirty-five (35) students each. The instrument used for the study is the Geography Academic Achievement Test (GAAT) designed by the researcher. The instrument was validated by three (3) experts. The reliability of the instrument using Pearson Product Moment Correlation Coefficient  $r = 0.82$  was obtained. Three specific objectives and three hypotheses were formulated and tested at 0.05 level of significance. The data were analyzed using t-test statistics. The result indicated that there is a significant difference in the mean achievement scores of students' pre-test and post-test when taught with the field trip method of teaching, and the mean achievement scores of students' pre-test and post-test when taught with the discussion method. Also, indicates there was no significant difference between the pre-test scores of the experimental and control group ( $t(68) = 0.3285$ ,  $p > 0.05$ ). Thus, the two groups were considered equivalent in terms of their achievement scores. It is therefore recommended among others that educational planners use the results of the research to find more appropriate teaching methods to teach and learn about the various aspects of geography in senior secondary school.

**Keywords:** field trip, discussion method and geography curriculum, secondary schools

**Introduction**

There is no common definition of teaching because different educationists have defined it differently to suit the purpose for which they use it. Teaching can be seen as an art or medium through which ideas, values, and concepts are transferred to the

learner in order to bring about a positive change in his/her behavior. Mang and Mankilik (2002) define teaching as a process that facilitates learning. From a different dimension, Damar (2004) view teaching as an organization of curricular

and relevant resources, the direction of experience and relevant resources to facilitate learning. The art of teaching lies in creating good learning situations and responding creatively to new situations as they arise. It is however, clear that to successfully relay the experiences effectively, there are mediums to be used, which are the techniques or strategies and sometimes referred to as the methods to be employed for effective teaching and learning processes. Teaching strategies, techniques or methods may be seen as plans formulated to bring about behavioral change in the students. By virtue of teaching, it is expected that every experience to be taught requires the use of two or more techniques to appropriately deal with it. Damar (2004) describes the different teaching methods: discussion, lecture, guided observation, drama, exercise, experiment, demonstration and field trip. It is expected that teachers get acquainted with these techniques and use them effectively. Based on this study, field trips and discussion methods of teaching will be the major focus of the research.

The purpose of education is to develop the knowledge, skills, and character of students. This process is not restricted to school, classroom or textbooks. Nabors (2009), says that school learning should be authentic and connected to the world

outside of school not only to make learning real but also to develop the ability to apply knowledge in real-world settings. He adds that field study brings about an understanding of the processes underlying geographical patterns in space and time. Tal and Morag (2009), describe field trips as students' experiences outside the classroom at interactive locations designed for educational purposes.

The discussion method is an oral interaction between people which consists of asking questions and giving answers. The method involves active participation of students and giving feedback and therefore is an effective method of teaching. The use of the discussion method is suitable for meeting the objectives of Geography teaching because the method provides an effective means of developing skills and of utilizing facts and information i.e. students not only learn to communicate ideas, but also to dissect and evaluate them and find wider and more practical applications for them. As a result, better understanding is ensured making learning more meaningful and more lasting (Quist, 2005).

Ngaroga (2018) emphasizes that the teachers' role during discussion should be that of a guide. The students are therefore given time to express their ideas and participate actively in the lesson. The discussion method is therefore appropriate

for teaching when the topic requires the flow of information and ideas from the teacher to students, from students to teacher or student to student.

Discussion is a pre-planned organized, unique method of teaching that works well if students accept that learning comes from peer interactions not just from teachers (Ayoti and Patel, 2014). It is characterised by increased involvement and active participation of members of the class. The participants are allowed to rely on their inner capacities, which encourage inventiveness, originality and creativity. The students are all allowed to put their thoughts and ideas into words, which otherwise would remain vague and indistinct as long as there is no verbal expression. Consequently new knowledge, skills and insights are acquired as presentations are presented by others during discussions.

Geography as a field of study enables us to comprehend the universe in which we live from different perspectives. It allows a logical framework for investigations into different questions about the environment.

It bridges the gap between the physical and social sciences by providing an understanding of different societies, cultures, and economies as well as those physical landscapes and different environmental processes. These can only be

obtained through proper methods of teaching and learning.

The scope of the Geography curriculum as presented in the Nigerian National Curriculum is so wide that hardly would teachers cover the syllabus before the students write their final and external examinations. This is seen in the division of Geography into physical, map-reading, regional, and human geography which entail that geography teachers need to employ different teaching methods for effective learning outcome. In respect to this study, discussion and field trip methods are seen to be effective and peculiar to the teaching of Geography in the senior secondary school. This is as a result of the supposed effectiveness of these methods in promoting effective interaction between the teacher and students. The discussion method permits a close interaction between the teacher and learners such that the learners voice their views, ask questions and are very involved and excited in the interaction. The field trip method brings into focus all the five senses in an experience that promotes meaningful learning. Indeed, learning theories spell out clearly that mere verbal presentation of ideas; and concepts as seen in some methods such as the discussion and lecture method may not promote meaningful learning as this only appeals to the sense of



hearing. However, effective and meaningful learning is that which brings the five senses into focus. The quality of any teaching strategy is estimated from the total pupils learning outcome with the achievement in tests given as paramount.

The geography curriculum has been planned in such a way that the methods of teaching for every subject matter and content listed in the curriculum have been suggested. These methods are deemed to be the most appropriate for the contents that have been drawn. It is expected that teachers adhere to the suggested methods except otherwise established that the developmental changes and differences of the learners, environmental challenges and ability differences do not permit for total adherence. However, teachers do not seem to understand the relevance of using the methods that are most appropriate for selected content and may not want to deliberately explore on different methods of teaching to discover the most appropriate and suitable for content and students of the selected content in question. Rather, they go for methods they are most used to which may seemingly be cheaper in terms of cost and time.

The application of wrong teaching strategies has a direct negative bearing on academic achievement particularly in geography; this has formed part of the

problem in the teaching of geographical concepts effectively. Methods of teaching geography are all good, but not all methods apply to all subject matter. For geography which looks at relationships between man and his environment, it requires that apart from classroom discussion, there is the need to look at the physical environment to establish the kind of relationships that exist. Looking at the geography curriculum in use in Nigeria, discussion and field trips tend to take the center place among the suggested methods of teaching for the contents listed, that is, these two methods (Field trip and Discussion) seem to dominate in geography curriculum. It is based on these; the researcher went out to find out the differential effects of Field trips and Discussion methods of teaching on students' achievement in geography curriculum in Fagge Local Government area of Kano State, Nigeria.

### **Literature Review**

The review of literature is on the concept of teaching method, field trips and discussion methods, and also empirical studies.

Teaching is characterized by a process that makes it possible for learners to learn. The manner or style by which the teacher presents his materials to learners and engages them in the task of learning is referred to as teaching methodology. This makes methodology very vital in the

teaching learning situation. Teaching method is a means for helping students to study effectively. Teaching methods concern the tactics teachers use to meet teaching objectives.

Teaching methods are ways instructors employ to convey the learning materials to learners. It is the overall procedure in which the process of teaching is organized and executed. Instructional method is the series of actions or activities planned by the instructor and systematically provided to the learner to enable him receive and process the information, retain and recall it in order to be able to use it to tackle emerging life task and problems. Omotosho (1991) as cited in Sanda and Mazila (2017) saw instructional method as the strategy or plan that outlines the approach that instructors intend to take in order to achieve the desired objectives. Amadi (1992) as cited in Sanda and Mazila (2017) revealed that instructional methods refer to all the things the instructor does in the classroom to enable the learner learn.

According to Sampath (2006), the term field trips is usually used when a person or a group of persons undertake a study tour to places where they expect to have a change from normal classroom routine, as learners interact with the built or natural environment. When educational field trips are undertaken by students, the main

objective is to gain additional knowledge through direct experience that will bring about active learning while dealing with concrete material.

Hein (2013), argues that field study can allow all types of learners to excel in acquiring knowledge in a subject, skills and building confidence for further learning, hence the learning from known to unknown. Learners from disadvantaged backgrounds will have an opportunity to make mental structures and experience places and events otherwise unobtainable to them while in a restricted classroom constraint. Hein adds that field trip lessons bring about direct experience with concrete phenomena and materials. Michie (2018) outlines the following as the purposes of conducting field trips: "Provide first-hand experience to the learner hence better performance in evaluations and change of attitude. Stimulate interest and motivation in physical geography thus retention of learned matter. They add relevance to learning and interrelationships among disciplines that promote transfer of learning and finally to promote personal development that enables learners to perform better in assessments and application of skills acquired."

According to Gitau (2008), defines the discussion method as the oral interaction between people which consists of asking

questions and giving answers. He further says that the method involves active participation of students and giving feedback and therefore is an effective method of teaching. According to Awiti (2010), the discussion method can be effective and successful when the following preparations are made by the teacher and the students: the students are given adequate time to search for information on the topic; the teacher avails the documents or assists the students by suggesting sources of information; and the students to be organized in appropriate groups and choose group leaders to record the points raised during the discussion.

There are various empirical studies on the use of different teaching methods in teaching and learning. Nuwana (2012) conducted research on “determining methods used in teaching geography in secondary schools” and the study indicated that the use of question and answer methods by teachers is at 85.3% while the use of field work by teachers is at 56.2%. Elvis (2013) also conducted a research on “teaching methods and students’ academic performance” and the findings shows that teacher-student interactive method was the most effective teaching method followed by student-centered method while the teacher centered approach was the least effective teaching method. The findings of Abdu-

Raheem (2011) on “effects of discussion method on achievement and retention in secondary school students in social studies” revealed that discussion method was superior over the traditional method in enhancing students’ achievement and retention in social studies. Abdulhamid (2010) conducted research on “effects of two teaching methods on secondary school students’ agricultural science performance” and the findings revealed though both demonstration and discussion method have noteworthy impact on student’s performance in agricultural science, however, demonstration method was found to be more viable than the discussion method. From the empirical studies, none of the study considered the differential effects of Field trips and Discussion methods of teaching. Base on this, the researchers conducted the study

### **Purpose of the Study**

The purpose of the study was to determine the effects of Field Trips and Discussion Methods on Academic Achievement of Geography Students in Secondary Schools in Fagge Local Government, Kano State, Nigeria

Specifically, the research pursued the following objectives:

1. The effects of using the field trip method of teaching on students’ achievement in geography.

2. The effects of the using discussion method of teaching on students' achievement in geography.
3. To determine significant differences in students' achievement in geography when taught using Discussion and Field trip methods of teaching.

### **Hypotheses**

1. There is no significant difference between the pre-test and post-test when using the field trip method of teaching students' achievement in geography
2. There is no significant difference between the pre-test and post-test when using the discussion method of teaching students' achievement in geography
3. There is no significant difference in students' achievement in geography between those taught using discussion and field trip methods.

### **Methodology**

Quasi-experimental design with pre-test – post-test control group design was used in this study to examine differential effects of Field trips and Discussion methods of teaching on students' achievement in geography curriculum in Fagge Local Government of Kano State, Nigeria. Two (2) groups were randomly selected for the pre-test and post-test design. The experimental groups were taught using the discussion method and the control groups were taught using field trips method. The

targeted population comprises of all senior secondary school two (SS II) geography students in Fagge Local Government in Kano State, Nigeria. A simple random sampling technique was adopted for the study. Out of the 116 public senior secondary schools in Fagge Local Government in Kano State, two (2) secondary schools were selected for the study. Thirty-five (35) students were randomly selected from each school chosen for the study making a total of seventy (70) students. The chosen students were randomly assigned into experimental groups and control groups of thirty-five (35) students each.

The data collection instrument in the study is the "Geography Academic Achievement Test"(GAAT) "Geography Academic Achievement Test"(GAAT) was used in the study, and was created by researchers. The test items used covered the topic the students were taught in the class using both methods of instruction. The test item used was adopted from the West African Examination Council (WAEC) past examination questions and from relevant textbooks used in teaching geography. Thirty (30) multiple choice test questions were set on the topic taught with four options (A-D) in which there is only one correct answer. Students were required to answer all questions and all questions carry

equal marks. Right respond to a question will earn two (2) marks while wrong answer will earn zero (0) mark. Total marks are sixty (60) marks for all correct answers.

The instrument used for data collection was validated by three (3) experts from Test and Measurement education, curriculum studies and geography, all from Bayero University Kano. The school used for establishing the reliability of the instrument was taken outside the sample study. The reliability of the instrument was determined using the test-retest reliability method. The test was first administered to a group of ten (10) students who were randomly selected. After two weeks, the test was re-administered on the same group of students. The result of the two tests was collated and compared to determine the reliability of the instrument. The scores of the two sets were correlated using Pearson Product Moment Correlation Coefficient Analysis in which a correlation

coefficient of  $r = 0.82$  was obtained. The reliability coefficient shows that the test instrument is consistent and reliable.

The instrument for data collection was administered two times at different intervals of six weeks, that is, before treatment (pre-test) and after treatment (post-test) to determine the effects of the treatment. The instrument was administered by the researchers and the researcher assistant.

The research hypotheses were tested using paired t-test and independent variable t-test at 0.05 level of significance.

### Results

The results of the study were analysed based on the research hypotheses stated.

**Hypothesis One:** There is no significant difference between the pre-test and post-test when using the field trip method of teaching students' achievement in geography

**Table 1: Paired t-test Comparison of the Achievement Scores for the pre-test and post-test when using the field trip method**

Variable	N	X	SD	Df	t	p-value	Decision
Pre-test	35	21.83	5.76	34	-24.34	.0000	Rejected
Post-test	35	50.06	4.99				

Note:  $p > 0.05$

Table 1 shows the achievement scores of the pre-test and post-test when using the field trip method. The pre-test has a mean score of 21.83 with a standard deviation of 5.76 while the post-test has a mean score of 50.06 with a standard deviation of 4.99. The

computed t-value at  $t(34) = -24.34$  was significant at 0.05 alpha level of significance. This indicates there is significant difference in the mean achievement scores of students' pre-test and post-test when taught with the field trip

method of teaching. Thus, we rejected the null hypothesis.

**Hypothesis Two:** There is no significant difference between pre-test and post-test

when using the discussion method of teaching students' achievement in geography

**Table 2: Paired T-test Comparison of the Achievement Scores for the pre-test and post-test when using the discussion method.**

Variable	N	X	SD	Df	t	p-value	Decision
Pre-test	35	20.74	4.91	34	-21.62	.0000	Rejected
Post-test	35	48.63	6.99				

Note:  $p > 0.05$

Table 2 shows the achievement scores of the pre-test and post-test when using the discussion method. The pre-test has a mean score of 20.74 with a standard deviation of 4.91 while the post-test has a mean score of 48.68 with a standard deviation of 6.99. The computed t-value at  $t(34) = -21.62$  was significant at 0.05 alpha level of significance. This indicates there is a

significant difference in the mean achievement scores of students' pre-test and post-test when taught with the discussion method of teaching. Thus, we rejected the null hypothesis.

**Hypothesis Three:** There is no significant difference in students' achievement in geography between those taught using the discussion and field trip methods.

**Table 3: T-test Comparison of the Achievement Scores for the Experimental and the Control Groups**

Variable	N	X	SD	Df	t	p-value	Decision
Experimental Group (Discussion method)	35	48.63	6.99	68	0.984	0.3285	Accepted
Control Group (Field Trips)	35	50.06	4.99				

Note:  $p > 0.05$

Table 3 shows the pre-test analysis for the experimental (experimental group) and control groups (field trip). The experimental group has a mean score of 48.63 with a standard deviation of 6.99 while the control group has a mean score of 50.06 with a standard deviation of 4.99. The computed t-value at  $t(68) = 0.984$  was not significant at 0.05 alpha level of

significance. This indicates there was no significant difference between the pre-test scores of the experimental and control groups ( $t = 0.3285, p > 0.05$ ). Thus, the two groups were considered equivalent in terms of their achievement scores.

### Discussion of Results

This study set out to find out if the teaching methods selected for use in teaching the

selected subjects matter in the Geography curriculum have any effect(s) on the academic achievement of Senior Secondary School two (SSII) students. To test the hypotheses, two schools with similar characteristics were used and taught using a different method of teaching. School “X” was taught using the field trip method while School “Y” was taught using the discussion method. In finding out the effect of using the field trip method on students’ academic achievement, it was discovered through the test administered to them before and at the end of the treatment shows mean scores of 21.83 and 50.06, a standard deviation of 5.76 and 4.99, this shows that, their performance was good, it means that field trip method of teaching is effective in the teaching of geography in senior secondary school in the study areas. Damar (2004) emphasized the need for geography teachers to use the field trip method of teaching because according to Damar, what the students see physically can hardly be forgotten and particularly when the field trip is properly organized, it reduces the boredom of sitting every day in class and on the same seat to receive lessons. The findings also agree with Hein (2013), who argues that field study can allow all types of learners to excel in acquiring knowledge in a subject, skills and building confidence for further learning, hence the learning from

known to unknown. Learners from disadvantaged backgrounds will have an opportunity to make mental structures and experience places and events otherwise unobtainable to them while in a restricted classroom constraint. Hein adds that field trip lessons bring about direct experience with concrete phenomena and materials which improves learner’s performance.

It was also discovered that; the discussion method of teaching geography is effective from the test administered to the students before and treatment (pre-test and post-test) shows mean scores of 20.74 and 48.63, and standard deviation of 4.91 and 6.99. This is in line with Mundi (2006) who opined that the discussion teaching method is advantageous in the following ways: it saves time and facilitates student’s involvement teaching and teaching; is an attention inducer and a powerful motivator in lesson delivery between students to students or between teacher to student; students receive feedback immediately through their own discussion; it gives a real-life situation of course of study as students acquire skills in real-life situations using tools and materials in their discussion; and it is good in showing the appropriate ways of doing things. This result revealed that the discussion method has great effect on students’ academic performance.

In order to find out the deferential effects between the academic achievements of the two sets of students in using the two methods of teaching, their mean scores were correlated and the difference was calculated using the student t-test of independence sample. The result obtained further confirmed that there is no difference in the academic achievement of students in the different methods that teachers use to teach the curricular content of the school subjects. The mean score of the experimental is 48.63 and the standard deviation is 6.99 while the control group is 50.06 and the standard deviation is 4.99. This shows that; there are no significant differences in their academic achievement. This is in line national curriculum which suggested field trips and discussion methods in most of the content for the teaching of the subject matter.

The national curriculum operational in Nigerian Secondary schools is planned in such a way that it gives room for the use of more than one method of teaching in a given subject matter. Different methods are suggested bearing in mind the individual differences that are found in learners. Consequent to this, teachers have been trained in the use of different methods and they are expected to give trial tests on these methods to discover the most appropriate for the given contents. Unfortunately, it was

discovered that some teachers do not adhere to the methods suggested by the national curriculum. They rather go for methods that appeal to them without taking into consideration the nature of the learner. For instance, in a study carried out by Nuwana (2012) on teaching methods used by teachers in geography, it was discovered that out of the total of 100 teachers sampled for the study, 70% were found not to be adhering to the teaching methods suggested in the national curriculum. This implies that teachers show nonchalant attitudes towards meeting learners' needs. Moreover, it is the interest and the needs of the learners that should cause a teacher to want to put in an effort in discovering the individual differences of the learners" so as to use the methods of teaching that best meet such needs.

### **Conclusion**

Based on the research findings as related to the hypotheses formulated and tested, the results obtained show that field trips and discussion methods of teaching had a greater effect on students' academic achievement in geography, this was confirmed in the post-test administered to the students after the treatment, The hypothesis that was tested also confirm this assertion that there is no difference between the academic achievement of students taught with a field trip and discussion



method and those taught with field trip method. The field trip and discussion methods enhance better performance due to its students' involvement approach. The manner in which the students themselves were engaged in finding, exploring and experimenting has prepared them more readily for geography lessons. This approach made the students follow the execution of the lesson with understanding. In the end, they were able to perform better or higher in geography. So, it was concluded that the methods were innovative and resourceful.

### **Recommendations**

Based on the research findings the following recommendations were made:

1. Teachers should adhere to the methods suggested by the national curriculum.
2. Educational planners should also use the results of the research to find out more appropriate teaching methods to be used in teaching and learning about the various aspects of geography in senior secondary school.

3. Textbooks writers should be encouraged to incorporate field trips and discussion approaches in their writings. This will go a long way in making geography teachers to be more educated about the approach
4. The teacher should consider factors such as previous knowledge, size of the class, available resources, number of students, teacher's effectiveness etc. before selecting a teaching method to be used in teaching and learning.

**REFERENCE**

- Abdulhamid, A. (2010). Effects of two teaching methods on secondary school students' agricultural science performance in Bauchi metropolis, Nigeria. *Journal of research in education and society*, 1(1): 1-12.
- Abdu-Raheem, B. O. (2011). Effects of discussion method on secondary school students' achievement and retention in social studies. *European Journal of Educational Studies*, 3(2): 293-301.
- Awiti, D. (2010). *The Use of Discovery Methods in Our Schools*. Daily Nation May 10, 2010 Pg. 10.
- Ayoti, H., & Patel, M. (2014). *Instructional Methods*. Nairobi: Nad Publications
- Damar, D. N. (2004). *The Making of a Geography Teacher*. Jos: Deka Publications.
- Elvis, M. G. (2013). Teaching methods and students' academic performance. *International journal of humanities and social science invention*, 2(9): 29-35.
- Gitau, P. N. (2008). *Mastering PTE education*. Nairobi: Kenya Literature Bureau.
- Hein, G. E. (2013). More than a field trip: Science programmes for elementary school groups at museums. *International Journal of Science Education*, 13(5), 505-519.
- Mang, L. G. & Mankilik, M. (2002). *Instructional Practical Skills for Prospective Teachers*. Jos: Sanoiez Publications.
- Michie, M. (2018). Factors influencing secondary science teachers to organize and conduct field trips. *Australian Science Teacher's Journal*, 44, 43-50.
- Mundi, N. E. (2006). The state of students' academic achievement in secondary school agricultural science in Kogi State. *Teacher Education Journal*, 12 1 14-19.
- Nabors, M.L. (2009). Making the case for field trips: What research tells us and what site coordinators have to say. *Education Journal*, 129(4), 661-667.
- Ngaroga, J. (2008). *Primary Teacher Education*. Nairobi: East African Educational publishers
- Nuwana, M. K. (2012). *Investigating the Pedagogical Challenges of Geography Teachers in Secondary in Plateau Senatorial zone*. An Unpublished Masters Project, University of Jos
- Quist, D. (2005). *Primary teaching methods in Malaysia*. New York: MacMillan.
- Sampath, K. (2006). *"Introduction to educational technology"*, Sterling publishers Pvt Ltd.
- Sanda, A.A & Mazila, E. A. (2017). The Effect of Lecture and Discussion Methods of Teaching on Learner's Performance in Social Studies in Continuing Education Institution Borno State, Nigeria. *International Journal of Education and Educational Research*.1(1) 35- 45.
- Tal, T., & Morag, O. (2009). Reflective Practice as a Means for Preparing to teach outdoors in an Ecological Garden. *Journal of Science Teacher Education*, 20(3), 245-262

**Investigation into the Availability of Non-Psychosocial factor in English Language Classrooms among Secondary Schools in Kano State**

By

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**ABSTRACT**

The study investigated availability of non-psychosocial factor in English Language classrooms among secondary school in Kano State. The objective where to find out whether there is availability of classroom physical facilities in English Language classrooms. The researcher used Self-Administered Questionnaires (SAQ) as method of data collection. The population of the study was 120 school heads teachers and sample Size of the study comprised 80 respondents. This was attained through use of Research Advisor (2006). Random sampling was used for choosing the respondents. The data was analyzed using means and standard deviation. It was found that some classroom environments and physical facilities were moderately adequate for teaching English language in secondary schools in Tarauni, Kano state. These classroom physical facilities were classroom space, students' seats, students' lockers, board, lightening, ventilation, and table. Also, some classroom physical facilities were less adequate for teaching English language in secondary schools in the state. The study therefore recommended that adequate good classroom physical facilities should be provided for teaching English language in secondary schools in the state in secondary schools by the government, government policy on education should be followed to the core.

**Keywords:** *Non-psychosocial*, factors, availability, classrooms

**Introduction**

The term psychosocial embraces the physical and social environments. It connotes the conditions that prevail in our world and the forces emanating from this that influence students' development. The environment tampers and alters our natural characteristics according to the conditions that prevail in such an environment. This refers to a home, school and neighborhood which are the child's immediate surrounding and their

physical characteristics, which exert influence on a child's development. According to Brembrek (2010), children who speak English at home where the environment is simulative, go to school with ability to speak. This opportunity may not be there for a child of illiterate parents who stay in a village. Such a child would lack perceptual stimulation and this would constitute a problem in verbal

communication skill in English language. Surveys on school attainment in London, Netherlands, Scotland and Wales etc. have shown that school attainment are affected by the environment as estimated by the occupational status of their parents. According to Brembrek (2010), there is evidence however, that the effect of environment is greater than might be expected by reason of inherited capacity alone. Data (2007), is of the opinion that in homes where children are asked to go hawking and reach the school late, this affects their learning. If on some days they are sent to go to farm or look after animals, their learning is equally affected. Such children would have difficulty in learning the language and hence a low performance in verbal communication skill in English language. Data continues by saying that this condition will be different from a student who is encouraged to go to school regularly with some incentives.

In another development, while studying about learning skills, Ominde (2016) reported thus: Outside the urban area, majority of schools are of mud and wattle type with thatched roofs, erected and maintained by the local community. Such buildings are of semi-permanent types that are in shocking condition. Such buildings

inevitably hamper the teacher and depress the spirit of children and sap the enthusiasm of the teacher...In addition, the classrooms were found with no furniture... children squatted on the floor and wrote on logs or earth ridges. Such furniture as existed was often so crudely made and unsuitably designed as to offer great impediments in the way of modern teaching methods. From the quotation, it can be understood that the physical environment in most rural area is not conducive for learning. This retards good teaching methods, dampens the enthusiasm of the teacher, and discourages the children from effective learning. This condition no doubt will constitute a problem in English language teaching and learning process and verbal communication skill in particular. In this light, the physical environment no doubt contributes to student verbal communication skill. A social environment is equally important. This is where the individual is interacting with other human beings. According to Brembrek (2010), the physical and social environment factors affect the child's spoken English. This can be traced in the social background of the child. For example, those children who speak English at home go to school with the ability to speak English. Brembrek, opined that intelligence is something we inherit but school

achievement is also determined greatly by the environmental factor of the family. This can influence the learning of English Language and hence verbal communication skill. Besides, Mallum & Haggai (2009), argue that man is made by nature and nurtured by the environment. They went further to state that no race or class which is born with innate superiority. It is the environment that causes the disparity in the brain. This would therefore constitute a problem in the learning of English as a second Language and hence a deficiency in verbal communication skill. Mother tongue is a social environmental factor that interferes in second language learning. According to Richard (2004), the problem of mother tongue is its interference in the learning of English Language; the partial transfer of mother tongue features (Language which the child first comes in contact with from birth) to the second language which is English. Suffice it to say that a child learning English as second language (L2) encounters various difficulties. The child having acquired his mother tongue, has become conversant with it such that the introduction of an alien language coupled with the fact that the child's linguistic system has become acquainted to the mother tongue makes it possible for the influence of the linguistic system of the target language.

According to Richard (2004), interference could be realized in areas such as phonology and semantics. Other interferences include direct translation, vocabulary influence and linguistic influence. For easy understanding of the mother tongue interference, Mallum & Haggai (2009), compare the structure of syntax, morphology, phonology and lexical items of the target language and the first language (L1) and came out with the conclusion that mother tongue has an influence on second language learning and hence verbal communication skill. As far as Seigha (2003), is concerned, no two languages have exactly the same set of sounds, word or syntax. Thus the second language learner internalizes the speech habit of his mother tongue but finds it difficult to pronounce certain sounds alien to his mother tongue. They find the pronunciation of new words difficult and hence the question of effective communication and fluency becomes an uphill task. The conservative culture where vernacular is spoken very freely in the school environment is another constraint of high proficiency and effective communication in English.

Adetugbo (2001), in an essay on the English in the New Educational System: says it is sheer laziness or lack of imagination to formally teach English grammar to students

whose competence in the language amounts to nothing. According to him, by the time a child learns a language he internalizes the grammar of the language. It is noticed that our uneducated grand-parents speak and use their languages appropriately. They have communicative competence in these languages. They have not only internalized the grammar and the verbal skill, but are also able to make judgment as to the appropriateness and acceptability of sentences in these languages. The role of instructional materials in teaching and learning process cannot be over emphasized. One of the principles teachers have to continually bear in mind is that man learns through his senses. Some learn better by one or more senses, to some seeing is believing, to others, the sense of hearing, touch, smell and taste dominate in acquiring knowledge. Hence for the intended learning to take place, the teacher must communicate effectively with the learner. Instructional materials such as television, motion pictures, carefully prepare tape sequence, helps the teachers in extending his learners' horizon of experience. They also help the teacher in providing meaningful information to the learner. When learners make use of resources in the school library, education technology center, laboratories and in their community

environment, they get meaningful information that will help them solve their problems. Their interaction with primary visual sources (regalia or real objects) will also provide them with useful information. In order to achieve effectiveness and efficiency during instructional process between the teacher and the pupils, the classroom teacher must try as much as possible to illustrate the subject matter with appropriate instructional materials to the learner. This is done by using real things to represent real life situation. In view of this, Onwuka (2000), maintains that common sense taught us that in the present phase of development the child will be faced with insurmountable difficulties if left learn unaided. Besides there is much to learn in so little time that utmost economy should be practiced in effect the learning. Instructional material stimulates learners' interest. It is to be noted that when the child's interest is stimulated, the teacher has to sustain such interest. The teacher needs to seek better, more long - life realistic functional and significant problem solving activities for learners to sustain their aroused zeal and interest. For instance, when a classroom teacher takes her pupil out for field work, their interest will likely be stimulated. Instructional materials are used as checks to the teacher's knowledge and means of

transmission. Instructional materials help both the teacher and the learner to overcome physical limitation during the presentation of subject matter. For example the use of films, television, slide, tape and programs in presenting information help greatly in overcoming physical difficulties. Nwoji (2002), asserts that instructional materials assist a teacher to transmit to a learner the facts, skills, attitude and knowledge that aid the understanding and appreciation of concepts. Instructional material serves as diagnostic and remedial tools for the teacher. When instruction becomes individualized and practical, teachers are placed in a better position to observe, analyze learning process and learning outcome. Hence he discovers that every learner needs assistance, the teacher's role will shift from presentation role to that of diagnostics, corrected and their strong points enhanced and sustained. Globally, effort is being made in the field of academic towards making teaching learning process more effective and permanent in the minds of learners though the use of instructional materials. This was affirmed by Barton (2016), who stated that the use of aids in teaching and learning are germane to good teaching. Individual difference exists amongst learners of varying categories. Every learner is disabled in one way or the

other. Some do not hear clearly, some do not see very well while some are too slow in understanding hence, the use of instructional materials helps him in discovering some or all the above in his learners and equally knows how to manage the materials to make learning process to be more effective and interesting.

Instructional materials like audio-visual materials (television, video, slides films and film strips, multimedia) heighten motivation for learning through its concreteness and interest, provides freshness and variety in teaching learning process. This is because these appeal to the students or pupils at variety of abilities. A systematic use of audio-visual materials can make the subject matter clearer and appealing to the pupils of diversified background and different abilities. Thus, audio-visuals materials can foster effective learning not only for the child who reads and writes easily but also for the pupil who is not verbally gifted. Audio-visual materials encourage active participation, give needed reinforcement, widen the range of learner's experiences, ensure order and continuity of thought and also improve the effectiveness of other materials. Visual materials like, diagram, charts, regalia, photographs, slides, amongst others present more realistic approach in education and

equally provide opportunity for class participation in groups or individually and when used, many senses are appealed to which result to increase in the learner's performance. Some of these instructional materials are very good for the preservation of records and other documents. They enrich learning and make it more pleasurable. The use of instructional materials is an eye opener to the teacher and promotes their better planning and scheduling. It gives the teacher enough guidance, co-ordination, supervision and more time for correction. Oyeyemi (2014), discussed the inherent advantages of improvisation and use of instructional materials. Thus, it makes lessons real, useful for the ever teeming population of pupils/students in schools. He stated that when materials used are easily available within the environment, the teacher plans, uses and evaluates the materials and such materials can easily be improved upon and can be used efficiently and effectively since they are designed to meet specific instructional objectives.

Instructional materials brighten the classroom and bring variety in a lesson. They help the slow learners to brighten up and bright students learn faster. They are very effective in establishing sense or spirit to team work among learners. For example, the

use of computer during instructional process Cook (2014), noted that with the computer relevant aspects of the target communicative situation can be modeled and the pupils can take in that which they are likely to meet latter. He equally recognized that adding a computer to arts, science, and language instruction introduces variety to the resources and learning styles used. Learning becomes fun and the learners can be divided into small groups or pairs to work on the projects either collaboratively or competitively. Instructional materials spur learners to learn and develop better and effective skills. The last but not the least, instructional materials help to promote the understanding of teaching and learning process, among others.

#### **Statement of the Problem**

In Nigerian secondary schools, there has been mass failure of students in English language examinations conducted by the West African Examination Council (WAEC) (2018). WAEC Chief Examiner's Reports, particularly, in Kano State show that the situation seems glaringly very poor. For instance, the analysis of SSCE English examination results from 2015 to 2018 showed a continuous trend of dwindling poor performance of students for the period. The growing concern on the poor performance and the WAEC Chief Examiner's Report



further explain that the situation is deteriorating. Since the goals of nation building is to produce students who pass their examinations in order to contribute their quota towards the business of building the nation, the status of teaching and learning an important subject such as English as a second language in secondary schools should be given priority attention. It therefore, becomes necessary that the teaching of English language in senior secondary schools in Kano State should be evaluated. Evaluation can help to reveal the critical elements in the quality of teaching of the language in the selected area. Majasan (2008) also sees evaluation as an educational strategy that helps to determine the quality or performance of a group or a system. It is up on this background that questions such as; what is the teachers' proficiency on the teaching of English as a second language in secondary schools in Kano State, what methods are used by the English language teachers in the selected secondary schools in Kano State for teaching English as a second language, what are the available instructional materials for the teaching of the English language as an L2 in secondary schools in Kano State and how adequate are the classroom physical materials for the teaching of English language in

secondary schools in Kano State Nigeria arise.

### **Research Objectives**

1. To find out whether there is availability of classroom physical facilities in English Language classrooms among secondary schools in Kano State.

### **Research Questions**

1. What is the availability of classroom physical facilities in English Language classrooms among secondary schools in Kano State?

### **Research Methodology**

This study employed descriptive research design with the population of 120 school Heads. The School Heads were selected because they are the ones that are directly involved in the physical facilities of the schools. The Sample Size of the study comprised 80 respondents. This was attained through use of the Research Advisor (2006). Random sampling was used for choosing the respondents. The researcher used Questionnaires as method of data collection during the study. The study used Self-Administered Questionnaires (SAQ) which were given to teachers. Before the researcher implemented the instrument, it was given to three experts for face validation and all the experts were from Nigerian University, Yusufu Maitana Sule, Kano. To ensure the reliability of the instruments, a trial test was

carried out to assess the reliability of the instruments. 30 copies of the questionnaires were distributed on a sample of 30 Head teachers in the various secondary schools in Jigawa Central Geopolitical Zone of Jigawa State. Jigawa State was not part of the study area but was deemed to possess similar characteristics with Kano State. The researcher administered the instrument once and the data collected was analyzed using Cronbach Alpha statistics. The internal

consistency reliability coefficient of the instrument was 0.812, making the instrument reliable. The data was analyzed using means and standard deviation. Based on a four point rating scale, the total weighted frequencies were used to determine the mean for each item. Acceptance level for the mean was 2.50 and above. Items which had scores of 2.50 and above showed acceptance while mean scores below 2.50 showed non-acceptance.

**Presentation of Result**

**Table 1: School Heads’ mean ratings on the adequacy of the classroom physical facilities for teaching English language in secondary schools in the state**

S/N	Items	School Heads				REMARK		
		X	REM	SD	REM			
1	Classroom space	3.11	MA	3.63	MA			
2	Students’ seats	3.45	MA	3.50	MA			
3	Students’ lockers	2.95	MA	3.41	MA			
4	Language laboratory	2.16	LA	3.91	LA			
5	Board	2.93	MA	3.41	MA			
6	Lightening	3.03	MA	3.50	MA			
7	Ventilation	2.90	MA	3.38	MA			
8	Computer	2.29	LA	3.81	LA			
9	Projector	2.29	LA	3.81	LA			
10	Table	3.18	MA	3.72	MA			

**Key:** X = Mean, SD = Standard Deviation, REM = Remark, MA = Moderately Adequate, LA = Less Adequate.

**Table 1** shows the responses of the respondents in the research question 1 on the adequacy of the classroom physical facilities for teaching English language in secondary schools in the state. The table 1 reveals that items 1, 2, 3, 5, 6, 7, and 10 have mean scores that is above the cut-off mark of 2.50 which

was regarded as acceptable limit as indicated by the researcher. These classroom physical facilities are moderately adequate for teaching English language in secondary schools in the state. Table 1 also disclosed that items 4, 8, and 9 have mean scores that is below the cut-off mark of 2.50 which was

regarded as acceptable limit as indicated by the researcher. Therefore, these classroom physical facilities are less adequate for teaching English language in secondary schools in the state. The finding is contrary to the earlier report of Obi (2004), that classroom facilities were grossly inadequate in schools in Northern states of Nigeria. Though, classroom facilities were inadequate but some were moderately available in schools.

### **Conclusion**

Some classroom environments and physical facilities were moderately adequate for teaching English language in secondary schools in Tarauni, Kano state. These classroom physical facilities were classroom space, students' seats, students' lockers, board, lightening, ventilation, and table. Also, some classroom physical facilities were less adequate for teaching English language in secondary schools in the state. These classroom physical facilities included: language laboratories, computers and projectors. It was found that many classroom physical facilities for teaching English

language in secondary schools were less adequate. Therefore, there is need to provide adequate materials to ensure conducive learning environments.

### **Recommendations**

1. Adequate good classroom physical facilities should be provided for teaching English language in secondary schools in the state in secondary schools by the government.
2. The researcher is recommending that government policy on education should be followed to the core. For instance, the Federal Ministry of Education (2009) introduced the community participation in running of schools but that is never done especially in the area of provision of good classroom environments. Some school principals would not involve the PTA in the administration of the school. If this happens, the PTA and the community leaders would not move on well. Every school, both public and private should be made to do the right thing at the right time otherwise such school should be sanctioned to closure.

REFERENCES

- Adetugbo, M. A. (2001). Production of Better Teachers for Colleges Education. *Journal of Nigeria English Language Association*. 8 (4), 209-211.
- Barton, A.(2016). *English in the Nigerian Environment*. In Bamgbose etal(Ed): *New*
- Brembrek, S. (2010). Phonological Interference in Learning English as a Language: A Study of Chamba. *Unpublished B.A Ed. University of Maiduguri*.
- Cook, D. (2006) *Teacher in the Real World those who can Teach*. USA: Houghton, Mifflin Co.
- Data,T.(2007). Mother Tongue Interference. A Study of Kilba.*Unpublished B.A. Ed University of Maiduguri, Borno State*.
- Majasan, Y. (2008). The Communicational Testing of Reading. *Journal of English Language Teacher*. 3(5), 45.
- Mallum, D. & Haggai, S. (2009). *Education and the Challenges of Quality in Nigeria*. In A.O. Enoh (Ed.) *Teacher Education and UBE*. Jos: Saniez Publication.
- Ominde, S.A. (2016). Assessing Students' Interest in Teaching and Learning English in Nigeria". *F.C.E. Zaria. Journal of Education Studies*. 5. (6), 13-19.
- Onwuka, K. (2000). Teacher Education in the 21<sup>st</sup> Century: *Vision and Action*. *Nigeria: An NCCE Publication*.
- Oyeyemi, H.A. (2013). The Business Education teacher; his Work, Qualification, Opportunities and Professional Activities by the Year 2000. *Business Educational Journal*. 4(2), 44-49.
- Nworwu, N.A (2003). Attitude of Nigerian Secondary's School Student Toward Elementary Teaching as a Career. *Unpublished M Ed. Dissertation, Columbia University U.S.A*.
- Research Advisors (2006). References. Retrieved on the 5<sup>th</sup> April, 2021 from <http://research-advisors.com/tool/SampleSize.htm>.
- Richard, W. A. (2004). Evaluation of Nigeria Certificate in Education Programme in the Training of Christian Religious Teachers. *Unpublished Ph.D. Thesis, Ahmadu Bello University, Zaria*.
- Seigha, G. (2003). An Evaluation of the Component of Applied Arts of the NCCE Minimum Standard Requirements for Colleges of Education. *Unpublished Ph.D. Thesis, Ahmadu Bello University, Zaria*.

**The Evolving Roles of Library and Information Science (LIS) Educators in Transitioning from Librarianship to Cyberianship in the Digital Age**

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**ABSTRACT**

We are in an era of rapid technological and digital transformation across disciplines, including the field of librarianship, which is undergoing a profound evolution. The development has reshaped the way information is accessed, disseminated, and utilized. By implication, the Library and Information Science (LIS) educators are tasked with a dynamic set of responsibilities. Hence, this article used a desk- research approach to explore the paradigm shift from traditional librarianship to the dynamic realm of cyberianship, focusing on the pivotal roles that are expected of the LIS educators in the education and training of their students in the digital age. In the process, the concept of cyberianship was explored, the reasons for cyberianship was issued, the nature of LIS educators was examined, and a brief historical development of LIS education in Nigeria was presented. More so, the global trends in LIS education was analyzed, while the article concludes by highlighting Nigeria's LIS Educators and their emerging roles in the education and training of their students in the digital age.

**Key words:** *Librarianship*, cyberianship, LIS Educators, LIS education and training, LIS Students, digital Age.

**Introduction**

The digital age, otherwise known as the information age is an era that is characterized by rapid transformation from the traditional industry that the Industrial Revolution brought through industrialization, to an economy that is based on the Internet, courtesy of Information and Communication Technologies (ICTs). In other words, the

Internet has brought about a massive revolution in communications by fostering the rise of social media and other interactive, crowd-based communication tools, thereby making it the fastest and most preferred medium of communication in our daily lives. The above statement is evident from the immense quantities of information that are

routinely uploaded, disseminated, and accessed over electronically-based platforms, making many people exercise their freedom of expression. Dentzel (2021) stated that the Internet is no longer concerned with information exchange alone; but rather a sophisticated multidisciplinary tool enabling individuals to create content, communicate with one another, and even collaborate. Further, Dentzel emphasized that today, we can send data from one end of the world to the other in a matter of seconds, make online presentations, live in parallel “game worlds”, and use pictures, video, sound, and text to share our real lives, our genuine identity. Personal stories go public; local issues become global. All these are for the simple reason that information is now the most strategic asset that transforms the global economy.

Nonetheless, the Internet has drastically changed every facet of human endeavor of which the library sector is not an exception. It has paved a massive way for the revolutionizing of library practices by way of posing many challenges, opportunities, and competition for LIS practice. It has propelled the library profession unto a refocused pedestal that is rooted in the application of ICTs for improved information service delivery called ‘cyberianship’, leading to a

new library world of invaluable tools and practices that have come to complement the age-long services of librarians in the provision of adequate information products and services for human advancement.

### **Cyberianship: What is it?**

The term ‘cyberianship’ could be viewed as a coinage portmanteau that is struggling to get into widespread acceptance in the library and information domain. It is our position that the concept got its roots from the word ‘cyber’, having a strong link with a network of computers, and relating to many compound words that begin with the combining form cyber i.e. cyberattack, cyber security, cyber terrorism, or cyber warfare, to explain. In the view of Saalasvuo (1996), the concepts of cybrarian, information therapist, and information concierge represented new names for the library profession. Joshi and Kamat (2016) averred that the word ‘Cybrarian’ was first used by Michel Bauwens, an Information Officer at BP Nutrition in Antwerp, Belgium, to describe the staff in a virtual library. Kumar (2006) stated that a cybrarian is a traditional librarian working in an automated environment, surrounded by ‘Digital Products’ (instead of books or in addition to books). On his part, Dey (2012) stated that a cybrarian is an information specialist, who deals with more

of Web content to reach his targeted user group, who directs the constant change, implements technology, manages access, educates users, and opens up an exciting new world to their constituents. Furthermore, Dey stressed that a cybrarian is nothing other than

the traditional librarian working in an automated environment, surrounded by digital products; while Techopedia (2016) sees a cybrarian as a librarian or research person who uses the Internet as a resource. In a bid to detail further, Techopedia stated thus:

FINAL DRAFT BJEA VOL 9 NO 3

*“A cybrarian can introduce the Internet into library systems in all sorts of different ways. These may include setting up digital portals for database research. A cybrarian could use online resources to set up a virtual reference desk, host virtual exhibits or publicize library events. A cybrarian could work on social media platforms to send out surveys or interact with library customers. A cybrarian could use resources like massive open online courses (MOOCs) or e-book lending programs to enhance the resources available to learners. All of this involves modernizing library systems to take advantage of the vast resources that digital media has to offer (Techopedia, 2016, p. 1)”.*

From the above explanations, cyberianship entails the application of the Internet by library professionals for digital exploration, content migration and library modernization for complex information-solving purposes. In other words, cyberianship is all that is associated with utilizing the Internet by LIS professionals for the provision of quality information resources/services.

### **Why Cyberianship?**

We are in a century that is driven by ceaseless and instantaneous information, which has led us to the attainment of tremendous developments in all facets of the human enterprise- the twenty-first century. Such developments are on a large scale, propelled by some digital technologies that are greatly modifying our thoughts, actions and ways of interaction. The library profession is no exception to witnessing the above developments because the field has been greatly and constantly experiencing a paradigm in all its facets, especially with the utilization of the World Wide Web (WWW)

in various routines. The World Wide Web, also known as the Web, was invented by Tim Burners-Lee in 1989 and ever since that time, much progress has been made about the Web and allied technologies. According to Khanzode and Sarode (2016), the Web all started with Web 1.0, referred to as a Web of information or percipience; through Web 2.0, a Web of verbalization; to Web 3.0, a Web of affiliation; then Web 4.0, the Web of integration and now Web 5.0, the Web of decentralized smart communicator. As all these stages of Web development kept evolving, many libraries especially in advanced economies saw the need to leap-frog into the trend by way of utilizing such Web technologies to enhance their services and operations.

With all these thriving developments that lead to knowledge expansion, however, the name ‘librarianship’ gradually experienced certain face-lifts to assume new areas such as Knowledge Management (KM), information management, digital librarianship and now



moving towards cyberianship. The developments have tremendously altered the way the library profession is being practised. Interestingly, while the basic philosophy of the profession has remained the same, the processes involved in achieving the philosophy of the profession i.e. selection, acquisition, processing, preserving and dissemination of information have significantly changed. In other words, the application of technology into the library domain is what led to a focus on cyberianship and the only difference between librarianship and cyberianship lies in their different mediums of information provision and access. Said differently, while the focus of librarianship may be argued to be more concerned with print-based information activities, cyberianship has a bias on the digital aspect of which information content is harvested, managed, preserved, retrieved and disseminated.

However, there is no doubt that technology is the engine that drives cyberianship. Ever since librarians realized the ample benefits of utilizing the Web to enhance their services, many of them started conducting a dual mode of operation by way of practising the traditionally based information service provision and at the same time, having a greater focus on practising their operations

on the cyberspace; all in a bid to contend with contemporary users' demands. The reasons may not be far-fetched from the fact that information seekers of the present day period are more inclined towards seeking information using technology; as technology facilitates greater access, increased speed and accuracy for locating, analyzing and retrieving a wide range of information content. As such, cyberianship undoubtedly focuses more on the provision of information on the Internet for wider accessibility and utilization.

#### **Who are the LIS Educators?**

Educators are very important components of all disciplines. They are professionals in the field of education, involved in the theory and practice of teaching and learning in a particular area. In other words, they are generally referred to as those persons who offer intellectual, moral, and social instructions. Educators seek to instil deep understanding in students, the kind of learning that they'll carry with them for the rest of their lives (Peters, 2017). In a bid to distinguish between the concept of a teacher and that of an educator, Peters argued that educators make it their goal to ensure that students fully understand the lesson, while teachers who are not educators merely get

through their lesson and hope the students took enough away to pass the class.

Narrowing it down to the LIS terrain, LIS educators are a unique breed of educators who strive to ensure that sustainable learning strategies for information access and dissemination are embedded in their students. According to Akinde and Adetimirin (2018), LIS educators adopt strategies, mix and navigate facets that ensure a quality educational system. They bring to the table the values of the profession and understanding information in everyday life, focusing on multiple literacies, learning and collaborating spaces, meeting technology needs, competencies and facilitating open data (Bartot and Sarin, 2016). With technology in place, LIS educators of the present era strive to widen their scope by integrating practical activities and global trends in the classroom as part of the curriculum. In summary, LIS educators are those that strategically aim to produce adequate instruction, research and service programs that meet both the current and the emerging technologically savvy information user needs and instil such skills in their would-be graduates.

### **Brief Historical Development of LIS Education in Nigeria**

Generally speaking, education is a great tool that leads to human success. It is a process through which people improve themselves for better living conditions. Aristotle (n.d.), as cited by Smith (2020) defined education as the process of training man to fulfil his aim by exercising all the faculties to the fullest extent as a member of society. That is why education is seen as the foundation of society which brings economic wealth, social prosperity and political stability (Idrisa, et.al., 2012). Furthermore, the same authors stressed that economic and social status depends on the education obtained by individuals since education contributes to individual capability in managing the quality of life. In other words, the basis for education is to create an avenue for people to develop their potential.

However, LIS education is a joint concept that consists of library education and information science education (Omehia, 2019). While library education is the specialized formal training for would-be librarians to acquire the skills and competencies that are necessary for library services and the transfer of knowledge; information science education is tailored towards equipping learners with the skills for

information collection, classification, manipulation, storage, analysis, interpretation and dissemination as well as those competencies that are required for the transfer of information literacy skills to learners. Quite often, such education is acquired from library schools/ institutions that train librarians and allied information professionals.

In Nigeria, the history of LIS education dates back to the 1953 UNESCO-organized seminar on the “Development of Public Libraries in Africa” held at the Institute of Librarianship, University College, Ibadan (as it was then called) now University of Ibadan Library School (Abubakar, 2021). The Ibadan seminar recommended that a limited number of library schools be established in Africa to provide full-scale professional training at the leadership level (Lawal, 2000). As a result of that, the first LIS School in Nigeria was at the University of Ibadan with the financial assistance of the Carnegie Corporation of New York, who took an interest in the development of the profession and accordingly sent Harold Lancour in 1957 to survey the library situation and give advice on how the Corporation can assist in the area of library development (Abubakar, 2021). Ever since that time, the programme has passed through certain positive

advancements concerning curriculum modification, innovation and career expansion. The reason may not be far-fetched from the daily transformations that are being witnessed in all spheres of the human enterprise. For instance, the changing need of employers, the application of ICT into our daily activities and the proliferation of related courses and programmes to librarianship called for many changes to be made to make the profession serve contemporary user needs. In other words, LIS education no longer focuses solely on the training and education of librarians to work mainly in libraries. To justify the above claim, Okello-Obura and Kigongo- Bukunya (2011) averred that the names of LIS education programmes, LIS education awards and LIS education courses have all changed. These changes have been especially due to the reorientation of higher education in the world and the need to stay relevant in the globally competitive world (Okello-Obura & Kigongo- Bukunya, 2008).

In February 1963, an Australian by the name F. A. Sharr and his wife, who also happened to be a librarian, submitted a report on research that he was asked to conduct, under the Commonwealth African assistance plan, on the library needs in Northern Nigeria. The outcome of Sharr’s report gave birth to the

commencement of the second LIS programme at Ahmadu Bello University, Zaria in 1965. According to Abubakar (2021), the LIS course in Zaria commenced to educate and train librarians at the

**Global Trends in LIS Education**

It is quite important to ascertain the global perspectives that reflect how LIS education thrives around the world. Moreover, the need to add contemporary innovations in the LIS profession is imperative to enable graduates to be globally competitive (Salubi, 2017). The basis is to ensure that LIS educators are proactive professionals who take action in nurturing their students into smart, well-informed and reliable products. Furthermore, LIS schools that are responsible for LIS education are expected to respond positively in that direction to produce competent and dynamic information professionals who possess a broad range of new skills and techniques that are in tandem with the requirements of the digital age. In other words, the increasingly changing complex society requires LIS educators to respond to the demands of the changing period by imparting to their students the skills needed to function effectively in a constantly changing environment.

However, there is an increasing expansion and competition among academic disciplines,

undergraduate level against that of Ibadan's postgraduate Diploma programme. Over a while, other LIS schools were successively established in different universities in the country.

which is a result of the rapid development in ICT and social networks that have been taking place swiftly from the 1990s onwards, leading to a greater realization of the relevance of the LIS profession to contemporary global demands. Such expansion is evidenced in the tremendous establishment of LIS courses on a massive scale, possibly as a result of the new pathways in which such LIS programmes take, courtesy of ICTs. Kaliper (2000) identified six important areas that have heralded new developments in LIS education in the United States that include:

- i. Addressing a broad array of information environments and information problems, although the library settings remain the heart of many LIS programmes;
- ii. Witnessing the emergence of user-centred courses and has also continued to incorporate different perspectives from other fields of study i.e. multidisciplinary issues;
- iii. Increasing the infusion of IT into the LIS curricula i.e. information technology has underlined all aspects of the curriculum.

As such, it was expected that the LIS programmes would bear the responsibility of keeping their students on the cutting edge of the existing and new technologies as they become available;

- iv. Experimenting with flexible programming to provide specialization within the curriculum;
- v. Providing instruction in diverse formats (e.g. course length, day and time of course offering, and on-or off-campus meetings, as well as distance education via the World Wide Web) to provide students with more flexibility; and
- vi. Expanding their curricula through offering related degrees at the undergraduate, master's and doctorate levels.

It is worth noting that another recent development in the United States and indeed globally, is the 'Information Schools' (iSchools) drive. The iSchools principally attempt to advance the field of information in the 21st century, particularly in the areas of education, research and professional development. Indeed, the iSchools movement is tremendously growing globally. Weech (2019) noted that the iSchools membership directory lists 101 institutions worldwide. Furthermore, some members of iSchools changed their names to simply

"Information School" (iSchool), while others continue to keep their original names (Information Science, Information Studies, Information Systems and Management, and LIS) (Abubakar, 2021).

While from the European perspective, the European Association for Library and Information Education and Research (EUCLID) is striving to ensure the proper provision of LIS education in European countries through several activities. According to Diso (2009), the association establishes interactive forums through which they support and advance LIS in the area of curricula development, quality assurance, collaborative and networking structures, staff/students mobility and exchanges, course structures, conceptual/theoretical issues, internationalization of LIS education to mention just a few. More so, other trends have been identified in recent literature about the LIS field. Some of these trends have been summarized by Racheal (2020) as follows:

- Access role replaces the custodial role
- Competency-based assessment/training
- Customer-focused/customer-centred, user-oriented approach in the provision of services
- Globalization of information
- Growth of electronic / internet resources

- Information management recognized as an important discipline
- Information recognized as a commodity
- Integrated and widespread ICT applications
- Knowledge management leveraging organization
- Knowledge-based economy (information/ knowledge as drivers to boost the economy)
- Leadership skills
- Librarians expanded & changes in a digital environment
- Librarians are designated as cyber librarians
- Librarians need new management knowledge and skills
- Mushrooming of information systems need for Information Management System (IMS)
- New breeds of information professionals (CIO, CKO, consultants and analysts)
- Role of digital/electronic/virtual library
- Specialized training in library and information management (Double degree –major and minor concept)
- Strategic alliances, partnerships and collaborations
- The trend to develop digital content to facilitate access.

Notwithstanding, of particular interest now is the fact that LIS schools are making modifications to the name of their programmes and degree titles to be amenable to the present-day demands. Moreover, some LIS departments even offer joint degrees with other faculties, especially in advanced nations. Research by Bronstein (2009) who analyzed the curricula of 30 LIS departments in 21 countries in different parts of the world using their Websites to determine current trends showed that the largest percentage of their courses relates to information content, coupled with technology courses as the second major category present in the curriculum. The study further amplified that, in the dynamic job market, LIS programmes should aim at providing the widest range of skills and competencies necessary in educating their students for all positions in the information environment. The aforementioned was supported by Salawu and Igwe (2018) who maintained that it is a reflection of the breadth, depth and diversity of careers requiring information and knowledge management. Hence, Weech (2019) concludes in this regard that the increasing number of specializations within ALA-accredited programmes is likely a result of the expanded definition of what constitutes the information professions. By

implication, there is an ongoing trend by many LIS schools to re-modelling their course contents to serve our contemporary information needs.

**Nigeria's LIS Educators and their Emerging Roles in the Training of LIS Students for Cyberianship in a Digital Age.**

Currently, we happen to be in a digital age, otherwise known as the information age. It is a period that started during the 1970s, sequel to the introduction of the personal computer; thereby paving the way for humans to transfer information freely and quickly for an enhanced living. Life in the digital age is information-driven, with data becoming of a higher value than oil. Compared to earlier forms of advancements, the speed of breakthroughs in the digital/ information age defies any form of historical precedent. The age is disrupting almost every industry across the globe. The breadth and depth of digital breakthroughs have heralded the transformation of entire systems of production, management, and governance. There is no doubt that the digital age has made it possible for several people to get connected through mobile devices, with unprecedented processing power, storage capacity, and access to knowledge in a speedy and unlimited manner.

However, some of the technological forces in the digital age include the development of big data, algorithmic management, 3D printing, quantum computing, smart robots, artificial intelligence (AI), the internet of things, nanotechnology, biotechnology and alternative forms of energy technology. The expressiveness of changing work patterns that the digital age brought i.e. digitalization makes it appropriate to crosscheck the emerging roles of LIS educators in the training of LIS students. This is because the digital age aims to unlock the vast economic potential of new technologies. Petropoulos (2018) believes that the effect of new technologies is likely to have a profound impact on employment, by displacing jobs, but it will also lead to an upgrading of occupations, the development of more hybrid skill sets, a decrease in repetitive routine work and a reduction in hazardous industrial tasks.

Although there is no gainsaying the fact that the LIS sector has been deeply rooted in digital activities courtesy of ICTs, especially in the developed world, the development has propelled many LIS schools in developing nations like Nigeria to embark on rigorous curriculum reforms and modifications to contend with the realities of the changing time. In other words, ICTs have changed the

required skill sets of the library profession as library positions are increasingly requiring specialized knowledge and skills. With that, LIS education has to be re-channelled towards producing competent librarians that would not simply manage all types of libraries effectively, but also offer allied information services that are in tandem with contemporary demands. Reasons are not far-fetched from the fact that IT computing power, storage capacity, connectedness and software applications are transforming employment and disrupting businesses globally.

As stated by Riley-Huff and Rholes (2011), the information age has fostered a trend in the LIS sector via the creation of new or redesigned job profiles as library administrators seek to make appointments of staff members with the necessary ICT skills. Luce (2008) stated that curricula now have to be designed to prepare practitioners to respond to the needs of students, academics, researchers, and scientists in these new eScience and eResearch contexts. Besides, information professionals no longer deal essentially with information stored in a physical format (for example, printed books and journals) as in the past; they must increasingly deal with digital content and

retrieval using natural language-based searching techniques.

With the above developments, it is clear that LIS educators have emerging roles to play in the training of LIS students to enable the students to remain relevant in the digital age. This they can do by way of updating their curriculum content to have competent cyberians that would serve the demands of digital users. In other words, since the current generation of information users prefers utilizing the cyber medium, LIS educators have to redesign their curriculum content to have a generation of LIS professionals that would have a competitive advantage in the creation, management, and use of digital content- cyberianship. Besides, LIS graduates are entering a world of work that has been transformed by tremendous changes. Hence, LIS educators need to understand the increasingly complex information environment and the needs of users because a commonly noted concern among employers is that new LIS graduates are not adequately equipped for the jobs they are applying for.

Erdman (2007) posited that LIS graduates should receive an education that will allow them effectively to enter “a field where the line between librarian and computer tech is blurred more and more,” where a reference



librarian, for example, should have not only disciplinary knowledge but also a knowledge of relevant technologies. Erdman's assertion is anchored on the fact that LIS practice is currently more recognized and documented than it used to be in ages past. In other words, the field is present, technology-driven. As such, LIS educators need to enhance their curricula to capture the wide but related range of trends that are redefining the LIS sector for the delivery of information and information-related products and services and among these trends are creating and providing access to digital documents and data, metadata harvesting/handling, managing institutional repositories, user interface design, digital curation and research data management among others.

### **Conclusion**

It is glaring that like most other fields of the human enterprise, the LIS profession has gradually journeyed into the digital world as a result of the many opportunities that ICTs have offered the 21st century society. It has not only brought about a modification in the processes through which librarians offer their

professional calling to society but also, has brought about the birth of cybrarians-navigators on the information landscape, rather than those who perform more information-keeping roles-librarians. Interestingly, the emergence of cybrarian roles in Nigeria has greatly affected the required skill sets of librarians in the country; leading to the need for a modification in the curriculum content of LIS education in the country to be amenable to the changing realities of our time. In other words, the present scenario has paved a gap that requires the curriculum content of LIS education in Nigeria to be tilted towards the production of tech-savvy competent cybrarians that would not simply manage all types of libraries effectively but also offer allied information services that are in tandem with the contemporary global best practices. Hence, the emerging roles of LIS educators in the country towards the provision of adequate training of their students to remain relevant with the contemporary global requirements of the digital age.

REFERENCES

- Abubakar, B. M. (2021). Library and information science (LIS) education in Nigeria: Emerging trends, challenges and expectations in the digital age. *Journal of Balkan Libraries Union*, 8(10), 57-67.
- Abubakar, B. M. (2015). Developing library and information science programmes for the emerging market in Nigeria: The need for appropriate entrepreneurial skills. *Middlebelt Journal of Library and Information Science*, 13, 16-31.
- Akinde, T. A. & Adetimirin, A. E. (2018). Administrative and infrastructural factors affecting library and information science educators' actual use of educational support systems for teaching in Nigerian Universities. *Journal of Librarianship and Information Science*. 51 (1), 180-195.
- Association for Library and Information Science Education. (2000). Educating Library and Information Science Professionals for a New Century: The KALIPER Report: Executive Summary [online] (8pp.). Reston (Virginia): *KALIPER Advisory Committee, Association for Library and Information Science Education (ALISE)*. Available at: [http://durrance.people.si.umich.edu/TextDocs/Kaliper\\_FinalR.pdf](http://durrance.people.si.umich.edu/TextDocs/Kaliper_FinalR.pdf) (accessed 19 July 2023).
- Bertot, J. C. & Sarin, L. C. (2016). The value of American Library Association accredited Master's Programs in Library and Information Studies: Serving our communities through professional workforce. Available at <http://www.ala.org/educationcareers/sites/ala.org.educationcareers/files/content/ALAWWhitePaper> accessed 15 April 2023.
- Bronstein, J. (2009). Current Trends in Library and Information Studies Curricular. *Libri*. 59 (2), 78-87.
- Dentzel, Z. (2021). How the Internet has changed everyday life. Available at: <https://www.bbvaopenmind.com/en/articles/internet-changed-everyday-life/>. Accessed on 23/12/2021.
- Dey, T. (2012). Cybrarian: the librarian of the future digital library. *International Journal of Information Dissemination and Technology*. 2 (3), 209-211.
- Diso, L.I. (2009). Emerging issues and challenges for LIS education in Nigeria. *Global Review of Library and Information Science*. 5, 62-74.
- Erdman, J. (2007). Education for a new breed of librarian. *Reference Librarian*, 47(98), 93-94.
- Hongisto, S. L. (2019). *Cybrarian - The new digital librarianship: Serving digital natives in hybrid libraries*. A thesis, submitted to the Department of Business Administration / Library- and Information Sciences, Oulu University of Applied Sciences, Finland. Downloaded from [https://www.theseus.fi/bitstream/handle/10024/261070/Hongisto\\_Sari\\_Linnea.pdf?sequence=2&isAllowed=y](https://www.theseus.fi/bitstream/handle/10024/261070/Hongisto_Sari_Linnea.pdf?sequence=2&isAllowed=y) on 3/1/2022.
- Idrisa, F, Hassana, Z, Ya'acoba, A, Gillb, S. K. & Awal, N. (2012). The role of education in shaping youth's national identity. *Procedia - Social and Behavioral Sciences* 59, 443 - 450. Available online at Doi: 10.1016/j.sbspro.2012.09.299.
- Joshi, N. M. & Kamat, R. R. (2016). *Cybrarian: Possibility with the Indian context*. A Conference paper published and presented at the UGC sponsored 3 days national conference on "Libraries in The Changing Information Marketplace, organized by SNDT Women's University Bharatratna

- Maharshi Karve Library & SHPT School of Library Science.
- Khanzode, K. C. A & Sarode, R. D. (2016). Evolution of the World Wide Web: From Web 1.0 to 6.0. *International Journal of Digital Library Service*, 1 (6). Downloaded from: <http://www.ijodls.in/uploads/3/6/0/3729/ijodls121.pdf>. Retrieved on February 17, 2023.
- Kumar, H. (2006). Librarian to cybrarian. In: Babu, T. A. & Ramaiah, L. S. (Eds.). Festschrift in honor of Professor M. Sankara Reddy. *Developing Cyber Libraries*. Mumbai: Allied Publishers Pvt Ltd.
- Lawal, O.O. (2000). Professional education for librarianship: International perspectives. Calabar: University of Calabar Press. 168.
- Luce, R. E. (2008). A new value equation challenge: The emergence of e-Research and roles for research libraries. Washington, DC: Council on Library and Information Resources.
- Okello-Obura, C and Kigongon-Bukenya, I. M. N. (2008). Financial management and budgeting strategies for LIS programmes: Uganda's experience. *Library Review*. 57 (7), 514-527.
- Okello-Obura, C. & Kigongo-Bukenya, I.M.N. (2011). Library and information science education and training in Uganda: Trends, challenges, and the way forward. *Education Research International*, doi:10.1155/2011/70537
- Omehia, A. E. (2019). Information Science education and Learning in a world of difference. *International Journal of Library and Information Science Studies*, 5 (4), 24-35.
- Peters, R. (2017). The difference between a teacher and an educator. Available at: <https://medium.com/@robertpeters/the-difference-between-a-teacher-and-an-educator-2ac6392a1e43> accessed on 20/03/2023.
- Petropoulos, G. (2018). The impact of artificial intelligence on employment. In: Neufeind, M., O'Reilly, J. and Ranft, F. (Eds.). *Work in the digital age: Challenges of the fourth industrial revolution*. London: Rowman & Littlefield International Ltd.
- Racheal, A. O. (2020). Global trends and emerging technologies in libraries and information science. *Library Philosophy and Practice*. Available at <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=7150&context=libphilprac>. Accessed on 20/03/2023.
- Riley-Huff, D. A. & Rholes, J. M. (2011). Librarians and technology skill acquisition: Issues and perspectives. *Information Technology & Libraries*, 30 (3), 129-140.
- Saalasvuori, S. (1996). Cybrarian: Information concierge? An article *Signum*, 29 (5), 110-112.
- Salawu, K.Y. & Igwe, K. N. (2018). Education for library and information science in Nigerian polytechnics: The case for information and knowledge management and innovative Higher National Diploma specializations. *Ebonyi Journal of Library and Information Science*. 5 (2), 464 – 475.
- Salubi, O.G. (2017). Library and Information Science education and training curriculum at institutions of higher education in Nigeria: A content analysis. *Journal of Social Sciences*, 51 (1-3), 79-86.
- Smith, M. K. (2020). Aristotle on education. *The Encyclopedia of Pedagogy and Informal Education*. Available at <https://infed.org/mobi/aristotle-and-education/>. Retrieved: 12/02/2022.
- Techopedia (2016). Cybrarian. Available at: <https://www.techopedia.com/definition/15414/cybrarian>. Accessed 10/04/23.
- Weech, T. (2019). Trends in accreditation: New definitions and distinctions. *American Libraries Magazine*.

**Analysis of Undergraduates' Performance in Computer-based Test in Faculty of Education, Niger Delta University, Bayelsa State**

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**ABSTRACT**

The current shift from paper-pencil testing to computer-based testing in the assessment of undergraduates' academic achievement in tertiary institutions is becoming ubiquitous and considered to be a remarkable improvement in the education assessment process. The use of computer-based test in examining students in all the Faculty-based courses in the Faculty of Education, Niger Delta University, Bayelsa State is driven by the increasing burden of scoring a large package of undergraduates' answer scripts. This study was carried out to give an analytical description of the undergraduates' performance in the newly introduced computer-based testing. The descriptive survey design was adopted. The sample of the study was all the 1426 undergraduates at 200 level of study and was assessed in the randomly selected four faculty courses. Undergraduates' scores, in the computer-based test (CBT) and paper-pencil test (PPT) were the data analyzed using description statistics and t-test statistical technique. Findings show that undergraduates' overall performance in CBT is slightly above average (54%). While undergraduates' performance in CBT in the first semester courses was below average (39%), there was a significant improvement in their performance in the second semester courses (82%). Further, finding reveals that the performance of students in the paper-pencil test is better than their performance in the CBT,  $t(1187) = -4.676 < 0.05$ . Conclusively, consistency in grading students on CBT could impact positively on the reliability of their academic achievement. Based on findings it's recommended that the CBT should be extended to other departmental courses that have high population of registered students

**Keywords:** Computer-based test, Paper-pencil test, Faculty courses, Technology driven assessment.

**Introduction**

Test is an instrument, device, tool designed to measure learners' traits according to certain rules. Most often, as instrument of measurement, it contains questions, quizzes in form of task and serves as stimuli to which

the learners are expected to respond. Their responses are described quantitatively and based on merit, value judgment is made. The tradition practice in testing is the use of paper-pencil test type to assess and evaluate

learning. However, in today's world, every facet of the society is technology driven. Technology is the practical use of scientific knowledge to produce objects, tools and techniques as innovation in solving man's practical problems. The educational system is fast becoming the base of technological growth, transition and advancement. This justifies the import in fusing technology into the teaching and learning experiences acquired by the younger generation from educational institutions. Teaching and learning experiences have come intertwined with digital support and technical skills. The assessment of learning experiences; that is, the systematic collection and organization of data to determine whether set down goals of instruction and education are being attained; is popularly being associated and implemented with technology structural design.

Traditionally, the common method of assessment is the paper-pencil assessment. However, a paradigm shift in the assessment of learning experiences in the educational system is being preferable in a contextual technology-driven society. The shift is from paper-pencil test (PPT) to computer-based test (CBT). Globally, computer-based testing is used for several admission processes, scholarships and examinations. In the

Nigerian context, this remarkable shift is evident in the unified tertiary matriculation examination (UTME) organized by Joint Admissions and Matriculation Board (JAMB) and the Post UTME aptitude test conducted by various universities.

Computer-based assessment is any form of assessment or evaluation (formative or summative assessment) that is conducted electronically with the use of information technology. Computer-based testing are tests or assessments that are administered by computer in either stand alone or dedicated network or by other technology devices linked to the internet or world wide web, most of them using Multiple Choice Questions (MCQs). (Jimoh et al 2012; Daramola, 2017; Olapode, 2021; and Bala, 2018). Computer-based test (CBT) is of two types, namely the adaptive and linear tests. The linear test is a full-length examination in which computer selects different questions for the testees without consideration of the testees' level of performance. It consists of a full range of test questions, usually multiple-choice questions, from easiest to most difficult, but not always in order (Oduntan 2015). The scoring method in the linear test is similar to the paper-based test. In a computer adaptive test (CAT), the computer picks from a wide variety of

questions based on testees' level of performance. These questions are taken from a large pool of possible questions categorized by content and difficulty. According to Abba et al (2020), in the testing process, each testee receives questions that are of the right level of difficulty for his/her ability. The tests usually begin with a question that is of medium level of difficulty for most testees. After each question is answered, the computer uses the answer and all previous answers to determine which questions will be answered next. Therefore, the next question is one that best follows the previous performance

While, the CBT is becoming popular in assessing learning experiences online, CAT is in its teething stage. Okeet al (2019) reported that CAT is a unique type of computer-based testing which enables greater precision and efficiency in some forms of assessment by first estimating an examinee's proficiency level (typically on the basis of initial item responses and then adapting to it, presenting only those items that are expected to give the most information about the individual (i.e., neither overly easy nor overly difficult items). However, the linear type of computer-based test is more common than the computer adaptive test for some likely reasons. One of these reasons is

the complexity in developing the questions to be fed into the computer. In linear computer-based test, the usual test items testees respond to with the use of the paper-pencil test are easily up loaded into the computer system. Whereas test items used for computer-adaptive test must be systematically selected, analyzed and ordered to fit into the structure of the software. Secondly, while the scoring of linear computer-based test is easy and as the same with the paper-pencil test, the scoring method of CAT is more advanced. However, both grading requires little or no human effort.

The linear type of computer-based test is what is adopted by most educational institutions e.g., the university and this is the object of focus in this study. However, many universities have advanced beyond using CBT for just Post University Matriculation Aptitude Test to either fully or partially integrate computer-based test into their assessment mechanism of the learning process. The institutions include University of Ibadan, Obafemi Awolowo University, Ile-Ife, National Open University in Nigeria (NOUN), University of Ilorin, Ilorin, Federal University of Technology, Minna, Covenant University, Ota, University of Nigeria, Nsukka, University of Lagos, Lagos. (Ajinaja, 2017).

The curriculum of the university system is organized based on faculties, comprising a group of related subject areas and sub-organized into departments as a branch or specific field of study that deals with a specific course for the students. Faculty of Education in Niger Delta University, Bayelsa State came into existence in 2001 as one of the pioneering faculties of the university. Its mission is to develop competent and professional teachers with robust innovative idea of teaching, research and development service (Faculty of Education Prospectus, 2021). Presently the Faculty comprises six departments (Arts Education, Educational Foundations, Library Information Science, Science Education, Social science Education and Vocational and Technology Education). Likewise, in all universities, there are series of courses that are domiciled in the Faculty while others are domiciled in the department based on area of specialization. The Faculty courses are equivalent to core curriculum that all students in the Faculty irrespective of the courses taken at the departmental level, are required to complete before they move to the next level or earn a certificate.

Managing the teaching/learning process in faculty courses is becoming more cumbersome due to the increasing number of students admitted into the university yearly.

This has also made it very difficult to assess the students under the usual unconducive and crowded condition of examination hall that most of the public universities are known for. More so, when the burdens of scoring a large package of students answer scripts (ranging from 700-1000) after examination; fall on the teachers. This is why incidents like missing scripts, examination malpractices, scores racketeering, late computation of scores and reliability of results do plague the integrity of the examination system and the authenticity of degree awarded to the students.

Justifiably, the adoption of computer-based test is seen as an alternative to the unmanageable population of undergraduate students in Nigeria (Jimoh et al 2012). Darrell cited in Jimoh et al (2012), reiterated that due to an increase in student numbers, ever-escalating work commitments for academic staff and the advancement of internet technology, the use of computer assisted assessment has been an attractive proposition for many higher education institutions

Recently, the Niger Delta University Senate approved the use of computer- based test against the traditional paper-pencil test, to accommodate the large population of students taking the faculty courses. This is to mitigate against the many flaws associated

with paper pencil test, particularly the delay in computing and presenting students' results for senate approval. Sanni et al (2015), argued that it is because of problems associated with the use of paper and pencil test (PPT), such as tedious process in the conduct of exam marking and result publication. Other reasons included high level of all forms of examination malpractice associated with PPT (Onyibi et al 2015); and increase in students' population in Africa (Kuyoro et al 2016). However, Ojerinde (2015) argued that the introduction of CBT in public examination has to do with the promotion of international best practice in the conduct of examination in Nigeria.

The use of computer-based test in examining students in all the Faculty-based courses in the Faculty of Education, Niger Delta University, Bayelsa State is driven by the increasing burden of scoring a large package of undergraduates' answer scripts that often led to delays in computing and presenting students' results for senate approval.

With the use of computer-based test, benefits such as ease and speed in scoring, reporting, accessing results; accurateness and reliability of results will promote an authentic university-based assessment/ education system. Economically, it is cost effective

The adoption of computer-based testing has its own challenges. Challenges such as inadequate computers to cater for the teeming students' needs; shortage of electricity supply or high electricity outage; lack of technical experts to man the computers when being used. However, measures such as organizing the students into batches to take turn in accessing the available computers; availability of steady electricity empowered by the university centered generations and the standby of computer technicians to take care of any malfunctioning during examination surmounted some of the challenges associated with computer-based testing in the university. In their study, Hussaini et al (2019) averred that challenges associated with the integrity of the computerized examination are problem of ICT infrastructure, poor internet network, inadequate computers and cyber security.

Faculty of Education keyed into the computer-based testing in the 2019/2020 academic session and the trial-testing commenced with the 100 and 200 levels students offering Faculty courses. The object of this study is the 200 level courses. There are six faculty courses that every student is required to take at this level. Two in the first semester and four in the second semester. The first semester courses are EDU 231



(Citizenship and Moral education) and EDU 241 (Introduction to curriculum development). The courses for second semester are: EDU 212 (sociology of education), EDU 214 (teaching methods) EDU 216 (elements of adult basic education) and EDU 218 (community development service). Students are examined in these courses at the end of each semester

### **Review of Related Literature**

Several research studies have been carried out on computer-based testing. A study carried out among Nigerian primary school children indicated that there is no difference in performance using paper-based and computer-based assessment delivery methods (Vanguard 2017). Olapode (2021) examined the influence of adopting CBT on students' academic performance in JAMB examination in Nigeria and the study found that the influence of CBT on students' academic performance in JAMB examination in Nigeria had been positive and remarkable over the years ranging from cost reduction, saving of time, impartial assessment, and prompt release of results and in proved reliability. Tacha (2021) found in his study that there is no significant effect of CBT on the academic performance of B.Sc. (ED) Physics at the University of Agriculture, Makurdi. Zayed et al (2018) reported in their

study that a simple difference in mean statistics test showed that there is no significant difference between the students' paper-based and computer-based scores. According to Mulvancy (2011), data collected from a survey showed that 71% of teachers believed that computer-based assessments do not raise test scores; 47% of students felt that it does improve scores.

The analytic discourse of the outcome of the first computer-based test adopted to examine students in Faculty courses for the 2019/2020 academic session of first and second semesters examination is the aim of this study. The study is guided by 5 research questions and 1 hypothesis.

### **Research Questions**

1. What is the level of performance of undergraduates in the computer-based test in the Faculty based courses of EDU 231, 241, 212 and 214 in the 2019/2020 academic session?
2. What is the mean score (percentage) of undergraduates who performed very poorly in computer-based test if a benchmark of 30% of overall score is observed?
3. What is the mean score (percentage) of undergraduates who performed excellently in the computer-based test if the criterion is 80%?
4. What is the level of performance of undergraduates in first and second

semesters courses examined using the computer-based test format?

5. What is the level and trend of performance of undergraduates on computer-based test across the departments?

**Hypothesis**

Ho1: There is no significant difference in performance between the undergraduates examined with the paper-pencil test and computer-based test for 2018/2019 and 2019/2020 academic sessions

**Methods**

Descriptive design was adopted for the study. The population of the study comprised all the 200 level students in 2018/2019 and 2019/2020 academic sessions in Faculty of Education. All the students in the population were selected for the sample. Thus, a sample of 1426 which comprised all the 678 students for the 2018/2019 academic session who were examined with the paper-pencil test and 748 students in 2019/2020 academic session that took the computer-based test. However,

the discrepancies in number of students observed under analysis of results are because some of the students who registered absented themselves from the examinations; and others did not register for all the four courses considered in this study. Four courses were selected from the available 6 courses using simple random sampling technique. Two courses from first semester (EDU 231 and EDU 241) and two courses from second semester (EDU 212 and EDU 214) that all 200 level students in Education must pass. The scores obtained by the students from the computer-based test in the 2019/2020 academic session and paper-pencil test in the 2018/2019 academic session were sources of data used in the study. Methods of data analysis included mean, percentage and t-test statistical procedure.

**Results**

**Research Question 1:** What is the level of performance of undergraduates in the computer-based test in these Faculty courses of EDU 231, 241, 212 and 214 in the 2019/2020 academic session

**Table 1: Descriptive statistics on performance in computer-based test**

Course code	Number of students	Minimum score	Maximum score	Mean	SD
EDU 231	709	7	70	28.77	8.66
EDU 241	748	12	68	31.43	8.13
EDU 212	680	18	61	38.62	7.57
EDU 214	684	13	60	38.74	8.94

Table 1 and Figure 1 present the level of performance in CBT in the four Faculty courses. EDU 231 (i.e.  $\bar{x}$  =28.77; SD = 8.66) reveals 41% overall performance. EDU 241 ( $\bar{x}$ =31.43 SD=8.13) implies 46% level of performance. EDU 212 ( $\bar{x}$ =38.62, SD=7.57) indicates 63% performance. EDU 214 ( $\bar{x}$ =38.74, SD=8.94) records 65% overall performance in CBT. Further, the coefficient

of variation for scores obtained is low i.e. less than one. This implies that scores of the students are about the same range of achievement level.

**Research Question 2:** What is the mean percentage of undergraduates who performed very poor in computer-based test if a benchmark of 30% of overall score is observed?

**Table 2: Descriptive statistics on poor performance in CBT**

Course code	No. of failure	Score= $\leq$ 31	Score= $\leq$ 21*
EDU 231	479(68%)	366(49%)	113(19%)
EDU 241	401(54%)	336(45%)	65(9%)
EDU 212	105(15%)	101(9%)	4(6%)
EDU 214	146(21%)	131(9%)	15(2%)
Mean Percentage			9(%)

\*30% of 70 marks

Findings in Table 2 show the rate of failure in the performance of undergraduates in the computer-based test. 45% (minimum pass in the university examination system) of obtainable maximum of 70 marks for each of the test is 32 marks. A score less than 32 implies failure in the test. Details show 68%, 54%, 15% and 21% failure rates in EDU 231, EDU 241, EDU 212 and EDU 214 respectively were observed. Further, a mean percentage of 9% indicates that 9 out of 100 undergraduates performed poorly in the

computer-based test with an obtainable score that is less than 21 marks in the examination. However, it is observed that while more failure rate was recorded in the first semester courses, an improvement in performance was recorded in second semester courses.

**Research Question 3:** What is the mean percentage of undergraduates who performed excellently in the computer-based test if the criterion is 80%?

**Table 3: Descriptive statistics on excellent performance in CBT**

Course code	No. of passes	Score= $\geq$ 32	Score= $\geq$ 56*
EDU 231	230(32%)	221(96%)	9(4%)
EDU 241	347(46%)	338(97%)	9(3%)
EDU 212	575(85%)	559(97%)	16(3%)
EDU 214	538(79%)	514(96%)	24(4%)
Mean Percentage			4%

\*80% of 70 marks

Table 3 shows a mean percentage of 4% of undergraduates who performed excellently well in the CBT. In other words, 4 out of 100 undergraduates scored a total of 56 and above from the obtainable score of 70

**Research Question 4:** What is the level of performance of undergraduates in first and second semesters courses examined using the computer-based test format?

**Table 4. Descriptive statistics on performance based on semester**

Semester	N	Courses	Percent Pass	Percent Fail	Mean Percent Pass	Mean Percent Fail
First	709	EDU 213	32%	68%	39%	61%
	748	EDU 241	46%	54%		
Second	680	EDU 212	85%	15%	82%	18%
	684	EDU 214	79%	21%		

Finding on Table 4 reveals that undergraduates' performance in the first semester courses is below average (39%) but with the second semester courses, their performance increased remarkably to 82%. This fact is buttressed by the statistics above wherein the failure percentage in the 1<sup>st</sup> semester courses is 68% and 54%

respectively while in the 2<sup>nd</sup> semester, a remarkable improvement was measured with 85% and 79% pass in both courses (i.e., EDU 212 and EDU 214).

**Research Question 5:** What is the level and trend of performance of undergraduates in computer-based test across the departments?

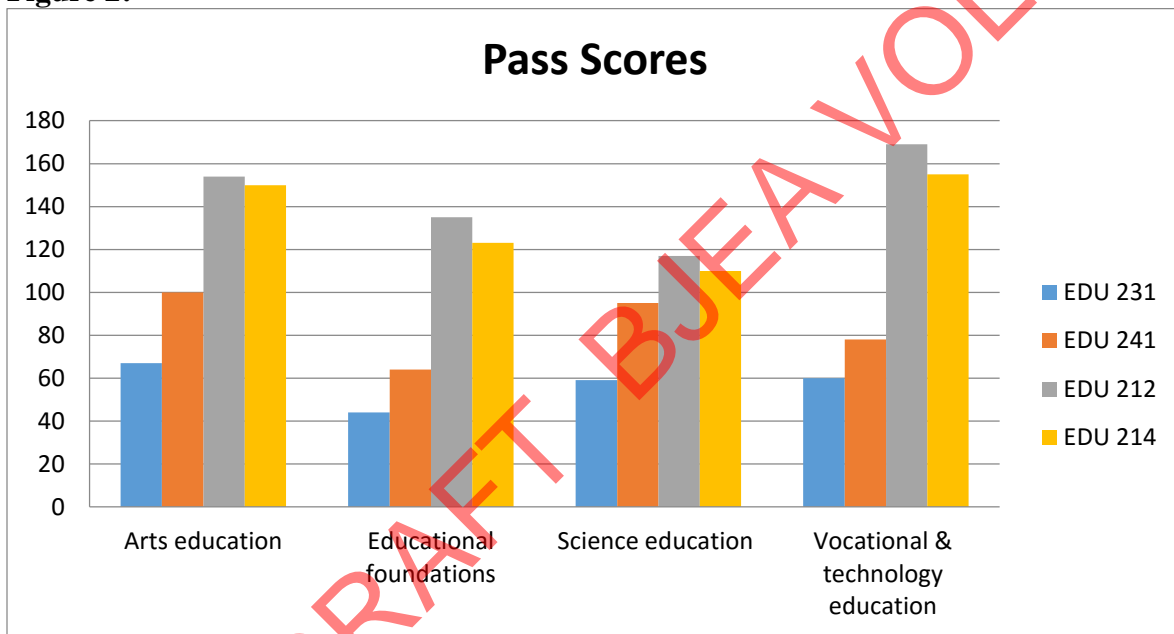
**Table 5: Descriptive statistics of performance based on department.**

Departments	No. of students	Course code	%Pass	%Fail
Arts education	186	EDU 231	67(36%)	119(64%)
	197	EDU 241	100(51%)	97(49%)
	179	EDU 212	154(86%)	25(14%)
	180	EDU 214	150(83%)	30(17%)
Educational foundations	172	EDU 231	44(26%)	128(74%)
	182	EDU 241	64(35%)	118(65%)
	167	EDU 212	135(81%)	32(19%)
	170	EDU 214	123(72%)	47(28%)
Science education	141	EDU 231	59(42%)	82(58%)
	136	EDU 241	95(70%)	41(30%)
	129	EDU 212	117(91%)	12(9%)
	127	EDU 214	110 (87%)	17(13%)
Vocational & technology education	210	EDU 231	60(29%)	150(71%)
	233	EDU 241	78(33%)	155(67%)
	205	EDU 212	169(82%)	36(18%)
	207	EDU 214	155(75%)	52(25%)

Table 5 shows the percentages of pass and failure in the sampled courses across departments. The highest percentage of pass was in EDU 212 (91%) in the department of Science education and the highest percentage fail was in EDU 231 (74%) in the department of Educational foundations. While EDU 231 recorded a highest percentage pass (42%) in

the department of Science Education; EDU 241 had the highest percentage of pass (70%) in the same department. Highest percentage pass in EDU 212 (91%) was observed in the department of Science Education and that of EDU 214 (87%) was also in the same department

Figure 2:



From Figure 2, the same pattern of performance is observed across the four departments.

**H<sub>01</sub>:** There is no significant difference in performance between the undergraduates

examined with the paper-pencil test and computer-based test for 2018/2019 and 2019/2020 academic sessions

Table 6: Independent t- test between CBT and PPT

TEST	N	Mean	SD	DF	T value	SIG
CBT	679	137.82	17.33	1187	-4.676	0.01*
PPT	510	143.10	20.62			

\*Significant at alpha level 0 .05

Finding in Table 6 shows that there is a significant difference in performance between the students that were assessed with the paper-pencil test and computer-based test.  $t(1187) = -4.676$   $p < 0.05$ . Scores on paper-pencil test have a greater mean of 143.10, while scores on computer-based test have a mean of 137.82; indicating that the undergraduates performed better in the paper-pencil test than in computer-based test.

### **Discussion of Findings**

Findings from Table 1 and Figure 1 show that the performance of undergraduates in Computer-based Test is fair (54%) across the four courses understudy. Performance is probably because it was their first attempt at technology driven assessment for Faculty courses. However, it is not their novelty experience in computer-based testing within the university system. This is because the university general studies courses are assessed using computer-based testing. However, this is their first-hand experience with regard to Faculty courses. 9 out of 100 and 4 out of 100 undergraduates performed poorly and excellently respectively in the computer-based test. Room for improvement in future performance is envisaged. Furthermore, finding as illustrated in Table 4 indicates that the students' performance is better in the second semester courses than in

the first semester. The benefit of repeated action is probably underscored here. Essentially if one does something again and again, one will get better at it and will become more efficient and be able to learn more and do more. A repeated action in the computer-based testing in the second semester examinations has impacted positively on students' performance. This supports the finding in this study. Undergraduates' performance in the first semester courses is below average (39%) but with the second semester courses, their performance increased remarkably to 82%. This implies that the consistency in using technology driven assessment in our educational system could raise the standard of academic achievement and quality education. Ceka et al (2019) in their study revealed that more students improved their score when they took the second exam on a computer rather on paper. According to them, students scored about 6 points higher when they took their exam on computer than on paper. Computer test-taking led to nearly a full-letter-grade in students' performance - a substantive effect. Students in the department of Science Education recorded the highest percentages of pass (42%, 70%, 91% and 87%) in the computer-based test across the four selected courses. Their performance could be

attributed to their ease in computer knowledge and usage in their science based courses. However a common trend is observed across the four departments in CBT performance as shown in Figure 2. Each department performed below and average in the first semester based courses, but a significant increase in performance was attained in the second semester based courses. The highest mean percentage in performance is observed in EDU 212 across all the departments and the least mean percentage was observed in EDU231 across the departments. A major finding in this study reveals that undergraduates performed better in the paper-pencil test than in the computer-based test. Finding in Table 6 shows,  $t(1187) = -4.676$   $p < 0.05$ . The mean statistics are significantly different; paper-pencil test scores have a greater mean of 143.10, while scores on computer-based test have a mean of 137.82. However, a study carried out among Nigerian primary school children indicated that there is no difference in performance using paper-based and computer-based assessment delivery methods (Vanguard 2017). Olapode (2021) found out that the influence of CBT on students' academic performance in JAMB examination in Nigeria had been positive and remarkable over the years ranging from cost

reduction, saving of time, impartial assessment, and prompt release of results and in proved reliability.

Tacha (2021) found in his study that there is no significant effect of CBT on the academic performance of B.Sc. (ED) Physics at the University of Agriculture, Makurdi. Zayed et al (2018) reported in their study that a simple difference in mean statistics test showed that there is no significant difference between the students' paper-based and computer-based scores. According to Mulvancy (2011), data collected from a survey showed that 71% of teachers believed that computer-based assessments do not raise test scores; 47% of students felt that it does improve scores.

The adjustment from the traditional paper pencil testing to computer-based testing may require time to stabilize and make the expected impact. Most of the students are technology complaint and with consistency on technology-driven assessment, it is a matter of time. The students are more likely to be fully receptive to techniques and preparation needed for computer-based testing and other forms of assessment that is driven technologically. This probably will affect their pattern of study habit and eventual academic success. In a similar study, Kasa et al (2018) assessed the performance of students of Library

Information Science (LIS) in a Nigerian University who pioneered the CBT project, and revealed that CBT incorporation is still at pilot level but results showed that its incorporation has encouraged students to be thorough and improve their technical skills. Likely factors that could be attributed used to the better performance in PPT than in CBT in the context of this study may include enabling environment that fueled pockets of examination malpractices; inflation of scores, low reliability of results; students' hard work and preparation for examinations. Notwithstanding, the receptive attitude of undergraduates towards computer-based testing indicates that the decision to assess them technologically is an important step towards achieving an educational system that will be premised on technology base. This is a global practice that is now a standard in developed countries. A major advantage of computer-based testing is the curtailing of examination malpractices that is found to be associated with paper-pencil testing which is increasingly becoming impossible to control in the management of examination in Niger Delta University. With computer-based testing, examinations malpractices is likely to be minimized and possibly to a zero level. Though hacking into the University ICT system could be a possible threat, however

there exists a tight security to prevent against such occurrence incorporated in the University ICT Unit in Niger Delta University.

### **Recommendations**

1. Computer-based testing should be extended to all courses in the departments where there is a high population of students offering that course.
2. More computer system should be purchased by the school authority.
3. Enabling environment should be created to explore the practicability of delivering teaching /learning experiences that are technology driven in the university system.

### **Conclusion**

The study is an analysis of undergraduates' performance in computer-based test in Faculty of Education, Niger Delta University. Though major finding shows that students performed better in the paper-pencil test than in the computer-based test, the overall performance of the students in CBT is observed as fair especially when it happened to be their first attempt at technology-driven assessment for examinations in the Faculty. Consistency in assessing and grading students on computer-based test could enhance their mastery of skills in the use of computer and positive impact on academic achievement.



## REFERENCES

- Abba, A & Abubaker, A. A.(2020). Challenges of computer testing among senior secondary school students in Zaria local government area of Kaduna state. *African Scholars Journal of Pure &Applied Science (JPAS-9)*.18 (9) 93-104
- Ajinaja, M.(2017). The design and implementation of computer-based testing system using component-based software engineering. *International Journal of Computer Science and Technology* 8(1), 58-65.
- Bala, M.M. (2018). Computer-based test CBT): A veritable tool for checking examination malpractice in Unified Tertiary Matriculation Examination (UTME). *International Journal of Educational Benchmark (IJEB)*. 10(2) 68-73.
- Ceka, B & O'Green, A.J. (2019). *Evaluating student performance on computer-based versus handwritten exams: Evidence from a field experiment in the classroom*. Cambridge University Press.
- Daramola, F. O (2017). Impact of computer-based test in Nigeria tertiary institutions: A theoretical view. *International Journal for Innovative Technology Integration in Education*. pp 109-114
- Education (2017). New study shows students' performance not affected by CBT. *Vanguard* vanguardngr.com.cdn.ampproject.org.
- Hussaini, D & Audu, K. (2019). An assessment of the challenges and prospects of computer-based test
- Oke, W. N & Dickson-Omogoye, B. T (2019). Computerized adaptive testing for improved e-assessment outcome: lesson for large scale assessment programmers. *ASSEREN* (CBT) in Joint Admissions and Matriculation Board (JAMB). *International Journal of Humanities and Social Science (IJHSS Journal)*. 6(5) 86-91. <https://doi.org/10.14445/23942703/IJHSS-1615p112>.
- Jimoh, R.G., AbdulJaleel, K.S and Kanu, Y.K. (2012). Students' perception of computer-based test (CBT) for examining undergraduate chemistry courses. *Journal of Emerging Trends in Computing and Information Science* 3(2) 49-59.
- Kasa, G.M.& Auwalu, Y. (2018). Imperatives of computer base test on performance of LIS students: A case study. *Library Philosophy and Practice(e-journal)*. <http://digitalcommons.unl.edu>
- Kuyoro, S.O., Maminor, U., Kanu, R.U. and Akande, P. (2016). The design and implementation of a computer-based testing system. *Journal of Applied Computation I* (1), 1-7
- Niger Delta University (2021). *Faculty of Education Prospectus (2021-2026)*. Niger Delta University Publisher limited.
- Oduntan, O.E., Ojuawo, O.O., & Oduntan, E. A. (2015). A comparative analysis of students' performance in paper/ pencil test (PPT) and computer-based test (CBT) examination system. *Research Journal of Education Studies and Review*. 1, 24-29
- Ojirinde, D. (29<sup>th</sup> March 2015). Reducing examination malpractice through computer-based tests. *Guardian Newspaper*. <http://guardian.ng/news>
- Journal of Educational Research and Development (AJERD)* 7, 169-178
- Olapode. S. (2021). The influence of computer -based test on students' academic performance in JAMB

examination.

<https://www.academia.edu>.

Olsen, O.E., Ojuawo, O.O. & Odutan, E.A. (2010). A comparative analysis of students' performance in paper/pencil test (PPT) and computer-based test (CBT) examination system. *Research Journal of Education Studies and Review*. 1, 24-29

Tacha, M. J. (2021). Effect of computer-based tests on the academic performance of B.Sc. (Ed) Physics students at the University of Agriculture, Makurdi. *Science Open*

*Preprints*. DOI: 10.14293/S2199-1006.1.SOR-PPHOPHY.v1

Zayed, S.G. & Hassan, M. (2018). Student performance on computer-based tests versus paper-based tests on introductory financial accounting: UAE Evidence. *Academy of Accounting and Financial Studies Journal* 22(2), 1-13

FINAL DRAFT BJEA VOL 9 NO 3

**Strategies for Maintaining and Securing Information and Communication Technology Facilities for Sustainable Digital Literacy Skills among Undergraduate students of Universities in Bayelsa State, Nigeria**

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**ABSTRACT**

The study examined managing Information and Communication Technology (ICT) learning facilities for sustainable digital literacy skills among undergraduate students of universities in Bayelsa State, Nigeria. The study adopted a descriptive survey research design. The objectives of the study were to determine the extent to which maintaining and securing ICT learning facilities influence sustainable digital literacy skills among undergraduates in universities in Bayelsa State, Nigeria, in which two hypotheses were raised to guide the study. The population of the study comprised all the 1684 undergraduates of the Faculty of Education in Niger Delta University and Federal University, in Bayelsa State. The sample size was 623 respondents. An Instrument tagged “Managing ICT Learning Facilities Questionnaire (MICTLFQ)” and validated by experts was used for data collection. A reliability value of 0.82 was attained using Cronbach Alpha Formula. The research questions were answered using mean and standard deviation, while z-test was used to test the hypotheses. The findings revealed that maintaining and securing ICT learning facilities strategies to a high extent influence sustainable digital literacy skill among undergraduates in universities in Bayelsa State. It was thus concluded that ICT learning facilities be regularly maintained and secured to allow for efficient and effective utilization by undergraduate students. Among the recommendations made was that ICT learning facilities managers should keep themselves abreast with innovative managerial competencies and deploy same for adequate maintenance of ICT facilities that will influence sustainable digital literacy skills among undergraduate students in universities in Bayelsa State.

**Keywords:** Maintenance, Securing, ICT facilities, digital literacy skills

**Introduction**

Developing nations of the world like Nigeria have in recent times integrated Information

and Communication Technology (ICT) in their educational systems. The importance of

ICT in Nigeria's higher educational system cannot be overemphasized. Higher educational system such as universities is the tier of the educational system after the post-basic educational system. According to the Federal Republic of Nigeria (FRN) National Policy on Education (2014), university educational system is geared towards the production of high-level manpower needs of the nation. Kariutha (2020) opined that ICT has affected the teaching and learning processes in the educational system.

ICT enhanced learning has to do with the use of ICT facilities to acquire relevant knowledge, skills and attributes for goal attainment (Jegade & Owolabi, 2008), ICT enhanced learning facilities according to Ichie (2015) include hardware devices connected to computers, software applications, interactive digital content and other satellite communication devices such as public address systems, printers, multimedia projectors, computer laboratory, library ICT units,, etc. The individual thus needs to be in an educational environment where he/she can effectively learn with the aid of information and communication devices. Effective learning especially in this era of globalization requires ICT enhancement.

ICT learning facilities are expected to aid an individual to acquire digital literacy skills

that would not only be useful to the students in a digital global economic world, but will also be useful to them in doing assignments and tests as well as Computer Based Tests (CBT). Digital literacy skills refer to the ability to effectively utilize technology to find, evaluate, create, and communicate information (Charles-Owaba, 2021). These skills are essential in today's digital age, as technology plays a critical role in almost every aspect of our lives. Among digital literacy skills that undergraduates can acquire as identified by Omeodu and Charles-Owaba (2020) include:

- i. Internet literacy skills: The ability to navigate the web and effectively use search engines to find information.
- ii. Media literacy skills: The ability to evaluate the credibility and reliability of digital media sources.
- iii. Information literacy skills: The ability to critically evaluate and analyze information for accuracy, bias, and relevance.
- iv. Communication skills: The ability to effectively communicate using digital tools such as email, instant messaging, and social media.
- v. Cyber security skills: The ability to protect personal information and devices from online threats.

- vi. Digital citizenship: The ability to understand and follow ethical and legal guidelines when using technology.

### **Literature Review**

In Nigeria, the ICT sector in recent times is being regarded as one of the foremost sectors which has contributed significantly to growth and development. The ability to effectively use information communication technology to achieve desired results in today's technological world is of great essence hence, developing digital literacy skills is crucial for success in today's digital world. While highlighting the importance of digital literacy skills, Omeodu and Charles-Owaba (2020) opined that lack of digital literacy skills among undergraduates is a significant reason for high student failure rates especially during computer based tests/examinations in Nigeria. This then means that digital literacy skills must be adequately sustained if university undergraduates must be current with global best practices and if the nation's graduates must remain and compete favorably in the global economic world.

Sustainable digital literacy skills can only be achieved through adequate management of ICT enhanced learning facilities. Managing ICT learning facilities has to do with all the efforts the manager puts in planning, coordinating, directing, organizing,

budgeting etc. ICT learning facilities geared towards goal attainment (Aina, 2011). In this study, the ICT directors, Chief Librarians, works directors are regarded as the managers of ICT learning facilities. The study also focused on the managers ICT learning facilities maintenance and security strategies for enhancing sustainable digital literacy skills. Ezikpe and Okpe (2017) rightly added that at the heart of educational management is the use of information and communication technology facilities. It is the task of the manager to plan, co-ordinate and direct the best ways to maintain and secure ICT facilities (Egboka, 2007).

ICT learning facilities maintenance strategies refer to all the efforts the ICT manager puts in place to keep ICT learning facilities in as near as their original state of utility as much as possible. It has to do with the repair and upkeep of facilities for effective and efficient use. It is thus pertinent for ICT learning facilities to be checked from time to time as a way of maintaining them for continuous use, proper over-hauling, and rehabilitation. ICT learning facilities security has to do with all the efforts of the ICT facility manager to guide and protect ICT learning facilities from incidents of theft and damage.

The use of security personnel to guide ICT facilities seems to also be a paramount

responsibility of the ICT facility managers. Regrettably, the researchers observed that ICT facilities are hardly maintained either by way of preventive maintenance, rehabilitation or periodic maintenance. It is a common sight to see damaged ICT facilities littering the university environment. Most times, there is the complain of high cost of maintenance and overhauling hence faulty ICT facilities are often abandoned in a store house, waiting for repairs which are hardly attained.

Osadolor (2008) carried out a study on “analysis of the adoption capacity of modern information technology by senior secondary schools in Edo State”. Descriptive survey research design was adopted for the study. The population for the study was the entire 268 public senior secondary schools in Edo State. The 268 principals of the schools also constituted the sample for the study. The researcher analyzed the data gathered using descriptive and inferential statistics and found that modern information technology adoption capacity of senior secondary school was low. And that the level of application of ICT in the schools was low. The factors he found responsible for the situation and identified as impediments to the adoption of ICT in the schools include lack of government support, lack of knowledge of

the use of computer and other ICT facilities , lack of trained personnel in computer/ICT and lack of computer /ICT facilities and non-availability of regular power supply.

Strategic ICT facilities managers require abilities such as team building, strong communication and problem-solving strategies to build upon the mission and vision of their schools, model best practices, set high academic standards etc. to sustain digital literacy skills among undergraduates in universities.

It is against this background that the study sought to investigate, managing ICT learning facilities for sustainable digital literacy skills among undergraduate students in Universities in Bayelsa State.

### **Statement of the Problem**

ICT facilities are essential teaching and learning tools in institutions of higher learning, in this era of globalization. There is no doubt about the importance of ICT in today’s world of teaching/learning hence ICT facilities in tertiary educational systems especially the universities have been geared towards the realization of the goals of higher education. However, the extent of maintenance and security of ICT learning facilities leaves more to be desired. The researchers observed that ICT facilities are hardly maintained and secured in our

universities. More often than not, one observes the high rate of ICT facilities that require maintenance, but are left abandoned, and kept unrepaired. Often times too, these facilities are exposed to thieves or are damaged by electrical faults and man-made faults. These may have resulted in the shortage of ICT facilities available to enhance undergraduate students' academic learning as well as the poor acquisition of sustainable digital literacy skills that will enable them to find, evaluate, create and communicate information for them to achieve high academic productivity and complete favorably in the near future in the global economy. The question therefore is: What are the ICT learning facilities management strategies for sustainable digital literacy skills in universities in Bayelsa State?

### **Purpose of the Study**

The main purpose of the study is to establish how the maintaining and securing ICT learning facilities influences sustainable digital literacy skills among undergraduates in universities in Bayelsa State, Nigeria. Specifically, the study sought to:

1. Determine the extent to which maintaining ICT learning facilities influence sustainable digital literacy skills among undergraduates in universities in Bayelsa State, Nigeria.

2. Determine the extent to which securing ICT learning facilities influence sustainable digital literacy skills among undergraduates in universities in Bayelsa State, Nigeria.

### **Research Questions**

The following research questions were formulated to guide the study:

- 1 To what extent do maintaining ICT learning facilities influence sustainable digital literacy skills among undergraduates in Universities in Bayelsa State?
- 2 To what extent do securing ICT learning facilities influence sustainable digital literacy skills among undergraduates in Universities in Bayelsa State?

### **Hypotheses**

**H0<sub>1</sub>:** There is no significant difference in the mean ratings of responses between male and female undergraduate students on the influence of ICT learning facilities maintenance strategies on sustainable digital literacy skills in universities in Bayelsa State, Nigeria.

**H0<sub>2</sub>:** There is no significant difference in the mean ratings of responses between male and female undergraduate students on the influence of ICT learning facilities security strategies on sustainable digital literacy skills in universities in Bayelsa State, Nigeria.

## **Methodology**

The descriptive survey research design was adopted in this study. The population comprised of all the 1684 final year education undergraduate students in Niger Delta University, Amassoma and Federal University Otuoke. The sample size of 623, comprising 299 males and 323 female undergraduate students was drawn from a population of 1684 from the Faculty of Education in Niger Delta University, Amassoma and Federal University, Otuoke. This constitutes 37% of the population. However, the sample was composed using the simple random sampling technique. Instrument for data collection was a structured questionnaire tagged as “Managing Information Communication Technology Learning Facilities Questionnaire (MICTLFO)” developed by the researchers. It was structured on a 4-point Likert type scale. The instrument had 3 sections, namely; section A, B and C. Section A measured the demographic characteristics of the respondents, section B measured the extent of maintenance strategies and section C measured the extent of security strategies. The instrument was validated by experts of measurement and evaluation and educational management. It was subjected to pilot testing and the outcome was analyzed using

Cronbach Alpha Formula which yielded a coefficient of 0.82. One-on-one mode of questionnaire administration was adopted and 100% return rate was achieved. However, out of the 323 questionnaires from the female responses, 4 were not well filled and hence, were unusable. Mean and standard deviation were used to answer the research questions, while z-test analysis was used to test the research hypotheses. The decision rule for answering the research questions was arrived at by finding the average of the 4-point scale, thus;  $\frac{4+3+2+1}{4} = \frac{10}{4} = 2.50$  thus, any item with mean value of 2.50 and above was interpreted as high extent, while mean scores below 2.50 were interpreted as low extent. For the hypotheses, the decision rule is that if the calculated z-value is greater than the critical or table value, the null hypothesis would be rejected, but if the calculated z-value is less than the critical or table value, the null hypothesis would be accepted.

## **Analysis and Results**

### **Research Question 1**

To what extent do ICT learning facilities maintenance strategies influence sustainable digital literacy skills among undergraduates in Universities in Bayelsa State?



**Table 1: Mean and standard deviation on the influence of ICT learning facilities maintenance strategies on sustainable digital literacy skills among undergraduates in universities in Bayelsa state.**

S/N	ICT Learning facilities maintenance strategies	Male		Female		$\bar{X}_1 + \bar{X}_2$	Decision
		$\bar{X}_1$	SD <sub>1</sub>	$\bar{X}_2$	SD <sub>2</sub>		
1.	Co-ordinate constant checks of ICT facilities to prevent the sudden possibility of breakdown to allow for continuous students' access	2.95	0.47	2.98	0.63	2.96	HE
2.	Ensures that ICT facilities are overhauled periodically in order to enhance the efficiency and effectiveness of ICT facilities available for students learning	3.31	0.46	3.15	0.46	3.23	HE
3.	Rehabilitate existing ICT facilities for more availability to students	2.79	0.51	3.12	0.46	2.95	HE
4.	Ensures prompt repair of damaged ICT facilities	3.53	0.47	3.08	0.69	3.31	HE
5.	Replaces worn out ICT facilities for continuous students access to learning	3.05	0.52	3.01	0.45	3.03	HE
6.	Allocates adequate time for use of ICT facilities to avoid being overburdened	2.49	0.63	2.51	0.62	2.50	HE
<b>Grand Mean.</b>		<b>3.02</b>	<b>0.51</b>	<b>2.98</b>	<b>0.55</b>	<b>3.00</b>	

**Source: Researchers Compilation (2023)**

The result in table 1 shows the mean and standard deviation of responses on the extent to which ICT learning facilities maintenance strategies enhance sustainable digital literacy skills among undergraduates in universities in Bayelsa State. The grand mean value of 3.00 for both groups was greater than the criterion mean of 2.50, which indicates that undergraduate students regarded to a high

extent that the ICT learning facilities maintenance strategies influence sustainable digital literacy skills among undergraduates in universities in Bayelsa State.

**Research Question 2**

To what extent do securing ICT learning facilities strategies influence sustainable digital literacy skills among undergraduates in Universities in Bayelsa State?

**Table 2: Mean and standard deviation on the influence of ICT learning facilities security strategies on sustainable digital literacy skills among undergraduates in universities in Bayelsa state.**

S/ N	ICT Learning facilities security strategies	Male		Female		$\bar{X}_1 + \bar{X}_2$	Decision
		$\bar{X}_1$	SD <sub>1</sub>	$\bar{X}_2$	SD <sub>2</sub>		
7.	Organize security personnel posted to ICT facility units to guarantee ICT facilities as well as students safety during ICT facilities usage	3.53	0.48	3.16	0.47	3.34	HE
8.	Co-ordinate ICT facilities protection by keeping them in burglary proof sections	3.02	0.67	3.01	0.69	3.02	HE
9.	Ensures that all ICT electrical appliances are switched off after use.	2.93	0.62	2.90	0.63	2.91	HE
10.	Provide adequate security gadgets for security personnel to fortify security personnel and give students a sense of maximum protection when using ICT facilities	2.98	0.70	2.91	0.60	2.95	HE
11.	Ensure that ICT facilities room doors and windows are adequately locked to prevent issues of theft.	3.13	0.54	2.79	0.62	2.96	HE
12.	Encourage feedback mechanisms on current security situations about ICT learning facilities	3.01	0.67	3.15	0.46	3.08	HE
<b>Grand Mean</b>		<b>3.10</b>	<b>0.61</b>	<b>2.99</b>	<b>0.58</b>	<b>3.04</b>	

**Source: Researchers Compilation (2023)**

The result in table 2 shows the mean and standard deviation of responses on the extent to which ICT learning facilities security strategies enhance sustainable digital literacy skills among undergraduates in universities in Bayelsa State. The grand mean value of 3.04 for both groups was greater than the criterion mean of 2.50, which indicates that undergraduate students regarded to a high extent that the ICT learning facilities security

strategies influence sustainable digital literacy skills among undergraduates in universities in Bayelsa State.

**Testing Hypotheses**

**H0<sub>1</sub>:** There is no significant difference in the mean ratings of responses between male and female undergraduate students on the influence of ICT learning facilities maintenance strategies on sustainable digital literacy skills in universities in Bayelsa State, Nigeria.

**Table 3: Z-test analysis on hypothesis 1**

Category	N	Mean	St.D	df	P	Z <sub>cal</sub>	Z <sub>crit</sub>	Decision
Male	299	3.02	0.51	617	0.05	1.283	1.960	Accept H <sub>02</sub>
Female	320	2.98	0.55					

**Source: Researchers Compilation (2023)**

From Table 3 above, the calculated Z-value is 1.283 at 617 degree of freedom and 0.05 level of significance. Since the calculated Z-value of 1.283 is less than the critical table value of 1.96, the null hypothesis is not rejected. In other words, there is no significant difference in the mean ratings of responses between male and female undergraduate students on the ICT learning

facilities maintenance strategies for sustainable digital literacy skills in universities in Bayelsa State, Nigeria.

**H<sub>02</sub>:** There is no significant difference in the mean ratings of responses between male and female undergraduate students on the influence of ICT learning facilities security strategies on sustainable digital literacy skills in universities in Bayelsa State, Nigeria.

**Table 4: Z-test analysis on hypothesis 2**

Category	N	Mean	St.D	df	P	Z <sub>cal</sub>	Z <sub>crit</sub>	Decision
Males	299	3.10	0.61	617	0.05	1.660	1.960	Accept H <sub>01</sub>
Females	320	2.99	0.58					

**Source: Researchers Compilation (2023)**

From Table 4 above, the calculated Z-value is 1.66 at 617 degree of freedom and 0.05 level of significance. Since the calculated Z-value of 1.66 is less than the critical table value of 1.96, the null hypothesis is not rejected. In other words, there is no significant difference in the mean ratings of responses between male and female undergraduate students on the influence of ICT learning facilities security strategies on sustainable digital literacy skills in universities in Bayelsa State, Nigeria.

**Discussion of Findings**

The study on ICT learning facilities maintenance strategies in research question one disclosed that when ICT managers coordinate constant checks on ICT facilities to prevent the sudden possibility of breakdown that will allow for continuous students access, ensure that ICT facilities are overhauled periodically in order to enhance the efficiency and effectiveness of ICT facilities available for students learning, rehabilitate existing ICT facilities for more

availability to students, ensure prompt repair of damaged ICT facilities as well as replace worn out ICT facilities for continuous students access to learning, to a high extent influence sustainable digital literacy skills among undergraduate students in universities in Bayelsa State. The study revealed that there is no significant difference in the mean ratings of responses between male and female undergraduate students on the extent to which ICT learning facilities maintenance strategies influence sustainable digital literacy skills among undergraduates in universities in Bayelsa State, Nigeria. These findings support the studies of Ajah and Chigozie-Okwum (2019), who disclosed that the supervisory practices, directing and co-ordination are major managerial strategies in the management of technology induced innovations in secondary schools. In corroboration, the findings of this study is in line with the studies of Zubairu, Oyefolahan, Babakano, Etuk and Mohammed (2020) who found out that teachers, students and principals must have sufficient access to digital technologies and internet in their classrooms and must have the knowledge and skills to use the new digital tools.

The study on ICT learning facilities security strategies in research question two also revealed that

When ICT managers organize security personnel to be posted to ICT facility units to guarantee ICT facilities as well as students safety during ICT facilities usage, co-ordinate ICT facilities protection by keeping them in burglary proof sections, ensure that all ICT electrical appliances are switched off after use, provide adequate security gadgets for security personnel to fortify security personnel and give students a sense of maximum protection when using ICT facilities, ensure that ICT facilities room doors and windows are adequately locked to prevent issues of theft as well as encourage feedback mechanisms on current security situations about ICT learning facilities, to a high extent influence sustainable digital literacy skills among undergraduate students in universities in Bayelsa State. Also, the study revealed that there is no significant difference in the mean ratings of responses between male and female undergraduate students on the extent to which ICT learning facilities security strategies influence sustainable digital literacy skills among undergraduates in universities in Bayelsa State, Nigeria. These findings support Okenema and Akukwe (2021) who reported that the extent of utilization of modern technologies in tertiary institutions was the result of adequate security measures put in

place to guarantee security of lives and properties in institutions of learning. In corroboration, the findings of Achuonye (2004) and Udoh (2016) suggests that quality of education can be enhanced through improved school administration and management.

### **Conclusion**

Providing Information Communication Technology (ICT) learning facilities is important, but the extra task of applying appropriate managerial strategies to maintain and secure these facilities for increased staff and students' productivity is ultimate. This study has disclosed that periodic and preventive maintenance as well as coordinating security personnel and providing security gadget amongst others were appropriate managerial strategies. Hence, ICT learning facilities managers need to regularly maintain and secured these facilities to allow for efficient and effective utilization by undergraduate students. It is thus pertinent for ICT learning facilities to be made available and at the disposal of university undergraduate students to enable them to acquire sustainable digital literacy skills. However, the study affirms that there is no significant difference in the responses between male and female students on the influence of ICT learning facilities

maintenance and security strategies on sustainable digital literacy skills among undergraduates in universities in Bayelsa State.

### **Recommendations**

The following recommendations were made:

- 1. ICT learning facilities managers should keep themselves abreast with innovative managerial competencies and deploy same for adequate maintenance of ICT facilities in the university system.
- 2. University staff and students should be constantly trained on the awareness and the need for everyone to be ICT learning facilities security conscious.

## REFERENCES

- Achuonye, K. (2004). *Contemporary educational technology*. Port-Harcourt: Pearl Publishers.
- Aina S. (2011). *Rudiment of educational management*. Lagos-Nigeria Fountain Training Consult
- Ajah, I.A. & Chigozie-Okwum, M. (2019). Prospects of ICT for Digital Growth and National Development in Nigeria. *International Multi-Disciplinary Journal*, Ethiopia. 13(9),192-203.
- Charles-Owaba, T. (2021). Mobile app-based pedagogy in mathematics education: a viable panacea to a sustainable digital economy policy. *Journal of Mathematical Science and Computational mathematics (JMSCM)*, 2(3), 41-54.
- Egboka, P.N. (2007). ICT in the management of technology, technical and vocational education in tertiary institutions. In J.B. Babalola, G.O. Akpa & A.O. Ayeni (Eds.). *Managing technical and vocational education in the era of globalization*. NAEAP.
- Ezikpe, N.N. & Okpe, P.U. (2017). Managing ICT tools and packages in Abia State secondary schools for leadership values and sustainable national development in Nigeria. *Nigerian Journal of Educational Administration and Planning (NJEAP)*. 17 (3) !7. 925-934.
- Federal Republic of Nigeria. (2014). *National policy on education*. NERDC.
- Ichie, A.E. (2015). Awareness, access and usage of information and communication technologies between female researchers and extensions. *Interactional Journal of Education and Development using ICT. (IJEDICTS)* 3 (1) 85-93.
- Jegede, P.O. & Owolabi, A.J. (2008). Computer education in Nigeria secondary schools: Gaps between Policy and Practice. *Middle School Technology Journal*. 6 (2), 1-11.
- Kariutha, J. (2020). Mobility at work: A Topology of Mobile Communities of Practice and Contexture Ambidex-terity. *Journal of Strategic Information Systems*, 13(4), 223-236
- Okenema, E. & Akukwe, C. (2021). Principals' administrative skills for ensuring conducive learning environments during covid-19 pandemics in secondary schools in Bayelsa State, *Nigerian Journal of Educational Administration and Planning*, 21(1), 378-402.
- Omeodu, M. D. & Charles-Owaba, T. (2020). Mobile app and mathematics education; awareness and barriers. *Journal of Assertiveness in science and mathematics Education*, 11(2), 90-98.
- Osadolor, O. (2008). *Analysis of the Adoption Capacity of Modern Information Technology by Senior Secondary Schools in Edo State*. In Nworgu (ed). *Education in Information Age: Global Challenges and Enhancement Strategies*. Nsukka: University Trust Publishers.
- Udoh, E.B. (2016). Access and use of information and communication technology for administrative purposes of public secondary schools in Akwa Ibom State. *International on-line Journal of Educational Studies*. 4(3). 581-591.
- Zubairu, H.A., Oyefolahan, I.O., Babakano, F.J., Etuk, S.O. & Mohammed, I. (2020). Assessing the e-readiness of Nigeria for digital economy. *American Journal of Computer Science and Information Technology*, 8(2), 1-6.

**Effects of Mathematical Skills on Learning Science in Senior Secondary Schools for Sustainable Development in Nigeria**

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**ABSTRACT**

The research study affirms the Effects of Mathematical Skills for Learning Science in Senior Secondary Schools for Sustainable Development in Nigeria. The study was conducted using a descriptive survey research method. The population of the study was 234 which covered all the three secondary schools science students, amongst which 90 students were selected using stratified and purposive simple random techniques. Three research questions and two null hypotheses were generated. A self designed questionnaire was used to obtain information from the respondents. The validity, each of the items used in the study satisfied discriminating power of 0.58 – 0.62, difficulty index of 0.45 – 0.50 and the reliability coefficient of the instrument used ranges between 0.77 – 0.85. The items were tested at 5% alpha level and analyzed using chi-square analysis. Result of the findings revealed significantly low level understanding of science by students who are mathematically poor in their academic achievement and a very high relationship between mathematics and science which implies that skills acquired in mathematics is highly significant for learning science in secondary schools. It was therefore, recommended that Mathematics curriculum should be structured in such a way that it promotes the acquisition of ample and sufficient skills that would promote the learning of science by students and that effective coordination between the curricular of mathematics and science at secondary level is required for the effective learning of science.

**Keywords:** Learning, mathematics, science, mathematical skills, sustainable development

**Introduction**

Mathematics and science are two areas of study that relate in content and context. It is therefore, important to look into the nature and scope of both disciplines to reflect the link connecting them. The importance of mathematics and science is widely acknowledged and needed in order to sustain and advance modern and innovative economies. One aspect of mathematics is creativity and creativity is a skill that serves

as a mother of self-reliance, industrial and technological development. The concept of sustainable development can be interpreted in many ways, but at its core is an approach to development that looks to balance different and often competing needs against an awareness of the environmental, social and economic limitations we face as a society. However, sustainable development has been defined as a development that

meets the needs of the present generation without compromising the ability of the future generations to meet their own needs (Nzekwe, 2001).

### **Statement of the Problem**

Educators, writers and several well informed Nigerians have over the years described the poor academic performance of students in school science and mathematics, giving attention to the deleterious effect of this development in the nation towards economic self reliance and industrialization (Azuka and Elija, 2012). These people have carried out studies or surveys concerning school's science and mathematics which relates directly or indirectly to all aspects of education, and these have revealed a downward trend. Teachers, parents, students and school managers have wondered what could be responsible for this poor academic performance in science. In Kano state, for instance, several workshops were organized to improve the performance of secondary school science teachers in the last few years. Yet the results were still not very encouraging. Since mathematics is the backbone of science, it is reasonable to assert that weakness in the subject might (at least in part) be the cause (Idris, 2008). Thus, to what extent can the teacher's weakness in mathematics affect students' performance in the sciences?

### **Objectives of the Study**

The study is purported to:

- i. Find out the relationship between the mathematical skills and students' ability in learning other science subjects.
- ii. To find out the challenges faced by students with poor mathematical skills in other science subjects.
- iii. To suggest possible solutions in addressing the identified challenges encountered by students with poor mathematical skills

### **Research Questions**

In line with the objectives of the research, the research would answer the following questions:

- i. What is the relationship between the mathematical skills acquired by students and their abilities in learning other science subjects?
- ii. What are the challenges faced by students with poor mathematical skills in other science subjects?
- iii. What are the possible solutions in addressing the identified challenges encountered by students with poor mathematical skills?

### **Research hypothesis**

$H_{01}$ : there is no significant relationship between the mathematical skills acquired by students and their abilities in learning other science subjects.



H<sub>02</sub>: there are no significant challenges faced by students with poor mathematical skills in other science subjects.

### **Significance of the Study**

Nigeria is a developing nation with an increasing demand for skilled manpower education as the bedrock of technological advancement and science is the crucial element of development. Nations that seek technological advancement for improvement of quality of life engage in educational system that is science and technological based. Hence, it is hoped that the findings of this research will be of high significance to following category of Nigerians:

- i. Policy makers: educational planners and implementers concerned would be made aware of the application of mathematical skills in science and how to make valuable contributions to the level of sustainable development in Nigeria by ensuring that adequate libraries, textbooks and other teaching facilities are supplied and put in place to enhance the learning and teaching of mathematics.
- ii. School Management Boards: The study will help the schools to devise ways that will correct the students' attitudes towards learning mathematics.
- iii. The teachers: findings of the study are expected to improve on teachers' skills on their teaching strategies.

### **Literature Review**

Science and technology are the bedrock of technological development of a nation (Ayuba, 2008). In order to produce visionary scientist, scientific concepts and ideas must be properly understood, digested, assimilated and communicated. JICA (2004) is of the view that, sustainable development is the only way to guarantee humanity's well being now and in future generations. However, inappropriate methodology of science delivery (Oloruntagbe and Omoifo,2012), the employment of indigenous and traditional methods, lack of skill and competence to put across the science concepts to students (Azuka, 2003) and absence of dedication and resourcefulness (Olaruntagbeand Omoifo, 2012) are often cited as teachers factors. There exist an impregnable link between mathematics and science subjects (Salau, 2011). The subject has played auxiliary roles of enabling the attainment of optimal heights in performance in various fields (Elijah and Azuka, 2012). In fact, it would be difficult to make an amicable breakthrough in science without sufficient knowledge of mathematics and quantitative process (Oloruntagbe and Omoifo,2012). The role of science and technology as factors of economic and social development of any nation cannot be over emphasized. In most nations of the world

today, the drive therefore is towards scientific and technological evolution as a means of achieving self reliance and economic buoyancy (Ali, 2012). It is in this view that the Nigerian government is making substantial efforts to encourage it citizens to study science and technology, in 1985 and opening of more Federal universities of technology across the country. Since science gave birth to technology (Adebayo, 2010) then considering the importance of science in all round development, there is need to ascertain the position of mathematics in relation to learning of science in secondary schools as asserted by Fakuade (1985), Kalejaiye (1970) and Idris (2008).

### **Methodology**

A descriptive survey design was adopted in the study since it offered an opportunity for selecting representative samples. Inference from the findings were generalized on the entire populace.

### **Population of the Study**

The population of the study was 234 science students of secondary school in Gwale Local Government Area particularly, Government Secondary School Gauron Dutse, Staff Secondary Schools Federal College of Education and Government Girls Secondary School Gauron Dutse all in Kano State.

### **Sample and Sampling Procedure**

In order to select from the population, stratified and purposive simple random techniques was used to obtain a total of 90 science students (30 from each school).

### **Instrument for Data Collection**

The instrument for the study was a structured questionnaire, designed on four Likart scale of Strongly Agreed (SA), Agreed (A), Disagreed (D) and Strongly Disagree (SD) assigned 4 points, 3 points, 2 points and 1 point respectively. All the items were based on mathematical skills. A total of 90 questionnaires were distributed in the three schools out of which 84 were retrieved as completely filled questionnaire giving a 93.3 % rate.

### **Validation of Instruments**

Validation was carried out by two lecturers from Bayero University Kano and two measurement and evaluation experts: one from Bayero University and the other from Federal College of Education Kano. The validity, each of the items used in the study satisfied discriminating power of 0.58 – 0.62, difficulty index of 0.45 – 0.50.

### **Reliability of the Instruments**

By split-half correlation reliability coefficient and test re-test, the reliability coefficient of the instrument used ranges between 0.77 – 0.85.

### **Results**

The two major hypotheses were tested and presented as shown in the tables below:

**Hypothesis One:** There is no significant relationship between the mathematical

skills acquired by students and their abilities in learning other science subjects

**Table 1: Selected issues related to the relationship between mathematical skills and students' abilities in learning science.**

Item	Variables (relationship)	CHOICES				Responses		DECISION		Decision
		SA	A	D	SD	X <sup>2</sup> CAL	X <sup>2</sup> CRI	X2 at 0.05		
A	Mapping skills acquired by students in mathematics promote their accuracy and exactness in science skills performance even without the original source	51 (60.7)	30 (35.7)	2 (2.4)	1 (1.2)					
B	Scaling skills acquired by students in mathematics help them in taking measurements of dimension in science	55 (65.5)	29 (34.5)	0 (0.0)	0 (0.0)					
C	Practical skills acquired by students in mathematics help them in performing experiments in science	36 (42.9)	45 (53.6)	1 (1.2)	2 (2.4)					
D	Critical thinking skill acquired by students in mathematics can enhance their recall of concept taught in science	45 (53.6)	18 (21.4)	21 (25.0)	0 (0.0)					
						Calculated X <sup>2</sup> = 82	Critical X <sup>2</sup> = 46.1			Rejected
								82 >		46.1

X<sup>2</sup> calculated = 82; X<sup>2</sup> critical = 46.1; Df = 88; X<sup>2</sup>calculated > X<sup>2</sup> critical i.e 82 > 46.1 and Hypothesis = rejected at 5% alpha level of significance

Table 1 above represented X<sup>2</sup> result summary of some selected issues related to the relationship between mathematical skills acquired by students and their abilities in learning science. The X<sup>2</sup> calculated = 82; X<sup>2</sup> critical = 46.1; degree of freedom = 88; X<sup>2</sup>calculated > X<sup>2</sup> critical i.e. 82 > 46.1 and the stated null hypothesis was rejected at 5% alpha level of significance. 96.1% (81) of the respondents agreed that mapping skills acquired by

students in mathematics promote their accuracy and exactness in science. This indicates that, there is significant relationship between mathematical skills acquired by students and their abilities in learning science.

**Hypothesis Two:** There are no significant challenges faced by students with poor mathematical skills in other science subjects

**Table 2: Selected issues related to the challenges faced by students with poor mathematical skills in other science subjects.**

Item	Variables (Problems/Challenges)	CHOICES				Responses			
		SA	A	D	SD	$X^2_{CAL}$	$X^2_{CRI}$	X2 at 0.05	Deci sion
A	Poor writing skills hinders students' abilities to excel in science	47 (56.0)	35 (41.7)	3 (2.4)	0 (0.0)				
B	Poor innovative steps in reporting weakens students abilities in creation of new ideas or things in science	50 (59.5)	31 (36.9)	3 (3.6)	0 (0.0)				
C	Poor indexing/power of labeling major work done weakens students abilities to identify parts/structures in science	39 (46.4)	45 (53.6)	0 (6.0)	0 (0.0)	Calculate $X^2 = 87$	Critical $X^2 = 46.1$		<b>Reje cted</b>
D	Lack of fastness in time keeping for not forgetting obstruct students creativity in science	32 (38.1)	49 (58.3)	1 (1.2)	2 (2.4)			87 > 46.1	

$X^2$  calculated = 87;  $X^2$  critical = 46.1; Df = 88;  $X^2$ calculated >  $X^2$ critical i.e 87 > 46.1 and Hypothesis = rejected at 5% alpha level of significance.

Table 2 above represented  $X^2$  result summary of some selected issues related to the relationship between mathematical skills acquired by students and their abilities in learning science. The  $X^2$  calculated = 87;  $X^2$  critical = 46.1; degree of freedom = 88;  $X^2$ calculated >  $X^2$  critical i.e 87 > 46.1 and the stated null hypothesis was rejected at 5% alpha level of significance. 96.1% (81) of the respondents agreed that poor innovative steps in reporting weaken students abilities in creation of new ideas or things in science. This indicates that, students with poor mathematical skills face challenges in other science subjects.

### Discussion of Findings

The result of data analysis of this study has clearly revealed that, there is a significant

relationship between the mathematical skills acquired by students and their abilities in learning other science subjects, this is in agreement with the survey study of Sallau (2011) who opined that, there exist an impregnable link between mathematics and other science subjects. The report of Elija and Azuka (2012) and Inglie and Turner (1981) found that adequate mathematics skill is required for teaching and learning practical chemistry, physics and biology is also confirmed by the findings of this study, furthermore, the result of data analysis of This study has clearly revealed that, students with poor mathematical skills faced challenges in other science subjects. This also correlates with the findings of Idris (2008) who opined that a good mathematics

background is required for the effective teaching and learning of chemistry in general, in particular, practical chemistry, and it would be difficult to make an amiable breakthrough in science without sufficient knowledge of mathematics and quantitative process (Olorungtabe and Omoifo, 2012).

### **Conclusion**

From the findings of this research, that is, it could be deduced that students with poor mathematical skills find it difficult to fare well in other science subjects, and vice versa, those with good mathematical skills were found to perform excellently in other science subjects. Therefore, a good mathematical background is required by students for the effective learning of science. Hence, there is the need for coordination and systematic integration between the curricular of mathematics and science at the secondary school level.

### **Recommendations**

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

- 1) Mathematics curriculum should be structured in such a way that it promotes the acquisition of ample and sufficient skills that would promote the learning of science by students.
- 2) There is need to organize special mathematics education programme for potential mathematics and science teachers to keep them abreast with the current trends in mathematics as well as the effective mathematical skills required for teaching that would cater for the weakness of students in learning both mathematics and other science subjects.
- 3) Effective coordination between the curricular of mathematics and science at secondary level is required for the effective learning of science. Therefore, a compulsory credit in mathematics for candidates wishing to pursue their tertiary education in the field of science should not be compromised.

## REFERENCES

- Adebayo, O. A. (2010). *Availability of Basic Teaching/Learning in Mathematics in Selected Secondary Schools in Lagos State, Nigeria*. A paper presented at the STAN 50th Annual Conference.
- Ali, A. (2012). *Teaching Mathematics for Science and Technology in Nigeria' Science and Technology*. Proceedings of Mathematics Association of Nigeria Conference in August 2012.
- Annual Conference of Mathematical Association of Nigeria (MAN). 41.
- Ayuba, G. (2008). The Professional Preparedness of Senior Secondary School Teachers in Kaduna State: Implication for Training Teachers.
- Azuka, F. N. (2003). Level of Acquisition of Science Process Skills Among Senior Secondary Students. *Journal of Science Association of Nigeria*, 29 (1 & 2), 47- 53.
- Elija, E. U., & Azuka, N. U. (2012). *The Effect of Mathematics Skills in Teaching Chemistry for Sustainable Development*. Proceeding of the 53<sup>rd</sup> Annual Conference of STAN and Inaugural Conference of CASTME Africa. 254-262.
- Fakuade, O. A (1985). "Students Expressed Usage of Some Mathematics Topics in Secondary School Science Practical". *Journal of Science Teachers Association of Nigeria*. 13 (1&2): 164 – 171.
- Idris, A. Y. (2008). The Effect of Mathematics Skills in Teaching Chemistry in Senior Secondary Schools for Sustainable Development. *Journal of Educational Research and Development*. 3 (2). 180-184.
- Inglie, R.B., & Turner, A. D. (1981). "Mathematics and Chemistry" Education in Chemistry 18 (2), 48 – 51.
- JICA, (2004). Study on Development Assistance for Development and Education (Tokyo, JICA) 5-10
- Kalejaiye, A. O. (1970). "Mathematical knowledge and science skills required by Nigerian students in learning science". *Journal of science teachers' association of Nigeria*, 18(1) 21- 26.
- Nzekwe, O. ( 2001). "Environmental Pollution Hazards and its Implication in Anambra state" National Light, Wednesday, Match, 14<sup>th</sup>, 3 -6.
- Oloruntagbe, K. O. (2009). *Effect of Teachers Sensitization on Students Acquisition of Science Process Skills and Attitudes*. A Ph.D. Thesis of the University of Benin, Nigeria. 87-89.
- Oloruntagbe, K.O., & Omoifo, C. N. (2012). Association Process Skills in STEM: Going Beyond Paper and Pencil Test. *Educational Thought*, 1, 25-36.
- Sallau, M. O. (2011) '*Options in Sustaining Mathematics as the Language of Science and Technology in the 21<sup>st</sup> Century*' in Obodo, G.C. (Ed). Proceedings of the September 2011 Conference.

**Principals' Supervision Strategies and Management of Instruction in Public Secondary Schools in Edo Central Senatorial District of Nigeria**

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**ABSTRACT**

This study investigated principals' supervision strategies and management of instruction in public secondary schools in Edo Central Senatorial District, Edo State, Nigeria. With (3) research questions, the tested hypothesis at 0.05 level of significance. The study adopted ex-post facto design to study a population of one hundred and thirty-eight (138) Junior and Senior Public Secondary School principals from five Local Government Areas in Edo State. The simple random sampling technique was adopted in selecting 69 principals from the 138 junior and senior public secondary school principals. A proportion of 40% of principals were selected from five (5) Local Government Areas and 371 teachers from 889 teacher. A questionnaire titled Principals' Supervision Strategies and Effective Management Questionnaire' (PSUSEMAQ) and Principals' And Teachers' Supervision Strategies and Effective Management Questionnaire (PTSUSEMAQ) were the two instruments used to gather data for the study. With face and content validity, the test-retest reliability technique was adopted and this was done by administering 40 copies of the instruments to 40 respondents in Edo South Senatorial District, Nigeria and the score obtained were correlated using the Pearson Product Moment Correlation Coefficient (PPMCC) and derived coefficient of reliability value of 0.65 and 0.71 were obtained. With this high coefficient values, the instruments were considered reliable. The data obtained were analyzed using PPMC Statistics. Findings revealed that there was a significant positive relationship between demonstration supervision strategy, micro teaching, interschool visitation and effective management of instruction in public secondary schools in Edo Central Senatorial District, Edo State, Nigeria. Based on the findings, the study recommended that principals should continue to employ demonstration supervision strategy, micro teaching and interschool visitation.

**Keywords:** *Principals' Supervision Strategies, Effective Management of Schools, Principals' Demonstration Strategy of Supervision, Micro Teaching Supervision Strategy, Interschool Visitation Supervision Strategy*

**Introduction**

It is alleged that the day to day administration of secondary schools in

Nigeria rests on the shoulders of the principal who is the leader, controller and

custodian of both academic and extra-curricular activities of the school. The principal has also been described as the chief executive of the school, who provides instructional leadership by coordinating curricular, co-curricular programmes and also responsible for the general administration of the secondary school. As instructional leaders, principals are responsible for the supervision, monitoring, assessment, evaluation and dissemination of current information on academic and modern teaching techniques to teachers leading to effective teaching and learning. As school managers, principals are expected to effectively guide and control administrative process for the purpose of achieving predetermined secondary education objectives as enshrined in the National Policy on Education (FRN, 2013). It is believed that the principal is saddled with numerous responsibilities in the day-to-day administration of secondary schools among which is supervision.

Supervision can be regarded as one of the most influential factors in ensuring the quality of education, as it plays an important role in the improvement of teaching and learning by taking on the responsibility of professionally developing teachers and enhancing the academic achievement of students. For the supervision process to be more effective,

supervisors must use appropriate strategies in the supervision of teachers in order to improve their teaching performance (Saani, 2013). It is believed that the principal as a supervisor assumes many roles in the educational process, the most important one being that of an informative and critical consultant with the aim of improving educational outputs, helping to fulfill teachers' needs, and overcoming the various problems associated with classroom practices. Among the many objectives of supervision in schools, the primary ones are improving the overall performance of the school and enhancing the quality of the educational process (Tesema, 2014). Flowing from the above, it is to be noted that there are various strategies of supervision which the principals could adopt if effective management of schools must be achieved. According to Iloh, Nwaham, Igbinedion and Ogor (2016) there are different supervision strategies employed by school principals and these are classroom visitation/observation, inter/intra school visitation, team teaching practices, workshops, demonstration, clinical supervision and micro-teaching, among others. This is also in line with Ani (2007) who outlined supervision techniques as follows: classroom visitation, micro-teaching, research-approach, workshop,



demonstration technique and tape recording. The supervision strategies that would be considered in this study are demonstration strategy, micro teaching strategy and interschool visitation strategy. Principals' demonstration technique is another supervision strategy for effective management of secondary schools. It involves teaching and learning activities in which the principal who is skilled and experienced illustrate educational materials, procedures or strategies in order to improve instruction. During demonstration, principals clearly explain the subject matter using vivid examples. Ani (2007) pointed out that demonstration technique of supervision gives teachers the opportunity of asking probing questions that can lead to discovering new methods and ideas; and irregular supervision of teachers could adversely affect their job performance. Mbipom (2006) cited in Sule (2013) opined that demonstration is believed to be useful in improving competency and effectiveness in the school system when involved; innovation such as the use of new equipment or a new textbook or module and a new orthography. Such a demonstration offers viewers the skills required in carrying out their roles and responsibilities.

One other supervision strategy which is believed to have influence on principals'

effective management of schools is micro-teaching. Micro-teaching is described as a teaching skill situation which is scaled down in terms of time, class size and teaching complexity to allow the teacher to focus on a selected teaching strategy. Microteaching is designed to develop new skills and refine old ones. According to Egwunyenga (2006), microteaching process is believed to allow the teacher together with the supervisor and the students to view the replay of the videotape of the lesson and evaluate the person and discuss aspects of the lesson. The supervisor points out the strengths and weaknesses and skillfully changing those weaknesses into strengths through constructive dialogue with the teacher being supervised. Based on the knowledge of the immediate feed-back and suggestions for improvement, the teacher re-teaches the lesson to the same group or a different group of students.

Interschool visitation is another supervision strategy which is believed to have positive relationship with principals' effective management of schools. This strategy of supervision gives opportunity to various categories of teachers to visit other teachers in the classroom to observe their manner of delivery of instruction, thus, assisting the beginner teachers to learn how to organize and manage students in the classroom and

to plan effectively. On this note, Ogunu (2000) asserted that inter-school visitation help teachers to learn new methods and be aware of the importance and use of new material, give opportunity to a beginning teacher to see a supervisor or experienced teacher in action, enlighten the teacher on how to use new teaching aids or equipment effectively in the classroom and also provide the experienced or master-teacher the opportunity to share ideas with other experienced teachers and thus enrich their teaching experience. The above three strategies are geared towards effective supervisory disposition of principals in ensuring the more effective performance in school management.

The management of instructions is a process of leading the school towards development through not only the optimum use of the human resources, supervision of activities, physical sources, principles and concepts that help in achieving the objectives of the school but, also, the proper coordination and adjustment among all of them (Bhatta, Raghavendra, Kumar and Clarice, 2012). Allen (2015) noted that the purpose of management of instructions is to enable members of staff of the school and the students to work together with the head-teacher of the school as a team in order to achieve the desired goals and objectives of the school. The school manager is the

person responsible for coordinating the activities of the school, using resources at his disposal in such a way that the school's objectives are achieved.

### **Statement of the Problem**

There have been series of reports on the level of poor management of instructions in public education most especially at the secondary school level of education in Nigeria and of which public secondary schools in Edo Central Senatorial District are not exempted. This poor or ineffective management of instructions in schools is believed to have been affected by ineffective supervision of school activities by the school principals. In this regard, Onuma (2016) lamented that secondary school principals seem to spend more of their official time only on managerial functions to the detriment of effective supervision process (and programmes) of the school. Personal observation of the researcher showed that over the years, public secondary schools in Edo Central Senatorial District, Nigeria have been experiencing ineffective management of instructions and this is observed to be responsible for the poor performance of students in examination as well as teachers nonchalant attitude towards their job. It has been observed that principals lack of effective supervision strategies could have negative influence on teachers' especially

in poor knowledge of subject matters, poor presentation of lesson, ineffective classroom organization and control, low participation in the school curricular activities, not regular and punctual in the school, lack of maintenance of good interpersonal relationship with subordinates and superiors, indiscipline and compliance to teachers professional code of conduct.

It is worrisome to all education stakeholders and the researcher inclusive how effective school management can be attained if these observations stated above are not corrected through effective classroom teaching. The strategies that can assure effective supervision include classroom visitation/observation, workshop, demonstration, microteaching, interschool visitation and clinical supervision. These have affected teachers' job performance in teaching which has negatively affected school management. In this regard, if principals do not use the right strategy in ensuring effectiveness in the management of their various schools, one begin to wonder how then could these schools effectively managed to attain the school set goals and objectives. In the same vein, all the previous studies at the disposal of the researcher, none of the studies incorporated all the strategies of this study. It is believed that there is a gap in

knowledge which this study seeks to fill. It is in the light of this unpleasant situation in school management that this study is set out to determine whether principals' supervision strategies have a relationship with the effective management of instructions in public secondary schools in Edo Central Senatorial District, Nigeria.

### **Research Questions**

The following research questions were raised to guide the study:

- a. What is the relationship between demonstration supervision strategy and management of instruction in public secondary schools in Edo Central Senatorial District, Edo State, Nigeria?
- b. What is the relationship between micro teaching supervision strategy and - management of instruction in public secondary schools in Edo Central Senatorial District, Edo State, Nigeria?
- c. What is the relationship between interschool visitation supervision strategy and management of instruction in public secondary schools in Edo Central Senatorial District, Edo State, Nigeria?

### **Hypotheses**

The following hypotheses were tested in this study:

- a. There is no significant relationship between demonstration supervision strategy and the management of instruction in public secondary schools in Edo Central Senatorial District, Edo State, Nigeria.
- b. There is no significant relationship between micro teaching supervision strategy and the management of instruction in public secondary schools in Edo Central Senatorial District, Edo State, Nigeria.
- c. There is no significant relationship between interschool visitation supervision strategy and the management of instruction in public secondary schools in Edo Central Senatorial District, Edo State, Nigeria.

### **Review of Related Literature**

Theoretical Framework: This study is anchored on Fred Edward Fiedler 1964 Contingency theory of Leadership. The contingency theory of [Fred Fiedler](#) is concerned with the effectiveness of a leader in an organization and it postulated that there is no best way to organize a corporation, to lead an institution or to [make decisions](#). Instead, the optimal course of action is contingent (dependent) upon the internal and external situation. Therefore, a contingent leader applies his/her own style of [leadership](#) to the right situation, they leaders are flexible in choosing and

adapting to succinct strategies to suit change in situation at a particular period in time in the running of the organization.

Additionally, the theory assumed that effective leadership depends not only on the style of leading but on the control over a situation and they require clear task with clear goals and procedures. The relevance of this theory is based on the assumption that the leader require strategies of school supervision in the management of school. Based on this, it is to be noted that principals as school administrators or teachers are not expected to use only a particular supervision strategy in every situation but different approaches to facilitates and encourage effective classroom teaching and learning.

### **Conceptual Clarification**

**Concept of Supervision:** In a lay term, “vision” implies overseeing. The word “supervision” can be read as overseeing, looking over person’s shoulders to check on them and also ‘super’ in the sense of outstanding or special, helping someone to extent his professional skills and understanding. Supervision is therefore described as an interaction between at least two persons for the improvement of activity.

It is also described as a formative, supportive and developmental process designed to improve and process of guiding

encouraging, directing and motivating workers so as to improve their output (Agih, 2015).

In a general term, supervision is defined as an administrative process through which the leader ensures that his subordinates are all contributing towards effective learning process. Hammock and Owing in Nwaogu cited in Allen (2015) noted that supervision focuses on the school of learning programmes, the grouping of pupils, method of evaluating, reporting and determining pupil's progress, the content of the curriculum, the teaching methods, the philosophy and practicing of discipline, the time schedule, place and procedure of staff meetings, procedures used in parents conference, the study and use of the community resources.

Omoike (2013) defined educational supervision as a managerial function which involves the elements of directing, controlling and coordinating. According to him, educational supervision is a multi-facet entity which is both instruction and personnel oriented. Its heart is the improving of teachers, classroom teaching and learning. Omoike (2013) acknowledged that supervision is primarily a process of evaluating the teacher to determine and possibly enhance the professional effectiveness of teaching of the teaching staff. This evaluation is done

in four areas which include; the progress of pupils/learners towards the standard established by government for various levels of education system, the relevance of instructional strategies and techniques adopted and utilized by the teacher, the extent of adherence by the teacher to curricular objectives and the extent of establishment and maintenance of a suitable learning environment.

### **Concept of Effective Management of Instructions**

The management comprises planning, organizing, staffing, leading or directing, and controlling an organization or initiative to accomplish a goal. Resourcing encompasses the deployment and manipulation of human, financial resources, technological resources, and natural resources. According to Karam (2016), management in school settings entails creating formal structures and an establishment based on a mission (or goals), objectives, targets, functions and tasks Gabola(2014) viewed management as a process of planning, organizing, directing and controlling the activities of an institution by utilizing human and material resources so as to effectively and efficiently accomplish functions of teaching, extension work and research. Alos, Waiku (2010) stated that effective management in educational institutions of learning is that

function of the school administrator (principal) which is concerned with direction and control of the various activities to attain the school objectives.

Cicco (1985) asserted that school management requires managers who succeed in carrying out the organizational goals of their schools, utilizing the following leadership skills: planning(deciding how to accomplish the organization's goals); organizing (doing the necessary preparation); staffing (filling positions with the right people); directing (motivating staff so that goals are achieved); controlling (guiding the organization in the proper direction);and decision making (which underlies everything the manager accomplishes).

### **Supervision Strategies used by Principals for Effective Management of Instructions**

According to Oki (2007), strategies of supervision are ways of doing things. In supervision at the secondary school level, strategies of supervision of instruction include the strategies used in supervision of teaching and learning for greater output for the fulfillment of educational goals. Chinyere (1997) identified strategies of supervision of instruction as observation, classroom visitation, and demonstration strategy, conference with teachers, inter-school visitation and evaluation strategy. In

the same vein, Iloh, Nwaham, Igbiniedion and Ogor (2016) listed the variety of supervision strategies to include: classroom visitation/ observation, inter/intra school, team teaching practices, workshops, demonstration, clinical supervision and micro-teaching among others. This is also in line with Ani (2007) who outlined supervision strategies as follow: classroom visitation, micro-teaching, research-approach, workshop, demonstration technique and tape recording.

According to Kajo (2011), there are several instructional supervisory strategies which include classroom visitation/ observation, inter/intraschool, team teaching practices, workshops, demonstration, clinical supervision and micro-teaching among others. In the same vein, Kolade and Ogbomida (2013) outlined supervision techniques as follow: classroom visitation, micro-teaching, research-approach, workshop, demon-stration technique and tape recording. The supervisory techniques outlined by the above scholars adopted in this study are: classroom visitation/ observation, workshop and demonstration. Classroom visitation or observation is a supervisory technique in which the principals visit the classroom and observe the teachers' delivery of the instruction taking account of their mastery of the subject matter, application of teaching

strategies and aids, classroom management and organization among others.

Sule (2013) investigated the influence of the principal's supervisory demonstration strategy on teachers' job performance in Nigeria secondary schools. Respondents involved six hundred and sixty (660) teachers and three thousand, three hundred senior secondary school students which were randomly selected from two hundred and thirty two (232) secondary schools in Cross River State. The result of analysis utilizing one-way analysis of variance (ANOVA) indicated that principal's demonstration strategy did not significantly influence teachers' job performance. The study also showed that principals used robust supervisory strategies which may include classroom visitation and inspection, demonstration, workshop strategy, inspection of teachers' record keeping, and administrative workshop strategy.

Eze (2016) in his study discovered that the principals as supervisors found little or no time to practice teaching demonstration and providing other supervisory services for instructional improvement. In a survey study of perception and actual performance of instructional supervision by the principals of selected secondary schools in Kaduna State of Nigeria, Effiong (2010) concluded that the principals had a high and positive perception of instructional

supervision but that their performance of instructional supervision was not above average.

Ayobo (2016) examined the effects of demonstration supervision technique on teacher effectiveness in secondary schools in Nigeria. The study adopted a comparative survey research design. All the 2,156 government owned secondary school teachers in Etsako West Local Government Area of Edo State constituted the population of the study. A sample of 505 teachers was selected through proportionate stratified random sampling technique. A researcher-developed questionnaire duly validated and whose reliability index is 0.65 was used for data collection. Mean and PPMC were used to analyse the data collected. The result of the study indicates that both internal and external supervision of instruction have positive effect on teacher effectiveness in secondary schools. The study also showed that principals use of demonstration technique significantly influenced teacher effectiveness in secondary schools in Nigeria.

Otse (2017) investigated principals' demonstration supervisory technique as correlates of teachers' job performance in secondary schools in Edo State, Nigeria. The study adopted a correlation research design. The study population comprised 3,351 secondary school teachers in Edo

State. Stratified proportionate sampling technique was used to sample 111 respondents from the population of the study. The findings of the study revealed that there is a high positive correlation between demonstration technique and teachers' job performance in secondary schools in Edo State. It was also revealed that the use of demonstration technique had a significant relationship between principals' demonstration techniques and teachers' job performance in secondary schools in Edo State.

### Methodology

**Research Design:** The study adopted survey research. This design allows examining the desired characteristic of a given population systematically. In addition, the design allows gathering of data about a target population from a sample and generalizing the findings obtained from the analysis of the sample to the entire population and it involves the use of questionnaire to determine the responses

and perception of the principals, teachers and students. This study was also an ex-post facto design.

**Population of the Study:** The population of this study consisted of all the one hundred and thirty-eight (138) Junior and Senior Public Secondary School principals in the five Local Government Areas (LGAs) that make up Edo Central Senatorial District of Edo State.

**Sample and Sampling Technique:** The simple random sampling technique was adopted in selecting 69 principals from the 138 junior and senior public secondary school principals in Edo Central Senatorial District. In achieving this, a proportion of 40% was used in selecting the number of principals in each of the five (5) Local Government Areas and 371 teachers from a total population of 889 teachers were selected and this constituted 41.7% of the total number of teachers in the district. The selection of principals and teachers is shown in the table below:

**Table 1: Population and Sample of the Respondents**

Name Local Government Area	No of Principals	Sample of Principals (40%)	No of Teachers	Sample of Teachers (41.7%)
Igueben	20	10	115	48
Esan West	32	16	271	113
Esan South East	34	17	153	64
Esan North East	24	12	202	84
Esan Central	28	14	148	62
<b>Total</b>	<b>138</b>	<b>69</b>	<b>889</b>	<b>371</b>

**Source:** Department of Planning, Research and Statistics, Post Primary Education Board, Benin City, Edo State (2020). Sample size drawn by the Researcher.



**Instrument of the Study:** Two instruments were used in the process of data collection. The instruments are questionnaire titled Principals' Supervision Strategies and Effective Management Questionnaire (PSUSEMAQ) and Principals' and Teachers' Supervision Strategies and Effective Management Questionnaire. The instrument was divided into four sections, Section A, Section B, Section C, and Section D. In Section A, the instrument focused on the respondents' location of school and name of school. Section B of the instrument focused on five items drawn on the relationship between demonstration and effective management of public secondary schools, Section C focused on the relationship between micro teaching and effective management of public secondary schools, Section D focused on the relationship between interschool-visitation and Effective Management of Secondary Schools. The respondents to this instrument responded to these items on a four-point likert scale

#### **Validity of Instrument**

The face and content validity of the instruments was ensured by the researcher under the guidance of two Lecturers in the Department of Educational Foundations and Management of Ambrose Alli University, Ekpoma. A draft of the instruments was given to them to read through and make corrections. Their corrections and

suggestions were integrated into the final drafts of the instruments. This process was undertaken to ensure that items contained in the instrument are precise, unambiguous and relevant. Based on their observations and corrections, modifications were made in the final draft before it was administered to the sampled respondents.

#### **Reliability of Instrument**

To determine the reliability of the instrument, a pretesting of the instruments was carried out by the researcher. The test-retest reliability technique was adopted. This was done by administering 40 copies of the instruments to 40 respondents (principals and teachers) in Edo South Senatorial District, Nigeria which was not included in the study area. After two weeks, the same instruments were re-administered to the same principals and teachers. The sets of score obtained were correlated using the Pearson Product Moment Correlation Coefficient (PPMCC) and derived coefficient of reliability value of 0.65 and 0.71 were obtained. With this high coefficient values, the instruments were considered reliable.

#### **Method of Data Analysis**

The data obtained were analyzed using Pearson Product Moment Correlation Statistics. Hypotheses 1, 2 and 3 were tested using the Pearson product Moment Correlation Coefficient at a significance of 0.05. provide justification

**Results**

**Testing of Hypothesis**

**Hypothesis 1:** There is no significant relationship between demonstration super

vision strategy and effective management of instruction in public secondary schools in Edo Central Senatorial District, Edo State, Nigeria.

**Table 2: Correlation between demonstration and effective management of instruction in public secondary schools**

Variable	N	X	SD	Df	Pearson r-coefficient	P-value	Remark
Demonstration Supervision Technique of Management of Instruction	365	3.00	.721	363	.512	.002	Rejected

**\*\*Coefficient is significant at the 0.05 level (2-tailed)**

The Table 2 showed that the mean ( $\bar{X}$ ) and standard deviation (S.D) of the respondents (N=365) were 3.00 and .721 for demonstration supervision technique and 3.60 and .551 for effective management of instruction while the r-coefficient of .512 was statistically significant ( $p < 0.05$ ). Therefore, the null hypothesis was rejected. This indicated that there were significant relationship between demonstration and effective management of instruction in public

secondary schools in Edo Central Senatorial District, Edo State, Nigeria. This result indicated that the effective use of demonstration supervision technique could bring about enhanced effective management of instruction in public secondary schools in Edo Central Senatorial District, Nigeria.

**Hypothesis 2:** There is no significant relationship between micro teaching and effective management of instruction in public secondary schools in Edo Central Senatorial District, Edo State, Nigeria.

**Table 3: Correlation between micro teaching and effective management of instruction in public secondary schools**

Variable	N	X	SD	Df	Pearson r-coefficient	P-Value	Remark
Micro-Teaching Supervision Technique of Management of Instruction	365	3.20	.155	363	.840	.037	Rejected

**\*\*Coefficient is significant at the 0.05 level (2-tailed)**

The table 3 showed that the mean ( $\bar{X}$ ) and standard deviation (S.D) of the respondents

(N=365) were 3.20 and .155 for micro-teaching supervision technique and 2.20 and .343 for effective management of instruction

while the r-coefficient of .840 was statistically significant ( $p < 0.05$ ). Therefore, the null hypothesis was rejected. This indicated that there was a significant relationship between micro teaching and management of instruction in public secondary schools in Edo Central Senatorial District, Edo State, Nigeria. This therefore showed that the consistent use of one variable like micro-teaching supervision technique

could result to high level of effectiveness in the management of instructions in public secondary schools in Edo Central Senatorial District, Nigeria.

**Hypothesis 3:** There is no significant relationship between interschool visitation and management of instruction in public secondary schools in Edo Central Senatorial District, Edo State, Nigeria.

**Table 4: Correlation between interschool visitation and management of instruction in public secondary schools in Edo Central Senatorial District, Edo State, Nigeria**

Variable	N	X	SD	Df	r-cal	P-Value	Remark
Interschool Visitation		3.11	.341				
Effective of Instruction	365	3.31	.442	363	.632	.005	<b>Rejected</b>

**\*\*Coefficient is significant at the 0.05 level (2-tailed)**

The table 4 showed that the mean ( $\bar{X}$ ) and standard deviation (S.D) of the respondents (N=365) were 3.11 and .341 for interschool visitation supervision technique and 3.31 and .442 for effective management of instruction while the r-coefficient of 6.32 was statistically significant ( $p < 0.05$ ). Therefore, the null hypothesis was rejected. This indicated that there was a significant relationship between interschool visitation and effective management of instruction in public secondary schools in Edo Central Senatorial District, Edo State, Nigeria. This therefore indicated that the more the principals used the interschool visitation supervision technique, the higher the

effectiveness in the management of instructions in schools.

**Discussion**

The finding of this study revealed that there was a significant relationship between demonstration and effective management of instruction in public secondary schools in Edo Central Senatorial District, Edo State, Nigeria. This finding might have been influenced by the fact that this technique enhances the principals' presentation of a prearranged series of events as it stimulates the principal's experience in the management of schools. This finding supports the findings of Ayobo (2016) that principals use of demonstration technique significantly

influenced teacher effectiveness in secondary schools in Nigeria. The finding of this study is in agreement with the findings of Otse (2017) that principals' use of demonstration technique had a significant relationship between principals' demonstration techniques and teachers' job performance in secondary schools in Edo State. The finding of this study is also in line with the findings of Okorie and Nwiyi (2014) that the principals use delegation of supervisory function strategy, demonstration strategy and workshop strategy and all these strategies enhances teacher's effectiveness in secondary schools. The finding of this study supports the findings of Ubokobong (2017) that a moderate positive relationship exists between principals demonstration instructional supervision practices and teachers' job performance and the study further showed that the use of demonstration technique moderately correlated teachers' job performance in Enugu State. The finding of this study supports the findings of Kaegon and David-West (2017) that there was positive relationship between principals' instructional supervisory techniques and workshops and teachers' service delivery in public secondary schools. The finding of this study is in line with the findings of Sanori (2011) that teacher's performance in secondary schools is significantly influenced by the principals used of classroom,

demonstration and workshop supervision techniques which validate the importance of discipline, record keeping and teaching aids. This finding is in agreement with the findings of Uduak and Eze (2015) that a significant relationship exist between principals' supervisory techniques in terms of classroom visitation, workshop techniques and teachers' job performance.

This study found out that there was a significant relationship between micro teaching and effective management of instruction in public secondary schools in Edo Central Senatorial District, Edo State, Nigeria. This finding might have been influenced by the fact that this technique makes it possible for the principals on specific tool in the practice of effective school management. This technique could enhance the principals' acquisition of new skills of school management as well as redefining the old ones. The finding of this study supports the findings of Mohammed, Luka, Emmanuel, Ali, Abubakar and Waziri (2019) that principals' microteaching supervision technique predicted the management of public secondary schools in Yobe State. The finding of this study is in agreement with the findings of Ikabokhai (2014) that principals' supervisory strategy and management of public secondary schools were found to have a relationship and the principals' microteaching supervisory

strategy is moderate and it has a significant relationship with the management of public secondary schools in Edo North Senatorial District. The finding of this study is in consonance with the findings of Agbozuabu (2015) that public secondary school principals used different supervision techniques and there was a significant positive relationship between microteaching supervision technique and effectiveness of secondary schools in Edo State. The finding of this study is in line with the findings of Uzaefa and Sahnun (2018) that microteaching supervision technique was very effective in enhancing school development and management. The finding of the study supports the findings of Osuala and Nzeako (2017) that the microteaching interventions improved the teaching skills significantly with significant differences between the three intervention groups. The finding of this study supports the findings of Irabor and Ekhayemhe (2013) that teacher's microteaching supervision technique has positive effects on the effectiveness of principals management of schools in Esan Central Local Government Area of Edo State. This study showed that there was a significant relationship between interschool visitation and effective management of instruction in public secondary schools in Edo Central Senatorial District, Edo State, Nigeria. This finding could have been

influenced by the fact that this technique of supervision could enable the principals to meet with teachers in action, enlighten the teacher on how to use new teaching aids or equipment effectively in the classroom and also provide the experienced or master-teacher the opportunity to share ideas with teachers and thus enrich their teaching experience as this is expected to guide the principals in improving their management of instructions. The finding of this study supports the findings of Aja-Okorie, Agwu and Okoli (2019) that there was a strong correlation between school interschool visitation strategy and school development in public secondary schools in Abakaliki Education Zone. The finding of this study supports the findings of Ezenwanyi (2011) that the use of interschool visitation among others showed a significant correlation with improved school management and students' academic performance in Enugu State Secondary Schools.

### **Conclusion**

Based on the findings, it was concluded that demonstration, micro-teaching and interschool visitation strategies are mostly used by principals for effective management of instruction in public secondary schools in Edo Central Senatorial District, Edo State, Nigeria. The study also concluded that there was a significant positive relationship between demonstration, micro teaching,

interschool visitation and effective management of instruction in public

**Recommendations**

Based on the findings, the following recommendations were made:

- a. The principals should continue to employ demonstration, micro teaching and interschool visitation strategies for effective management of instructions.
- b. There is the need for principals to sustain the use of demonstration technique since it has positive effect on the management of instructions in secondary schools.

secondary schools in Edo Central Senatorial District, Edo State, Nigeria.

- c. Principals of secondary schools should continue to encourage and make adequate provision for micro-teaching practicum as a measure of improving effective management of instruction.
- d. The principals should map out modalities for enhancement of effective interschool visitation technique of supervision of instructions as this will help improve on its current state.

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## REFERENCES

- Agih, A. A. (2015). Effective school management and supervision: imperative for quality education service delivery. *An International Multidisciplinary Journal, Ethiopia*, 9(3), 62-74
- Aja-Okorie, U., Agwu, L. O. and Okoli, J. U. (2019). Analysis of internal supervisory functions of principals in public secondary in Abakaliki Education Zone of Ebonyi State Nigeria. *Journal of Research & Method in Education*, 9(5), 01-07
- Allen, A. A. (2015). Effective school management and supervision: imperative for quality education service delivery. *An International Multidisciplinary Journal, Ethiopia*, 9(3), 62-74
- Ambili, R. (2013). Microteaching, an efficient technique for learning effective teaching. *Journal of Research Medical Science*, 18(2), 158–163.
- Anagbogu, E. (2010). *Clinical supervisory skills by principals in Enugu East Local Government Area* (Unpublished M.Ed. Thesis). University of Nigeria, Nnusaaka.
- Ani, C. I. (2007). *Dynamics of school supervision*. Enugu: Cheston Agency Ltd.
- Ayobo, A. O. (2016). The effects of demonstration supervision technique on teacher effectiveness in secondary schools in Nigeria. *Journal of Research in Education*, 56(7), 82-91.
- Bhatta, G. H. S., Raghavendra, T. K., Kumar, C. N. P. & Clarice, M. A. C. (2012). *Planning, organization & management of school/classroom processes: A position paper*. Bengaluru: Directorate of State Education, Research and Training
- Campos-Sánchez, A., Sánchez-Quevedo, M., Crespo-Ferrer, P., García-López, J., & Alaminos, M. (2013). Microteaching as a self-learning tool: Students' perceptions in the preparation and exposition of a micro-lesson in a tissue engineering course. Retrieved on 23/08/2020 from <http://www.jotse.org/index.php/jotse/article/view/71/96>
- Chinyere, N. (1997) Supervision for Quality Output. In Ndu, A. N. Ocho, L.O. & Okeke, B.S. (eds). *Dynamics of Educational Administration and Management*. Awka: Meks Publisher.
- Cicco, J. M. (1985). What is effective school management. *Paper presented at the Annual Meeting of the National Association of Secondary School Principals, 69th, New Orleans, LA.*
- DDCE (2013). Management concepts and organizational behavior. Retrieved on the 24/09/2020 from [https://ddceutkal.ac.in/Syllabus/MA\\_Education/Paper\\_8.pdf](https://ddceutkal.ac.in/Syllabus/MA_Education/Paper_8.pdf)
- Egwunyenga, E.J. (2006). *Essentials of school administration*. Benin City: Justice-Jeco Publishers.
- Enaigbe, A. P. (2009). Strategies for improving supervisory skills for effective primary education in Nigeria. *Edo Journal of Counselling*, 2(2), 235-244
- Eze, U. E. (2016). Falling standard in education. *Newswatch magazine*, January 18, 10-17.
- Ezenwanyi, S. D. (2011). Strategies for effective supervision as a correlate for improved school management and students' academic performance in Enugu State Secondary Schools. *Journal of Education and Management*, 2(3), 43-52
- Ezeugwu, A. G. (2010). The usage of interschool supervision strategy in

- instructional supervision by secondary schools Principals in Ebonyi and Enugu states. *International Journal of Education and Science*, 12(10), 342-351
- Federal Republic of Nigeria (2013). *National policy on education* (Revised). Lagos: NERDC
- Fernando, D. M. Hulse-Killacky, R.D. (2005). *The relationship of supervisory styles to satisfaction with supervision and self-efficacy of master's level counseling students* (Unpublished doctoral dissertation). University of New Orleans, Louisiana, United States.
- Fiedler, F.E. (1958) *Leader Attitudes and Group Effectiveness*, Urbana, IL: University of Illinois Press.
- Gabola, S. (2014). *A guide to effective school management*. Ibadan: Valuta Educational Publishers.
- Hammock, T. and Robert, C. (2005). *Supervising instruction in secondary schools*. New York: McGraw-Hill Company Ltd.
- Igwe, S. O. (2001). Supervision, evaluation and quality control in education. In N. A. Nigeria, E.J. Ehiametalor, M. A. Ogunu and M. Nwadiani (Eds). *Current Issue in educational management in Nigeria*. *Nigeria Association for Educational Administration and Planning*, 3(9), 33-39.
- Igwe, S.O. (2001) Supervision, Evaluation and quality control in Education in N. A. Nwagwu (ed). *Current Issues in educational Management in Nigeria*. Benin City: Ambik Press Ltd.
- Ikabokhai, C. O. (2014). Principals' supervision strategy of supervision as correlate management of public secondary schools in Edo North Senatorial District. *Journal of Education*, 2(1), 41-49.
- Iloh, C.A., Nwaham, C.O., Igbinedion, J.O.N. & Ogogor, T. N. (2016). *Fundamentals of educational administration and supervision*. Agbor: Progress P.E. Printing Associates.
- Iloh. C.A & Nwaham, C.O., Igbinedion, J.O.N. & Ogogor, T. N. (2016). *Fundamentals of educational administration and supervision*. Agbor: Progress P.E. Printing Associates.
- Kaegon, L. E. S. & David-West, T. M. (2017). Principals' managerial techniques as correlates of teachers' service delivery in public secondary schools in Rivers State. *International Journal of Scientific Research in Education*, 10(3), 343-351.
- Kajo. D. T. (2011). *Administrative constraints on teacher effectiveness in government secondary schools in Benue State, Nigeria* (Unpublished Phd thesis). University of Nigeria, Nsukka.
- Karam, P. (2016). Management concepts and organizational behavior. Retrieved on 29/09/2020 from <http://www.ddegjust.ac.in/studymaterial/mcom/mc-101.pdf>
- Kilminster S. M. (2007). Effective supervision in clinical practice settings: A literature review. *Medical Education*, 34, 827-840.
- Kolade, B. O. & Ogbomida, H. A. (2013) Principals' instructional supervisory role performance and teachers' motivation in Ekiti Central Senatorial District of Ekiti State, Nigeria. *Journal of Educational and Social Research* 3, (2), 295-301
- Mbipom, D. L. A. (2011). *Proposal and thesis writing*. Nairobi: Pauline Publications.
- Mohammed, G., Luka, Y. B., Emmanuel, B., Ali, M. A., Abubakar, A. & Waziri,



- G. E. J. (2019). Principals' Supervisory Technique as Predictor of Teachers' Motivation in Senior Secondary Schools in Yobe State, Nigeria. *International Journal of Research and Innovation in Social Science (IJRISS)*, 3(9), 430-434
- Murana, K, A. (2011). Principals' Supervisory role and Teachers' Motivation in Edo State. *Journal of Social Research*, 2(2), 295-302.
- Ngala, F. B. & Odebero, S. O. (2010) Teachers' perception of staff development programmes as it to teachers effectiveness: A study of rural primary schools in Kenya. *Educational Research and Review* 5(1), 1-9.
- Nnabuo, P. O. M. (1996). *Supervision and inspection: A humanistic approach*. Port Harcourt: Bengray Publications.
- Nwokefor, C. E. (2012). *Appraisal of supervision of instruction in secondary schools in Okigwe Education Zone of Imo State* (Unpublished master's thesis). University of Nigeria, Nsukka
- Obilade, S. O. (2013). *Introduction to education administration*. Ibadan: Odusote Books Ltd.
- Oduka, A. B. (2012). Changing school culture through staff decisions development. *Association for Supervision and Curriculum Development*, 3(1), 10-22.
- Ogunu, M. (2000). *Introduction to educational management*. Benin City: Mabogun publishers
- Oki, G. A. (2014). An empirical assessment of impact of demographic factors on job satisfaction amongst Saudi Arabia bank employees. *MAGNTR Research Report*, 2(4), 92-99.
- Okorie, M.N. & Nwiyi, D. S (2014). The principal's supervisory strategies and teacher's effectiveness in secondary schools in Akwa Ibom School. *Journal of Science and Research*, 5(1), 59-66
- Olaniyan, Z. T. (2011). Instructional improvement: Principle and processes. *Journal of Educational Studies*, 3(4), 58-71
- Omoike, D. (2013). Introduction to educational supervision. In E. O. Omoregie and D. Omoike (eds). *Organization of education in Nigeria*. Benin City: Independent Concept.
- Onumonu, N. (2013). Principals' instructional supervision techniques as determinants of school management and effectiveness in Abakaliki Education, Ebonyi State. *British Journal of Education*, 4(3), 40-52.
- Osakwe, N. R. (2013). Relationship between principals' supervisory strategies and teachers' instructional performance in Delta North senatorial District, Nigeria. *Pakistan Journal of Social Sciences*, 7(6), 437-440.
- Osakwe, R. N. (2013). Supervisory functions of secondary school principals and factors competing with these functions. *Journal of Research & Method in Education*, 1(3), 13-19
- Osasenaga, B. C. (2019). The relationship between principals' supervision and teachers' job performance in public secondary schools in Esan West Local Government Area of Edo State (Unpublished B.Sc. Project). Ambrose Alli University, Ekpoma
- Otse, S. H. (2017) Principals' demonstration supervisory technique as correlates of teachers' job performance in secondary schools in Edo State, Nigeria. *International Journal of Education Policy and Leadership*, 2(7), 11-21
- Otsu, H. A. (2013). Supervisory skills by principals in Enugu East Local

- Government Area. *Journal of Educational Studies*, 3(2), 229-232.
- Peter, C. B. (2011). *A guide to academic writing*. Eldoret, Kenya: Zaft Chancery.
- Ray, S. & Hyl, N. (2010). *Emerging pattern of supervision: Human perspectives*, New York: McGraw-Hill Book Company.
- Saani, A.J. (2013). Influence of compensation and supervision on private basic school teachers work performance in Ashaiman Municipality. *International Journal of Business and Social Science*, 4(17), 64-69.
- Sanori, T.A. (2011). The empirical assessment of principals' supervision capacity as dependent outcome of teachers' performance in secondary schools. *European Journal of Educational Studies*, 2(3) 15-24
- Suchon, D. A. (2000). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco: Jossey-Bass.
- Sule, M. A. (2013). The influence of the principals' supervisory demonstration strategy on teachers' job performance. *Journal of Humanities and Social Science*, 11(1), 39-44.
- Sule, M. A., Arop, F. O. and Alade, F. O. (2012). Principal's classroom visitation and inspection, and effective school management in Akwa-Ibom State, Nigeria. *Research on Humanities and Social Sciences*, 2(11), 106-111
- Tasihi, H. I. (2014). The urban and rural school principalship: Challenges and prospects. *Journal of Research in Education*, 23(5) 1-12
- Tesema, J. A. (2014). *Educational management: Theory and practice*. Nairobi: University of Nairobi Press.
- Uduak, D & Eze, G. B. (2015). Principals' supervisory techniques and teachers' job performance in secondary schools in Ikom Education Zone, Cross River State, Nigeria. *British Journal of Education*, 3(6), 31-40
- Uzaefa, A. & Sahnun, K. (2018). The effects of microteaching supervision technique on school development and management. *Alberta Journal of Educational Research*, 21(1), 100-115
- Victor, A. A. & Chidi, N. (2017). Principals' supervisory techniques as correlates of teachers' job performance in secondary schools in Ebonyi State, Nigeria. *International Journal for Social Studies*, 3(10), 13-22
- Wilbur, M. (2007). How foreign language teachers get taught: Methods of teaching the methods course. *Foreign Language Annals*, 40(1), 79-101.

**Validation of Head Teacher’s Supervisory and Leadership Role on Teachers to Improve Early Child Care in Nursery and Primary Schools in North Central Nigeria**

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**ABSTRACT**

The paper focus on the validation of head teacher’s supervisory and leadership role on teachers to improve early child care in nursery and primary schools in north central Nigeria. The study adopted a descriptive survey research design. The population for the study comprised 45 Head Teachers and 94 Teachers, Selected from two Nursery and Primary Schools in each state of North Central Nigeria, (Benue, Kogi, Kwara, Niger, Plateau, Nasarawa). Proportionate stratified sampling techniques and proportionate stratification were used, and the sample size of each stratum is proportionate to the population size of the stratum. A structured questionnaire titled Supervisory and Leadership Role on Teacher of Early Child Care questionnaire (SLRTECCQ) was used as an instrument to retrieve opinions from respondents, three research questions and three hypotheses were raised for the study. The questionnaire was validated by two experts from the Department of Curriculum and Teaching Benue State University Makurdi, Nigeria. The data were analyzed using Cronbach alpha to obtain reliability coefficients of 0.70. Indicating that the instrument is appropriate and reliable for the study as it was above 0.60 on the reliability index. Mean and Standard Deviation were used to analyse the data collected and obtained from the research questions. The findings showed that the use of instructional procedures, and daily supervision, were identified as Head Teacher’s Supervisory role on teachers to improve ECC , and coordinating all administrative processes was identified as Head Teacher’s Leadership role while inadequate coordination was identified as challenges of Head Teacher’s Supervisory role on teachers to improve ECC. It recommends that Head Teacher should be trained to improve their supervisory and Leadership skills through workshops and seminars.

**Keywords:** Head teacher, Supervisory, leadership, Role, Early Child Care and Education

**Introduction**

Education of the child in our society and all over the world is the greatest concern of parents, teachers, the community and the government. The survival of any nation or culture depends to a large extent on the sound and worthwhile education provided for its children. According to Article (31) of the United Nations Convention on the Rights of the Child, (UNICEF, 2013). “Children have the right to join in a wide range of cultural, artistic and other recreational activities”. The National Policy on Education (2013) section two recognizes the fact that formal education of a child starts from the age of 3 years, hence the prescriptions on pre-primary education as contained in the policy document. The official recognition given to pre-primary education in the national policy on education is based on sound philosophies, goals, quality education effective curriculum and conducive learning environment. A child is regarded as a person from the age of zero to five years under the care of parents or caregivers, helpers and securities in Early Childcare Centres (ECC). ECC is a place where all the activities and programmes are deliberately directed, towards the general development of the child. According to Maduwesi (2005), an Early Childcare Centre is a place where education is given to

children from zero to five years. Again Babalola (2010) explained that Children taken care of by ECCE programmes range from age 0-5 years and described it as a place where all the activities and programmes planned for the general development of the child takes place. ECC is a place where services are provided by early childhood professionals to create an enabling environment for a child to thrive and develop to the fullest potential. The Federal Republic of Nigeria in her National Policy on Education (FRN, 2004) makes provision for ECC. As referred to in the document, Childhood/Pre-primary education is the education given in an educational institution to children before their enter primary school. It includes the crèche, the nursery and the kindergarten. The aim of ECC include: to effect a smooth transition from home to school, prepare the child for the primary level of education, provide adequate care and supervision for the children while their parents are at work, inculcate social norms in the children, learn good habits, good health habits, and teach the rudiments of numbers, letters, colours, shapes and forms through play. Supporting these documents (Nigerian Educational Research and Development Council (NERDC), 2006). Point out that, the early childcare centre is established towards

strengthening the structure, increasing the number of trained personnel, providing adequate structural facilities, supporting the development, revision of curriculum to contain ECC-specific messages, maintaining appropriate standardized teaching and learning programmed. Based on the foregoing, Teachers are regarded as the strength and the engine room for the child to learn good habits, good health habits, and rudiments of numbers, letters, colors, shapes, and forms through play and to perform academically. This makes it compulsory and paramount for teachers to be well-trained to perform effectively and to deliver good teaching. Apart from the teacher being well-trained academically, Teachers need to be groomed in the profession by the head teachers. This involves supervising the teacher to ensure that they improve their teaching. This makes the head teachers coordinate most of the activities performed by the teachers through supervision. According to Osakwe (2010), supervision is concerned with the provision of professional assistance and guidance to teachers to help them achieve effective teaching in schools. The head teacher plays supervisory and leadership roles that provide professional guidance for teachers to improve their skills and competencies for teaching to enhance

students' performance during learning. Again Classroom teachers' performance in the area of preparation of lesson plans before delivery, good use of instructional materials, best teaching method and proper classroom management are all hinged on the committed supervisory and leadership role. Provision of feedback enables the teachers to have direction and focus, towards students' learning. This performance can be achieved through the supervisory staff and instructional supervisors put in place by the head teacher. Improving the teachers' instruction is regarded as the major objective of supervision, where the supervisor uses most of the time in the classroom to improve teaching and learning. The head teacher as a supervisor ensures that the curriculum developed and approved by the Ministry of Education is implemented with the focus of achieving the set objectives. According to Ebuk and Bankole (2019), the involvement of the teachers in planning and evaluation of experiences as they work together with supervisors, helps the teachers to participate more in effective curriculum development and how teaching materials are used effectively.

### **Statement of the Problem**

The freedom to play in an unstructured environment has been replaced with the

convenience of video, television, and computer screens; organized youth leagues are at an increasing rate. Children naturally imitate adults; they watch and observe adults being lively and creative with playful learning. Their inquisitive nature provides the underlying basis for the play. Therefore play will inspire children's ability to learn easily. But it is observed that in ECC play is not given adequate attention by adults, teachers, or caregivers. Okpala, (2016) observed that early childhood education may be left with the impression that changes in government policies towards early childhood education may threaten to reduce the quality and accessibility. NERDC in conjunction with UNICEF developed guidelines for the operation of ECC across the country. The guidelines include; providing adequate care and supervision for children while their parents are at work, providing a healthy and safe environment, protection and security and effect a smooth transition from home to school. However, studies have shown that, despite the establishment of ECC, and increased daycare disparities in childhood education, the teaching materials in ECC are not tailored to children's needs. Classrooms are without daily supervision, Use of instructional procedures, assessment of teaching improvement and as a result, ECC

lack of school-community relationships and poor staff supervision. This makes the early childhood services stay uninformed and unprofessionally connected. Therefore, there is every need to validate Head Teacher's Supervisory and Leadership Role in Early Child Care and Education in the Nursery and Primary Schools in North Central Nigeria

### **The Objective of the Study**

The objectives are to;

- i. Identify the Head Teacher's Supervisory role on teachers to improve Early Child Care in the Nursery and Primary Schools in North Central Nigeria
- ii. Identify the Head Teacher's leadership role on teachers to improve Early Child Care in the Nursery and Primary Schools in North Central Nigeria
- iii. Examine the challenges of the Head Teacher's supervisory and leadership role on teachers to improve Early Child Care in the Nursery and Primary Schools in North Central Nigeria

### **Research question**

The following research questions guided the study:

- i. What are the Head Teacher's supervisory role on teachers toward improvement of Early Child Care in the Nursery and Primary Schools in North Central, Nigeria?

- ii. What are the Head Teacher's leadership role on teachers to improve Early Child Care in the Nursery and Primary Schools in North Central, Nigeria?
- iii. What are the challenges associated with Head Teacher's supervisory and leadership role in ECC in the Nursery and Primary Schools in North Central Nigeria?

### **Research Hypotheses**

**The following hypotheses are tested: H<sub>01</sub>**

- a. There is no significant difference between the mean score of Head Teachers and Teachers on the supervisory role of teachers to improve early child care in the Nursery and Primary Schools in North Central Nigeria
- b. There is no significant difference between the mean score of Head Teachers and Teachers on the Leadership role of teachers to improve ECC in the Nursery and Primary Schools in North Central Nigeria
- c. There is no significant difference between the mean score response of Head Teachers and Teachers on the challenges of Head Teacher's Supervisory and Leadership on teachers to improve Early Child Care in the Nursery and Primary Schools in North Central Nigeria.

### **Methodology**

The study adopted a descriptive survey research design, and 37 items structured

questionnaire named Questionnaire on Supervisory and leadership role on teacher of Early Child Care questionnaire (SLRTECCQ). The questionnaire was validated by two experts from the Department of Curriculum and Teaching at Benue State University Makurdi, Nigeria, and reliability of the questionnaire was established through the use of Cronbach alpha, and reliability coefficients obtained was of 0.70. The population for the study comprised 45 Head Teachers and 94 Teachers selected from two Nursery and Primary Schools in each state (Benue, Kogi, Kwara, Niger, Plateau, Nasarawa) of North Central State of Nigeria, and Proportionate stratified sampling techniques were used in the selection of the sample size. In which a sample of Head teachers and teachers were selected. seven out of the twenty-eight Nursery and Primary Schools in North Central Nigeria in the six (6) States of North-Central Nigeria. Mean and Standard Deviation were used to analyze the data.

### **Results**

Research Question One:- What are the identified Head Teacher's supervisory role on teachers to improve Early Child Care in the Nursery and Primary School in North Central Nigeria?

FINAL DRAFT BJEA VOL 9 No3



**Table: Mean responses of the respondents on the identified Head Teacher’s Supervisory role on teachers to improve Early Child Care in the Nursery and Primary Schools in North Central Nigeria**

S/N	Identified Head Teacher’s Supervisory role	X	S.D	Remarks
1.	Use of instructional procedures	3.77	0.81	Agree
2.	Daily supervision	3.99	0.80	Agree
3.	Observing classroom activities	3.83	0.82	Agree
4.	Prepared instructions for guidance	3.80	0.62	Agree
5.	Develop self-discipline	3.85	0.62	Agree
6.	Organize and supervise patrols	3.81	0.79	Agree
7.	Monitor classroom obstruction	3.54	0.96	Agree
8.	Ensuring teaching competencies	3.79	0.74	Agree
9.	Resolve teachers’ mistakes	3.51	0.80	Agree
10.	Observing the teaching skill	3.52	0.66	Agree
11.	Assessment of teaching improvement	3.64	0.89	Agree
12.	Evaluations and report	3.68	0.76	Agree

The data presented in Table 1 revealed that 12 items on identified Head Teacher’s Supervisory role on teachers to improve ECC care have a mean value ranging from 3.52 to 3.99 this showed that the mean value of each item was above the cut-off point of 3.50, The table also showed that the standard deviations (SD) of the items are within the range of 0.62 to 0.96 and are positive. This indicated that all the identified items as Head Teacher’s

Supervisory role on teachers to improve ECC in the Nursery and Primary Schools in North Central Nigeria are positive. This indicated that the respondents were not very far from the Mean of one another in their scores.

**Research Question Two:** - What are the identified Head Teacher’s Leadership role on teachers to improve Early Child Care in Nursery and Primary School in North Central Nigeria?

**Table 2: Mean Responses of the Respondents on Head Teacher’s Leadership role on teachers to improve Early Child Care in the Nursery and Primary Schools in North Central Nigeria**

S/N	Identified Leadership role	X	S.D	Remarks
1.	Coordinating all administrative processes	3.83	0.89	Agree
2.	Managing budgets	3.54	0.77	Agree
3.	Implement policies and events	3.80	0.62	Agree
4.	Resolving conflicts	3.91	0.98	Agree
5.	Ensure current practices and techniques	3.61	0.60	Agree
6.	Involved in teaching duties	3.58	0.61	Agree
7.	Promote professional and academic growth	3.74	0.92	Agree
8.	Planning of professional development	3.81	0.76	Agree
9.	implementation of professional development	3.91	0.98	Agree
10.	staff in cooperation	3.80	0.87	Agree
11.	Ensures training for teachers	3.80	0.80	Agree
12.	Organize Workshop for teachers	3.90	0.83	Agree
13.	provision Teachers’ professional needs	3.83	0.64	Agree
14.	Updating teaching skills and competencies	3.80	0.87	Agree
15.	Enhancing teaching skills and competencies	3.79	0.87	Agree

The data presented in Table 2 revealed that 15 items on identified Head Teacher’s Leadership role on teachers to improve ECC care have a mean value ranging from 3.54 to 3.91, this showed that the mean value of each item was above the cut-off point of 3.50, and the standard deviations (SD) of the items are within the range of 0.60 to 0.98 which are positive. This indicates that all the items identified as Head Teacher’s Leadership role on teachers to improve ECC in the Nursery

and Primary Schools in North Central Nigeria are positive. This indicated that the respondents were not very far from the Mean or one another in their scores.

**Research Question Three:-** What are the challenges of the Head Teacher’s Supervisory and Leadership role on teachers on the improvement of ECC in the Nursery and Primary Schools in North Central Nigeria?

S/N	Identified challenges	X	S.D	Remarks
1.	Inadequate Coordination	3.88	0.83	Agree
2.	Inadequate budgets Management	3.58	0.75	Agree
3.	Improper Implementation of Policies	3.67	0.64	Agree
4.	Improper resolution of conflicts	3.51	0.95	Agree
5.	Improper current practices and techniques	3.80	0.94	Agree
6.	Involved in teaching duties	3.70	0.91	Agree
7.	Lack of instructional procedures	3.74	0.92	Agree
8.	Improper daily supervision	3.54	0.93	Agree
9.	Inadequate Evaluations and report	3.61	0.92	Agree
10.	Inadequate instructions for guidance	3.52	0.79	Agree

The data presented in Table 3 revealed that 10 items on identified challenges of Head Teacher's Supervisory and Leadership role on teachers to improve ECC care have a mean value ranging from 3.51 to 3.88, this showed that the mean value of each item was above the cut-off point of 3.50, and the standard deviations (SD) of the items are within the range of 0.64 to 0.95 which are positive. This shows that all the identified items as Head Teacher's Supervisory and Leadership role on teachers to improve Early Child Care in

the Nursery and Primary Schools in North Central Nigeria are positive. This indicated that the respondents were not very far from the Mean or one another in their responses.

### Hypotheses Testing

**H0<sub>1</sub>:** There is no significant difference between the mean score of Head Teachers and Teachers on the Supervisory role of teachers to improve Early Child Care in the Nursery and Primary Schools in North Central Nigeria.

### T-test Analysis of the Head Teachers and Teachers on the Supervisory role of teachers in Early Child Care in the Nursery and Primary Schools

S/No	Supervisory role	X <sub>1</sub>	S <sup>2</sup> <sub>1</sub>	X <sub>2</sub>	S <sup>2</sup> <sub>2</sub>	t- cal	Remarks
1.	Use of instructional procedures	3.77	0.81	3.45	0.60	1.30	NS
2.	Daily supervision	3.99	0.80	3.72	0.71	1.66	NS
3.	Observing classroom activities	3.83	0.82	3.54	0.73	1.55	NS
4.	Prepared instructions for guidance	3.80	0.62	3.63	0.69	0.63	NS
5.	Develop self-discipline	3.85	0.62	3.45	0.93	0.56	NS
6.	Organize and supervise patrols	3.81	0.79	3.45	0.73	0.50	NS
7.	Obstruction & Monitor classroom	3.54	0.96	2.81	0.80	0.78	NS
8.	Ensuring teaching competencies	3.79	0.74	3.45	0.73	0.50	NS
9.	Resolve teachers' mistakes	3.51	0.80	3.45	0.93	0.56	NS
10.	Resolve teachers' mistakes	3.52	0.66	3.72	0.90	-0.44	NS
11.	Assessment of teaching improvement	3.64	0.89	3.18	0.80	1.37	NS
12.	Evaluations and report	3.68	0.76	2.81	0.80	0.78	NS

Key: S<sup>2</sup><sub>1</sub> = Variance of lecturers: S<sup>2</sup><sub>2</sub> = Variance of instructors: X<sub>1</sub> = Mean of lecturers X<sub>2</sub> = Mean of instructors: Df = 29: P = 0.05: S = Significant: NS = Not Significant t-cal = 1.98: This key applies to tables 4, 5, and 6

Data presented in Table 4 revealed that each of the Supervisory roles had their calculated t- values ranging from 0.60 to 1.66 which were less than the t-table value of 1.52 (two-tailed tests) at 0.05 level of significance and 29 degrees of freedom (df). This indicated that there was no significant difference between the mean responses of Head Teachers and Teachers on the Supervisory role of teachers to improve Early Child Care. Therefore, the null hypothesis of no

significant difference between the mean responses of Head Teachers and Teachers on the Supervisory role of teachers to improve Early Child Care in the Nursery and Primary Schools in North Central Nigeria was upheld.

**H0<sub>2</sub>:** There is no significant difference between the mean response of Head Teachers and Teachers on the Leadership role of teachers to improve Early Child Care in the Nursery and Primary Schools in North Central Nigeria.

**T-test analysis of Head Teachers and Teachers on the Leadership role of teachers to improve Early Child Care in the Nursery and Primary Schools**

S/No	Leadership role	X <sub>1</sub>	S <sub>1</sub> <sup>2</sup>	X <sub>2</sub>	S <sub>2</sub> <sup>2</sup>	t- cal	Remarks
1.	Coordinating all Admin Processes	3.83	0.89	3.54	0.81	-0.06	NS
2.	Managing budgets	3.54	0.77	3.90	0.83	0.77	NS
3.	Implement Policies	3.80	0.62	3.81	0.98	1.11	NS
4.	Resolving conflicts	3.91	0.98	3.63	0.69	0.61	NS
5.	Current Practices and Techniques	3.61	0.60	3.72	0.73	0.32	NS
6.	Involved in Teaching Duties	3.58	0.61	3.54	0.81	-0.05	NS
7.	Academic growth	3.74	0.96	3.65	0.60	0.11	NS
8.	Professional development	3.81	0.76	3.36	0.60	1.44	NS
9.	Implementing of Events	3.91	0.98	3.80	0.78	1.47	NS
10.	Staff cooperation	3.80	0.87	3.88	0.87	0.08	NS
11.	Training for Teachers	3.80	0.80	3.81	0.87	0.61	NS
12.	Workshop for Teachers	3.90	0.83	3.72	0.90	1.11	NS
13.	Teachers' Professional Needs	3.83	0.64	3.91	0.61	0.21	NS
15	Updating Teaching Skills	3.80	0.87	3.90	0.72	0.43	NS

Data presented in Table 5 revealed that each of the Leadership roles had their calculated t- values ranging from - 0.06 to 1.44 which were less than the t-table value of 1.52 (two-tailed tests) at 0.05 level of significance and 29 degrees of freedom (df). This indicated that there was no significant difference between the mean of Head Teachers and Teachers on the Leadership role of teachers to improve C Therefore, the null hypothesis of no significant difference between the mean response

of Head Teachers and Teachers on the Leadership role of teachers to improve Early Child Care in the Nursery and Primary Schools in North Central Nigeria was upheld

**H0<sub>3</sub>:** There is no significant difference between the mean response of Head Teachers and Teachers on the challenges of Head Teacher's Supervisory and Leadership on teachers to improve ECC in the Nursery and Primary Schools in North Central Nigeria

**T-test Analysis of Head Teachers and Teachers on the challenges of Head Teacher’s Supervisory and Leadership role on teachers to improve ECC in the Nursery and Primary Schools in North Central Nigeria**

S/No Supervisory and Leadership role	X <sub>1</sub>	S <sup>2</sup> <sub>1</sub>	X <sub>2</sub>	S <sup>2</sup> <sub>2</sub>	t- cal	Remarks
1. Inadequate Coordination	3.88	0.83	3.92	0.94	0.02	NS
2. Inadequate budgets Management	3.58	0.75	3.00	0.54	1.11	NS
3. Improper Implementation of Policies	3.67	0.64	3.45	0.93	0.25	NS
4. Improper resolution of conflicts	3.51	0.95	3.72	0.90	0.34	NS
5. Improper current practices and techniques	3.80	0.94	3.63	0.66	0.05	NS
6. Involved in teaching duties	3.70	0.91	3.00	0.41	1.30	NS
7. Lack of instructional procedures	3.74	0.92	3.45	0.81	0.38	NS
8. Improper daily supervision	3.54	0.93	3.72	0.90	-0.47	NS
9. Inadequate Evaluations and report	3.61	0.92	3.90	0.61	1.36	NS
10. Inadequate instructions for guidance	3.52	0.79	3.72	0.72	1.14	NS

Data presented in Table 6 revealed that each of the challenges of the Head Teacher’s Supervisory and Leadership role on teachers to improve ECC had their calculated t- values ranging from -0.47 to 1.36 which were less than the t-table value of 1.52 (two-tailed tests) at 0.05 level of significance and 29 degrees of freedom (df). This indicated that there was no significant difference between the mean response of Head Teachers and Teachers. Therefore, the null hypothesis of no significant difference between the mean responses of Head Teachers and Teachers on challenges of Head Teacher’s Supervisory and Leadership role on teachers to improve ECC was upheld.

**Discussion of Findings**

The findings of this study revealed the identified Head Teacher’s Supervisory role on teachers to improve ECC care in the Nursery and Primary Schools in North

Central Nigeria the use of instructional procedures, daily supervision, observing classroom activities, preparing instructions for guidance, developing self-discipline, organizing and supervising patrols, obstruction and monitoring classrooms, teaching competencies, resolving teachers’ mistakes, assessment of teaching and evaluations and report, These findings were in agreement with the opinion of Habtamu and Eshetu (2019) that improving teacher instructional competencies, many educators have come to realize that the quality of instruction depends not only on teachers’ teaching skills and the utilization of modern technologies but also on supervisory support provided to teachers to indirectly bring about better student performance. While UNESCO (2007) confirms that the overall education system should be supported by educational supervision to improve the teaching-learning

process in general and learners' achievement in particular.

Another findings of the study revealed Head Teacher's Leadership role the identified Head Teacher's Leadership role by respondents include; coordinating all administrative processes, and managing budgets, implement policies, and resolve conflicts, current practices and techniques, involved in teaching duties, academic growth, professional development, implementing of events, staff in cooperation, training for teachers, Workshops for teachers, Teachers' professional needs and updating teaching skills and competencies. These findings were in agreement with the opinion of Ali (2017) that (Principals) Head Teachers who are more dedicated, patient, and empathic in their administrative roles are more likely to be effective, Head Teachers in schools are responsible for instructional leadership and policy development, record keeping, and human relationships. In the opinion of Ali, Sharma, and Zaman, (2016) pointed out that principals are charged with recognizing the school's vision and mission and then transferring the vision and mission plan to realistic teaching-learning experiences and co-curricular activities to realize the school's vision missions. Principals must effectively communicate

with students, teachers, and parents, as well as meet their standards and must also make decisions in the event of an emergency.

Furthermore, the identified challenges of the Head Teacher's Supervisory and Leadership role on teachers to improve ECC include inadequate Coordination, inadequate budgets management, non-implementation of policies, non-resolution of conflicts, lack of current practices and techniques, involved in teaching duties, lack of instructional procedures, Improper daily supervision, Inadequate Evaluations and report and Inadequate instructions for guidance These findings were in agreement with the opinion of Samrat, Ghulam and Muhammad (2021) that administrative work is much more difficult because it necessitates efficiency to fulfill administrative obligations. Chike-Okoli (2016) revealed that the majority of supervisors are incompetent and weak in supporting teachers to promote students' achievement, and suggested that teachers should be guided to improve teaching methods and techniques, utilize newly discovered principles of group dynamics, provide for individual differences, locate and utilize community resources and evaluate their teaching.

### **Conclusion**

This study examined the supervisory and Leadership role of teachers to improve ECC and their challenges. The essence is to maintain the importance of early childhood education in conjunction with intellectual stimulation and enhance the professional growth of teachers. This study was aimed at helping preschool and early childhood teachers as they are extremely vital to the beginning of a child's learning path, thereby focusing on environments that encourage exploration and problem-solving, rather than tests and homework. Although other factors like political, economic and social problems might affect Head Teacher, supervisory and Leadership roles, a lot of efforts can be put in

place to give special attention to supervision and Leadership

### **Recommendations**

The following recommendations are made

1. Head Teachers should be trained to improve their supervisory and Leadership skills through workshops and seminars.
2. Head Teachers should not be servants and masters but exhibit relationships where both parties contribute to the success of the teaching-learning process.
3. Supervision and Leadership should be a continuous process by Head Teacher following education policies, edicts and laws to avoid disagreements.

REFERENCES

- Ali, N. (2017). Teachers' perceptions of the relationship between principals' instructional leadership, school culture and school effectiveness in secondary schools in Pakistan/Niaz Ali (Doctoral dissertation, University of Malaya). [http://studentsrepo.um.edu.my/7225/1/THE\\_SIS\\_2017.pdf](http://studentsrepo.um.edu.my/7225/1/THE_SIS_2017.pdf)
- Ali, N., Sharma, S., and Zaman, A. (2016). School culture and school effectiveness: secondary schools in Pakistan. *Malaysian Online Journal of Educational Management*, 4(4), 50-65.
- Chike. O (2016). A Handbook on Supervision of Instruction. Ibadan: Gabesther Publishers
- Ebuk, L. E. and Bankole S. S (2019) Principals' Supervisory Leadership Strategies and Teachers' Job Effectiveness in Secondary Schools in FCT, Abuja International Journal of Arts and Technology Education Volume 11, No. 1 March,
- Habtamu G Eshetu M (2019) Analysis of the Supervisory Support to Teachers in Primary and Secondary Schools of Sidama Zone, Ethiopia; *IOSR Journal Of Humanities And Social Science (IOSR-JHSS)* 24, (10) 11, 45-51 e-ISSN: 2279-0837, p-ISSN: 2279-0845. [www.iosrjournals.org](http://www.iosrjournals.org)
- Meador, D (2023). "The Role of the Principal in Schools." ThoughtCo, [thoughtco.com/role-of-principal-in-schools-3194583](http://thoughtco.com/role-of-principal-in-schools-3194583).
- Nakpodia, E. D. (2011). Early Childhood Care Education. Its Policy Formulation and Implementation in Nigerian educational system. *African Journal of Political Science and International Relations*. Vol. 5 (3). Pp.159-163, March 2011. Available online at <http://www.academicjournal.org/ajpsir>. ISSN 1996-0832. ©2011 Academic Journals.
- National Council for Curriculum and Assessment (2007) *Assessment in the Primary School Curriculum: Guidelines for Schools*. Dublin: NCCA. Retrieved from [www.ncca.ie](http://www.ncca.ie)
- National Policy on Education (2013). *The Pre-Primary Education: Federal Ministry of Education*. 11-14. Federal Government Press.
- Okpala, A.O (2016) Appraisal of the Management of Early Child Care Centres in South East Zone of Nigeria University of Nigeria, Nsukka PhD thesis
- Osakwe, A. (2010). Relationship between working conditions and teacher effectiveness in secondary schools in Abia educational zone of Abia State. M.Ed. Dissertation, University of Port Harcourt, Nigeria.
- Osakwe, R N (2013), Supervisory Functions of Secondary School Principals and Factors Competing With These Functions *IOSR Journal of Research & Method in Education (IOSR-JRME)* e-ISSN: 2320-7388, p-ISSN: 2320-737X Volume 1, Issue 3 PP 13-19 [www.iosrjournals.org](http://www.iosrjournals.org)
- UNESCO (2004). *ECA policy development and implementation in Africa. Early childhood and family policy series*. No 9 UNESCO Education Sector, France.
- UNESCO (2007). *Reforming school supervision for quality improvement*. Retrieved from United Nations Convention
- UNICEF. (2013). *the Convention on the Rights of a Child*, Retrieved from [http://www.unicef.org/crc/files/Survival\\_Development.pdf](http://www.unicef.org/crc/files/Survival_Development.pdf) [www.iiep.unesco.org/fileadmin/.../Supervision/SUP\\_Mod8.pdf](http://www.iiep.unesco.org/fileadmin/.../Supervision/SUP_Mod8.pdf) October 16, 2006
- Samrat.R Ghulam.M and Muhammad.A (2021) Administrative role of Principals In Pakistan *Journal of Social Sciences Review (JSSR)* Vol. 1, Issue 1, 46-56



**Restructuring Higher Education for Relevance in the Era of Globalization: A Catalyst for a Model Shift in Educational Policies and Administration**

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**ABSTRACT**

Today, globalization has turned out to be a term referring to a great many of fields ranging from economy and politics to communication technologies and culture to describe a large spectrum of changes which is already able to spread all around to world. Just as many other organizations in the society, education institutions are also inevitably affected by innovation requirements. In that way, it is true to suggest that initial innovation movements in education started with the revision of some applications in the past and the pinpointing of lack points. Then, this process is practically followed by a group of new revisions. As for the third step, we could see the challenge between the new and traditional applications in education. Just like other services offering social benefits, education has traditionally been regarded as a public commodity because of the positive externality it leads to, and investments and subventions of the state in this field have almost always been perceived as a public service. However, global changes indicate that every step of education has gradually been evaluated as consumption commodity parallel to individual preference. From some time, globalization has also invariably affected teaching and training like many other fields of modern social life. Meanwhile, the paper also highlighted that global demographic, economic and cultural powers have had considerable effect for the last 20-25 years on education system, administration and policies. Finally the paper explored how school, and higher education have been responding to globalization, and what the implications have been for educational research, policy makers and development in this unprecedented era of global change.

**Keywords:** *Globalization*, education reform, higher education, educational policies and administration

**Introduction**

Today, globalization has turned out to be a term referring to a great many of fields ranging from economy and politics to communication technologies and culture to describe a large spectrum of changes which is already able to spread all around to world. Meanwhile, globalization could also be

regarded as a multifunctional term concerning the improvement of cultural, political, technological, and economic affairs in addition to being processes which weaken national boundaries with limitless improvements as well enlarged interaction and some other processes which enhance the

awareness of citizenship and society mentality along with social considerations and rejections. Just as many other organizations in the society, education institutions are also inevitably affected by innovation requirements. In that way, it is true to suggest that initial innovation movements in education started with the revision of some applications in the past and the pinpointing of lack points. Then, this process is practically followed by a group of new revisions. Beginning from the 1980s, in many countries, the increased responsibilities of local governments as well as the delegation of decision making power to sub-units are considered that major power of innovation; (Ofosu, 2010).

Undoubtedly, in addition to these factors, the considerable increase in the number of students and schools along with multiplied and varied education programs has gradually led to more remarkable effect of a central bureaucracy on schools. For these reforms to improve the processes and results of education and training authorities focus on not only enhancing current schools through projects such as “school enhancement”, “school centered administration”, “learning schools” and “total quality management” but also “alternative school” models. In this

process changes in social structures have had considerable effect on learning-centered education mentality. Meanwhile, it is also evidently that ongoing improvements in democratization and human rights have also made remarkable contributions to the democratization of learning, individual focused on his / her own interest, skills and preferences as well as alternative education programs, the increase of school diversity and more individualistic learning progress (Beycioğlu & Aslan, 2010).

### **Globalization**

Undoubtedly, one of the most prominent winds of change in the 20<sup>th</sup> century is the globalized world which is, in fact, highly new term surging originally in the 1960s. Then, the use of the term “globalization” gradually increased until the 1980s. Even though, as a concept, “globalization” initially referred to the “globalized village” in the 1960s, beginning in the 1980s, scientists increasingly turned their attention to “globalization” to study it in a systematic way along with a theoretical respect based on the process itself. When it came to 1990s, “globalization” proved to be a key term for scientists. Today, too many people, “globalization” should refer to a phrase related to liberalism in terms of economy or

universality of democratic concepts while some others regard “globalization” as universal human rights, ecological problems or everything that includes all above (Aslan, 2010)..

One the other hand, one supporting ever-changing see “globalization” as a process containing both opportunities and risk. In this respect, it seems true that explanations concerning “globalization” do not match with the each other. Namely, on one hand, “globalization” may refer to the close affairs of nations in terms of politics, economics and communication and so which is getting smaller and smaller. On the other hand, “globalization” refers to a worldwide capitalism, the effort to create a global market as well as the way of capitalists to establish an absolute sovereignty all over the world (Balkar & Özgan, 2010). Meanwhile, “globalization” is also claimed to be as the inevitable result of modern science and new technologies which is mainly based on economic power and has four major dimensions of politics, culture, technology and economics. All systems in the society are necessarily affected by these four dimensions (Erol, 2010). With the globalization, it seems now indisputable that globalization has also accelerated regional collaborations and

projects by which all social institutions have experienced changes and such collaborations and project have invariably caused all social institutions including economics to experience considerable changes, as well (Didou-Aupetit, 2012). Moreover, it could be concluded that such changes have also affected the traditional approach to democracy which makes up the society itself. Moreover, globalization will allow certain democratic movements and bodies to urge more commonly while regional collaborations and projects will contribute democracy to appear more frequently. However, it seems probable that certain movements against democracy will also become more often in the society and this also likely to limit the development and expansion of democracy (Balkar, 2010).

It is a common claim that the modern world has entered into the globalization era. While globalization discourses are increasing nowadays, the debates have centered on transformation and re-structuring of economy, culture and politics in global perspective. The process called “globalization” has nearly been an inevitable part of our routine. In other words, “globalization” includes with both its effects and comments of it, enlarged and more

developed economic, social and political affairs of countries, increased capital activities, the end of all kinds of polarizations that are based extensive logic discrimination, well-awareness of different social cultures and their beliefs and expectations as well as intense relations of countries (Özgan, 2010)

Thus, globalization in the context of this paper does not only or primarily refer to economic inter-dependency of countries but also mean the conversion of the place and time in which we live. Whether they are financial or not, undoubtedly, the events occurring in remote locations affect us now more directly and instantly than the ones in the past. Therefore, it could be assumed that globalization is comprised of certain sophisticated processes evolving with the combination of political and economic effect as Errol, (2010), defines globalization as gradually increasing discrepancy in terms of time and location while. In his view, the mutual defection between local and global factors is major factors and in global process, the local ones built up. Errol in addition, suggests that globalization is not a newly appearing term, but it is of gradually increasing phases beginning in as early as the 15th century (Errol, 2010).

#### **Effect of globalization on higher education**

According to Gömleksiz, M. N. & Kılınç, H. H. (2012), there are three major factors contributing the transformation of higher education:

1. The collapse of the vital role of nation-state in social and economic development as well as the notion that higher education is a national fortune contributing the national awareness.
2. Re-establishment of the functions of the social-welfare referring to a new point of view concerning the public sector which will be financed by the state itself.
3. All over the world, the whole public sector has been occupied by private company mentality As a result, higher education is not considered a public sector any more.

More, problems related to higher education are not native to the Middle and Eastern Europe, but they are now global ones which are in need of solutions through global organizations such as IMF and OECD. Undoubtedly, as regional collaborations have gained speed with the effect of globalization, they have opened up new changes in education, notably in higher education. According to Didou-Aupetit'e (2012), NAFTA (North America Free Trade

Agreement), this was signed between the USA, Mexico and Canada and introduced on 1st of January 1994 has been a turning point in re-establishment of the Higher Education System in Mexico.

Globalization is also claimed to have affected higher education system in many ways. According to Tutkun, Ö. F. (2010), one could see the effects of globalization over higher education system at four points: 1) economic benefits (close observations on universities due to their considerable economic contributions), 2) decline in budget and financial pressure, 3) teaching with technological support and with the enlarged share of international student market, and 4) establishment of the rules over the ones who offer this service. However, it is also true that globalization has affected higher education systems in developed countries. There are two major headlines affecting the agenda of higher education institutions in the USA and other African Countries. These includes;

1. The reform over development of training, improving the standards, advancement of programs, and recognition of the needs of ever-changing student population.

2. Decreased sources and increased costs in higher education. As a result, some quarters

turn their attention to the business world in order to rebuild the higher education system (decreased costs, function and bureaucracy). Colleges and universities in the US have also considered ways so as to lessen their costs, close some departments, programs or institutions, as well as measuring of performance the teaching staff, loading extra responsibilities onto them and privatization of various institutions.

According to cites Özkan, R. & Sivrikaya, Ü. (2012) public judgment as a “result of globalization” in France have expanded as parallel to demands of central and local authorities. On the other hand, globalization offers a number of opportunities. According to Güngör, N. D. (2010), universities students and academicians are now likely to reach global opportunities via internet access. According to Fırat, M. (2010) changes just at the beginning of the 21st century have also opened up new technologies such as computerization, communication and multimedia. However, according to Kıldan, A. O. (2010), globalization is the greatest challenge to against universities and has brought many threats together. According to him, the university is exposed to three major challenges caused by globalization:

1. The discordant relation between globalization and traditional role of the university in national culture

2. A more homogenized education system, which is caused by the effect of communication and informatics technologies and the culture of global research, has inevitably weakened the “differences” which are usually expressed as “national cultures”.

3. The gradual deterioration in social function of the state with globalization has also weakened financial aspect of public universities, declining their income levels.

Globalization has invariably brought about “a gap opportunity” in secondary and higher education between ones from lower class and middle class as according to Karaman, K. (2010). He further states that another threat lies under the declined shares and funds in many countries. Özkan, R., (2012), in his opinion supposes that recently a known “digital divide between ones, was included in higher education, which do have knowledge and technology and ones who do not. “Digital divide” draws on absolute frontier between the universities which could offer technology and knowledge and the ones which could not. Therefore, this case should be regarded as a considerable obstacle. Effect of progress as

of the last quarter of the 20th century could be summarized as follows:

**1. Progress in affairs between the state and universities:** As a result of ever increasing effect of market economy, the mentality and applications of public management have also been reshaped. Correspondingly, as a financial source of public management, the state’s point of view to universities has also been affected and market mentality and application have been structured in public management. To give an example, Baker who was the Education Minister in Teacher’s cabinet by the end of the 1980’s asked for universities to give up qualified individuals to meet the necessities of the state.

**2. Tendency of university autonomy to account for public:** the society providing financial sources of the university is how able to account for he by using the right for inspection through varied public opinion means. As a result, universities are now feeling themselves obliged to account for all. Digital divide is a term referring to differences between ones who have information Technologies and who do not have in a modern economy and society. In July 1999, he US Commerce Department submitted convincing reports indicating that

digital division is of an obvious relation with considerably rising competence. On the other hand, recent studies performed by Check-in Research Forester Institution and Stanford University obviously underlined the fact that education level and social class are more remarkable factors than structure of racial division (Reid, Gill, & Sears, (Eds.), 2010). Walks of the society which furnishes financial support for them. However, such an application is certain to contradict with academic freedom.

**3. Efficient use of information technologies in research, virtual education and maintenance of teaching & training activities:** Information technology has now been used in effectively maintenance of formal education, distance learning and virtual Higher education programs.

**4. Transformation of universities into international institutions:** Today, universities, especially ones in developed countries, bear not only national students and researchers but also international students and researchers. In that way, universities are able to compete with each other to be an attraction centre for international students and researchers as well as national ones.

**5. Regarding universities as complex bodies and financial sources rather than as a society of students & academic staff:** On training of qualified man power mostly take employment possibilities into consideration, focusing rather on compatible departments with current conditions of the market. According Sivrikaya, Ü. (2012) the mentality of “the markets know the best” has surely affected universities, as well.

**6 Orientation towards for the pragmatist mentality at universities:** In the term “the pragmatist university” suggested that being an academia involves in a multi-dimensional effort since, in an ever-changing environment, they feel obliged to market their specialty to the markets in and out of the university, which means according to the writer extra marketing and consultancy roles for academia’s along with their training and searching roles.

**7. Newly appearing competitors of the state’s Higher education institutions:** It has become an undeniable fact that these competitors are private and national bodies, private foreign institutions and certificate centres of national ones with foreign partners as well as national and foreign virtual education servers and the ones offering co-education service. Additionally, as to effect

of recent innovations on higher education, one could consider the following points.

**8. Commercialization in higher education:**

In recent years, universities have nearly become customer-based companies driven in a bureaucratic manner, which urges state universities to be more competitive.

**9. The market mentality that knowledge is a commercial item to sell and buy:**

As a result of such a manner, the university is now regarded as a body focusing rather on market-based opinions. Undoubtedly, the world has now rapidly changed and the newly appearing conditions have also brought about a great number of innovations. Such winds of national and international change have invariably affected all individuals and institutions, as well. In that way, it is likely to conclude that ever-increasing political, social, economic and technological innovations since the 20th century have also prevailed increasingly in the 21st century.

To give an example, the reduced prices in information technology and expansion of such items have eliminated such terms as “distance” and “frontiers”, by which universities have been exposed to a new period of change and to many, such a period could be explained not only as the natural

result of search efforts for a more active education and higher education system, but also as developed level of technology to affect all a walks of life. Namely, this case is the obvious consequence of crossing periods of high quality technology for innovations and the beginning of the 21st century (Özkan, 2012). Accordingly, in our global world, higher education has gradually turned out to be a global activity, leaving its traditional national-based role. Parallel to global efficiency of education, higher education system in developed countries has increasingly been more vulnerable to students’ mobility for higher education from intense young population in developing countries to developed ones. For instance, the number of foreign students at universities in OECD countries has reached nearly 1.6 million, doubling in the last two decades.

On the other hand, developments in communication technologies create new mobility opportunities in the global world which do not actually depend on students’ mobility. In this way, we could consider “program mobility” as a gradually expanding process in recent years. In this process, without being obliged to go abroad, students are now able to register and get a degree, in their own countries, from another country’s



education programmes by usually utilizing virtual education techniques (Özkan, 2012).

For another application, universities in developed countries could now establish campuses in some other countries, which invariably leads to “institutional mobility” as a novel term. To put thing together briefly, it is an undeniable fact that globalization has had considerable effects on global higher education system and in fact we could sum up these effects as “reduced budget” allocated by the government for higher education service, utilitarianism in universities, teaching training based on technologic support and various sanctions imposed for university service providers with enlarged volume of student market share on global based. Apart from these major effects, there are undoubtedly some other challenging factors urging universities to changing and transformation such as financial challenge, ever-changing social needs and technology and market authority. In that way, we could come across various so-called labels for newly established universities like “the 21st century universities” or “multi-university” (Misirli, 2010).

### **Globalization and Educational Policies and Administration**

Globalization has brought a paradigm shift in educational policies and administration in many countries. Under the impacts of globalization, the old-fashioned values of wisdom, trust, empathy, compassion, grace, and honesty in managing education have changed into those so-called values of contracts, markets, choice, and competition in educational administration. At present, school administrators are probing more into the instrumental skills of efficiency, accountability and planning than the skills of collaboration and reciprocity. School education nowadays puts more stress on the short term, the symbolic and convenience, having the answers and sameness, than those of the past, which focused on the long term, the real and substantive goals and objectives, discretion and reserving judgment, and character. In the competitive global economy and environment, nation-states have no choice but to adjust themselves in order to be more efficient, productive, and flexible. To enhance a nation’s productivity and competitiveness in the global situation, decentralization and the creation of a “market” in education have been the two major strategies employed to restructure education (Novelli, 2010). Decentralization and corporate managerialism have been used by most governments to increase labour

flexibility and create more autonomous educational institutions while catering for the demand for more choice and diversity in education (Comelo, 2010). The emergence of education markets has also been central to education reform for globalization in many states. Ferus, (2002) argues that if education is restructured on market principles and based upon competitive market relations where individual choice is facilitated, education will become more efficient. While it is true that many educational developments are due to globalization, the dynamics, complexity, and mechanism of such impacts are still not fully grasped, globalization has been affecting education systems, directly and indirectly, and summarizes that globalization has recently brought the following major educational changes drastically (Comelo, 2010).

### **Restructuring Higher Education in the Era of Globalization**

There have been a variety of important social, cultural, economic, and political forces that link to the global development of higher education. Gömleksiz, M. N. & Kılınc, H. H. (2012), identified (i) the globalization of economy, (ii) the ‘commodification’ of knowledge, and (iii) the retrenchment of the welfare state as three important forces,

among others, for the changes in higher education. Globalization leads to the emergence of a knowledge economy, in which the importance of information technology and knowledge management is coming to outweigh that of capital and labour. Globalization also leads to the intensification of the transnational flows of information, commodities, and capital around the globe. That, in turn, renders both production and dissemination of knowledge increasingly commoditized. In parallel with the onset of globalization, more and more welfare states have adopted a neoliberal ideology geared to promoting economic international competitiveness through cutbacks in social expenditure, economic deregulation, decreased capital taxes, privatization and labour ‘flexibility. All these forces are implicit in a restructuring of higher education systems worldwide. (Novelli & Ferus-Comelo, 2010).

The impacts of these forces on the change to higher education are manifest in the drastic restructuring of higher education systems, in which values, such as accountability, competitiveness, devolution, value for money, cost effectiveness, corporate management, quality assurance, performance indicators, and privatization are emphasized

(Kılınc, 2012), Though nations vary widely in their social, political, cultural and economic characteristics, what is striking is the great similarity in the unprecedented scope and depth of restructuring taking place. In general, most of these changes are expressions of a greater influence of the market and the government over the university system. At the core of these changes is a redefinition of the relationships among the university, the state, and the market has been able to identify certain trends in the restructuring of higher education, in the globalizing practices in Anglo-Pacific and North American universities. These trends have important implications for the development of higher education systems in other countries in this era of globalization. These trends include (i) a shift from elite to mass higher education, (ii) the privatization of higher education, (iii) the practice of corporate managerial, and (iv) the spread of international education (Ferus-Comelo, 2010). Rising relative incomes for more highly educated labour increases the demand for university education and allied institutions, pushing governments to expand their higher education by establishing more institutions and learning Centre (Maringe & Foskett, 2010). In the face of limited resources and the

rapid expansion of higher education, governments have been forced towards the privatization of higher education and corporatization of public universities. Privatization is another global trend in higher education, which means a reduction in the level of state provision, and correspondingly, the encouragement of the expansion of private provision (Lee, 2000). The underlying ideology of privatization is based on the belief that the public sector is ineffective, inefficient, and inflexible, while the private sector is deemed more effective, efficient, and responsive to the rapid changes that are needed in the globalizing world. By corporatization, public universities are run like business corporations. The adoption of business-like approaches will result in financial cost savings; increased administrative efficiencies; and retain academic staff through the offering of competitive market remunerations. Such a global change reflects the fact that higher education institutions are increasingly required to secure additional funds from external sources and to reduce dependence on the government (Zajd, 2010). In Nigeria a unique feature of the rapid expansion of private higher education is the emergence of offshore programmes that are offered by foreign universities and the

establishments of more private universities across the country. The emergence of foreign-linked programmes reflects a growing trend of transnational education, in many countries in the world, more relax African countries which means that there is a growing volume of higher education being delivered across national boundaries. Education has become increasingly affected by commoditization. In the global context, the boundaries of how, where, and under whose authority education is carried out and certified are becoming less clear as universities internationalize their campuses, curricula, and teaching staff (Lee, 2000; Maringe & Foskett, 2010). There are some backwash effects created from these global currents of restructuring of higher education due to globalization. First, a rapid expansion in higher education may inevitably lead to a fall in the average academic standard and performance of graduates. It is likely that the definition and establishment of quality will become the prerogative of management rather than academic professionals. When universities become more corporatized, they will be linked more to the market and less to the pursuit of truth. Intellectuals will become less the guardians of the search for truth, and administrators will assume a dominant role. In this regard, norms that have traditionally

been part of university life may be questioned. Zajda (2010) warned that when guided by a climate of knowledge as production, the university may become indifferent to subjects dealing with ethics, social justice, and critical studies.

### **Educational Reforms**

While higher education systems worldwide have been undergoing restructuring as a response to the challenges posed by globalization, school education systems inevitably have to be reformed. The International Labor Organization (ILO) (1996) and Carnoy (1999) have been able to identify three different models of educational reforms and make a distinction between: (i) competitiveness-driven reforms, (ii) finance-driven reforms, and (iii) equity-driven reforms Zajda (2010). The competitiveness-driven reforms are implemented in order to improve a country's competitiveness in the world market and the major strategies include decentralization, centralization, improved management of educational resources and improved teacher recruitment and training. Finance-driven reforms consist of privatization, shifting public funding from higher to lower levels of education, and the reduction of costs per student as the major strategies in many countries of this world, but in some African countries like Nigeria many

or almost all Federal Universities increases school fees in year 2023. While equity-driven reforms are often targeted towards groups that are neglected or are more affected by the consequence of structural adjustment programs. Different countries will adopt these models of educational reform to a greater or lesser extent according to their financial situation, culture and interpretation of globalization. Though different nation-states may have varying perceptions of globalization and adopt different strategies in school educational reforms, similarly to the strategies in restructuring higher education described in previous sections, decentralization, marketization and choice are the major approaches seen (Erol, 2010).

The main argument for decentralization stems from the assumption that increased flexibility and control allow for a better fit between educational methods and the students served, as well as greater accountability for educational results. Decentralization is cast in the role of a reform that increases productivity in education and thus contributes significantly to improving the quality of a nation's human resources. Many schemes have been tried to achieve decentralization of school education, such as voucher plans, magnet schools, zero-based budgeting, school consultative committees

and school-based management. Decentralization in education systems is typically the legacy of the New Right's neoliberal ideology of school reform in Western countries in the early 1980s (Akpınar, & Çakmak, & Kara, 2010) Both Ronald Reagan of the United States and Margaret Thatcher of Great Britain were committed to breaking the monopoly of schools and the introduction of more choice, competition and measurable results. They both believed that strong state control of schools rendered them ineffective, inefficient and not responsive enough to rapid global societal changes. Their basic beliefs were that the market is the most efficient instrument to allocate resources, that competition will motivate people to raise their standards of performance and that school improvement will not occur if they are not held accountable and given the necessary resources to do their job (Princová, 2010).

These two Governments came into office on a platform of motivating schools' internal initiatives and reducing the governments' roles in and control over education by creating competitive markets in the school system and devolving authority to schools. The New Right's language articulated in school reform is, "choice", "competition", "market mechanism" and such like. In order

to promote a market mechanism in the school system and to allow schools to compete with each other, state (government) schools should be dissolved, deregulated and even “privatized”, be given the chance of self-management (Çakmak, & Kara, 2010) and be accountable for their own performance. Choice may be bi-directional in the sense that schools compete for students and students also compete for schools. According to Balkar, B. & Özgan, H. (2010) the two-way competition is the driving force for both schools and students to improve and to raise their standards of performance. In the face of competition, students would strive for excellence in order to get into a “good” school, and schools would ensure they provided quality education in order to compete for the best students. When market forces are introduced into the school system, competition is created, and the quality of education will be assured effectively, efficiently and automatically. School-based management (site-based management, self-budgeting and self-management are other terms coined) is the most popular form of school management reform to revitalize schools in terms of responsiveness, flexibility, accountability and productivity (Princová, 2010).

### **Conclusion**

In this angle of the 21st century, the world has gradually been more globalized as well as remarkably differences had emerged, Such as rapid period of innovation and conversion has also invariably led to ever-increasing communication, more intensive interaction, developing technology and gradually improving scientific knowledge. In this respect, this period is largely defined as a course of globalization and informed society represented by brain power, qualified human and rapid economy on global scale in which there is no room for strict -rules and applications, local principles, targets and values, along with traditional central and one dimensioned approaches and evaluations. As a result, the innovation period has also inevitably affected education system and mentality in various ways, the most important of which is globalization trend in education system. Today, education programs are constantly renewed by displacing or questioning conventional education mentality and methods while a new education mentality is being globally introduced, based rather on search and group work. So as to make use of recent developments in education, contemporary and more flexible programs have been put into effect, considering all kinds of education systems, methods and principles. In this process, the

latest technologic means are also adapted to education and computers are used extensively in any step of this period. In that way, the key decision makers in education should aim at getting rid of the threats in education caused by globalization in addition to getting maximum efficiency from globalization a great many of opportunities in education caused by globalization education system, otherwise, is bound to be incompetent in needing the educational needs of an ever-changing societies and individuals and they will remain forever as a static society.

### **Recommendations**

1. The potential effects of globalization on education are many and far-reaching, due to its scale and nature and the main bases of globalization are knowledge intensive information and innovation. Government of states and nations should do much possible to see that globalization have a profound impact on education.

2. Shift in educational policies and administration in many countries under the impacts of globalization for the old-fashioned values of wisdom, trust, empathy, compassion, grace, and honesty in the

managerial sector of education have been changed drastically into those so-called values of contracts, markets, choice, and competition, so some measures need to be taken to re-addresses the system.

3. The curriculum of instruction should encompasses variety of important social, cultural, economic, and political forces that link to the global development of higher education

4. Government in its side should look into ways to raise the relative incomes of universities and allied institutions for them to expand their higher education programmes and expected productivity to be realized.

5. Higher education systems worldwide have been undergoing restructuring as a response to the challenges posed by globalization, school education systems inevitably have to be reform also.

6. Choice in the schools contents may be bi-directional in the sense that schools compete for students and students also compete for schools, in this sense two-way competition is the driving force for both schools and students to improve and to raise their standards of performance.

## REFERENCES

- AACSB International (2011). Globalization of management education: Changing international structures, adaptive strategies, and the impact on institutions. Report of the AACSB International Globalization of Management Education Task Force. Bingley, UK: Emerald Group Publishing.
- Akpınar, B. & Çakmak, Z. & Kara, C. (2010). Reflections of postmodernism on elementary school sixth and seventh grades' social studies curricula, *Fırat University Journal of Social Science*, 20 (2), 137-160
- Ayan, E. (2010) Globalization-national state centralisms' realities, the Journal of International Social Research, 3 (14), 75-87
- Balkar, B. & Özgan, H. (2010) Teachers' opinions on the effects of globalization on the education process in primary education, *Mehmet Akif Ersoy University Journal of Education Faculty*, 10 (19), 1-22
- Beycioğlu, K. & Aslan, M. (2010) Change and innovation as main dynamics in school development: Administrators and teachers' roles, *Yüzüncü Yıl University, Journal of Education Faculty*. VII (I), 153-173
- Daun. H. & Strömqvist. G. (Eds.) (2011). Education and development in the context of globalization. N.Y.: Nova Science Publishers.
- Erol, N. (2010) Re-thinking the organizations in the process of globalization. *Journal of Gazi Academic Overview*, 4 (7), 79-89
- Fırat, M. (2010) Continuity education in information society and future of schools, International Conference on New Trends in Education and their Implications, 11-13 November, 2010 Antalya Turkey, Proceeding books, 504-509
- Gömleksiz, M. N. & Kılınç, H. H. (2012) Views of academicians on the effect of globalization on curriculum: A qualitative study, *Mustafa Kemal University Journal of Social Sciences Institute*, 9 (17), 397-413
- Güngör, N. D. (2010) Education, globalization and brain drain, Retrieved 21.09.2013 from [acikarsiv.atilim.edu.tr/browse/51/](http://acikarsiv.atilim.edu.tr/browse/51/)
- Gürak, H. (2003) Where does globalization take us?, *Journal of Productivity*, No.2,02.03.2011, Available from: [http://www.elelebizbize.com/kutuphane/hasangurak/Kuresellesme\\_Nereye.pdf](http://www.elelebizbize.com/kutuphane/hasangurak/Kuresellesme_Nereye.pdf)
- Karaman, K. (2010). Globalization and education, *Journal of World of Turks*, 2 (3), 131-144
- Kıldan, A. O. (2010) Quality in educational services; preschool context, Süleyman Demirel University *the Journal of Faculty of Economics and Administrative Sciences*, 15 (2), 111-130.
- Kök, M. & Çitçi, M. & Ayık, A. (2011). An examination on teacher's competencies in their branches (Sample of early childhood teacher's), *Atatürk University Journal of Social Sciences Institute*, 15 (1): 169-183
- Maringe, F. & Foskett, N. (Eds.) (2010): Globalization and internationalization in higher education: Theoretical, strategic and management perspectives. London: Continuum.
- Novelli, M. & Ferus-Comelo, A. (Eds.) (2010). Globalization, knowledge and labour: Education for solidarity within spaces of resistance. London: Routledge



- Odabaşı, F. & Fırat, M. & İzmirli, S. & Çankaya, S. & Mısırlı, A. (2010) Being academician in globalizing world, *Anadolu University Journal of Social Sciences*, 10 (3), 127-142
- Ofosu V (2010). The Effect of Globalization on Ghana, Equality, viewed on 07 August 2011, <http://kranteng.wordpress.com/the-effect-of-globalisation-on-ghana/>
- Özkan, R. & Sivrikaya, Ü. (2012). A research on 100 basic works global values at primary education, *Atatürk University Journal of divinity Faculty*, 38, 341-360
- Özkan T (2006) Evaluation of primary teachers' opinions about global education, Unpublished Master's thesis, Çukurova University Social Sciences Institute, Adana, Turkey
- Princová, K (2010). Globalization, vulnerability, poverty and human limits, viewed 07 August 2011, <http://conference.osu.eu/globalization/publ/16-princova.pdf>
- Reid, A., Gill, J. & Sears, A. (Eds.) (2010). Globalization, the nation-state and the citizen: Dilemmas and directions for civics and citizenship education. New York: Routledge.
- Tutkun, Ö. F. (2010) The philosophic dimensions of curriculum in the 21st century, *GÜ, Journal of Gazi Education Faculty*, 30 (3), 993-1016
- Yazıcı, Ö. (2013) Secondary school students' attitudes towards contemporary world issues, *Journal of Turkish Studies*, 8 (6), 807-823
- Zajda, J. (Ed.) (2010). Globalization, education and social justice. Dordrecht: Springer.

FINAL DRAFT BJEAF VOL 9 NO 3

**Dynamics of School Discipline, Admission Criteria and Student Academic Achievement in Universities in Oyo State, Nigeria**

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**ABSTRACT**

This study investigated the dynamics of school discipline, admission criteria and student Academic Achievement in Universities in Oyo state, Nigeria. The study adopted descriptive survey research design with population of 76,801 (seventy-six thousand and eight hundred and one) that consisted all the staff and students in universities in Oyo State. Multi-stage technique was used to select four hundred and ninety six (496) students from three universities in the study area. A self constructed questionnaire tagged dynamics of school discipline, admission criteria and student academic achievement questionnaire (DSDACAAQ) with 0.76 reliability coefficient was used in the process of collecting data and inferential statistics of Pearson Product Moment Correlation (PPMC) and Multiple Regression was used to analyze the data collected at  $p < 0.05$  level of significant. The study revealed that school discipline has no significant influence on student academic Achievement in Universities in Oyo State. Cal, value=0.263,  $p > 0.05$ , it also revealed no significant relationship between admission criteria and student academic achievement in Universities in Oyo State. Cal, value=-0.043,  $p > 0.05$ . The study had shown various statistics for regression analysis. The R value of 0.072 is an indication that multiple correlations among independent variables and dependent variables are low. The  $R^2 = 0.005$ , the study also revealed that admission criteria made the highest contribution to the student academic achievement ( $\beta = 0.052$ ,  $t = -1.079$ ,  $p < 0.05$ ) followed by school discipline ( $\beta = -0.061$ ,  $t = -1.213$ ,  $p < 0.05$ ) which were not significant. The recommended among others, that government and governing council of the Universities should abolish favoritism policy in admission criteria.

**Keywords:** Admission Criteria, School Discipline, Students' Academic Achievement

**Introduction**

It is highly important to note that human development is commonly based on the amount of knowledge he or she acquires, how much the knowledge is managed and applied in developing himself or herself, his community, and the world at large. This implies the rationale behind the need for education. The worldly knowledge a man gain from education plays major role in human development; it helps to understand the happenings in a much more cohesive manner. Meanwhile, educational success is measured based on the academic achievement of student.

Students' academic achievement is the performance outcome of intellectually acquired knowledge, skills and techniques, expected from a university graduate. As an indicator of education, it is the prerequisite for individual and societal prosperity. It is the extent to which a student or university has achieved either short or long term goals. University student's academic achievement may be measured through cumulative grade point average, ability to defend his/her certificate, his/her employability status, his/her level of perseverance and self discipline.

Furthermore, the university-academic achievement may be measured through graduation rate, input-output ratio survival,

award won for specific activity, quality of her output, world recognition and her position in the world university ranking on academic, moral excellence, research, teaching, community services and efficiency. If a student has performed poorly in his/her academics, it is probably that such student can perform better but lacks discipline or that he/she could not perform better, if it is that he/she could not perform better, the admission criteria into the university and the department is in question.

In the bachelor degree program, the Cumulative Grade Point Average (CGPA) is calculated to determine a student standing overall performance which includes all courses counting towards the degree. The CGPA is calculated by dividing the sum of grade points earned by the total credit value of courses a student has attempted. CGPA is an assessment tools used to evaluate students' academic achievement. The CGPA is a number that indicate how well a student has performed in all the courses on average. This number is then used to assess whether a student meet with the standards and expectations set by the university. A prospective student needs self discipline to study and compete with thousands of applicants, and to meet up with the university admission criteria, for him/her to be selected

among the few successful applicants that will make their ways into university, after being shortlisted for admission, he/she also needs to live in conformity with the university rules and regulation (school discipline) in order to complete the programme successfully, and attain excellent academic achievement. A student is self disciplined if he/she is able to control himself do what is right, when it is right, because he/she believes it is right rather than because he/she is afraid of university punishment or sanction.

School discipline in university is designed to facilitate student academic achievement, university objectives, academic structure, the curriculum, the physical conditions, the network of relationships and interaction among university management, students, academic and the support staff. The success of school system depends largely on the level of disciplined staff and students. A school characterized with high level of indiscipline may find it uneasy to achieve her targeted goals and the student who lacks discipline may find it uneasy to excel in his academic pursuit.

Observations have revealed that, rarely will you hear of a school known for indiscipline mentioned among the top performing schools when results are released. On the other hand, schools which are known to perform

excellently are equally known for being some of the most disciplined schools. The maintenance of discipline in a school depends on how effective the set rules and regulations are. Students should be aware of the consequences of breach of school rules and staff should ensure that school rules are enforced to the letter. Determining rules and consequences, teaching them to students and outlining the benefits of working within them, is a critical up-front investment. If there is a doubt about expectations for behaviour in the classroom, students may develop their own patterns of behaviour. As a wise teacher once said, if you don't have a plan for your students, they will have a plan for you (Sithole, 2008).

University admission criteria are one of the key indicators of academic achievement. The purpose of admission process is to select best candidates for the particular program, who will complete the program successfully. Thus rigorous admission criteria can predict academic performance, decrease failure rate and successful completion of the program. Admission criteria in university constitute the cognitive (intellectual) factors which can predict the academic performance. Criteria for admission into university include aptitude tests, previous academic achievement and admission test (Brown, 2011).

The university organization has the sole responsibility of managing its internal challenges, admission processes inclusive (FGN cited in Koko, 2015) but recent events has shown admission interference policies by both internal and external forces to the management of universities in Nigeria. The implication of this is that factors influencing university admission in Nigeria has become both internal and external in nature. From the external level, the Federal government regulate activities of the University through the National Universities Commission (NUC), a body saddled with the responsibility of coordinating University programmes in the country and the Joint Admission and Matriculation Board (JAMB) for admission, while from the internal perspective, the NUC admission policy (1999) predominately reserved 10% of the admission to the discretion of the university management.

The Federal government of Nigeria approved admission guideline through the National Universities Commission (NUC,1999) with special consideration to federal character policy stipulates that 45% should be based on merit, that is those that score very high marks in JAMB and WAEC which are to be given priority placement into their choice of universities and courses; 25% should be for

catchment areas consideration; 20% for educational disadvantaged states and 10% to the discretion of the vice chancellor and the university.

### **Statement of the Problem**

The poor academic achievement of students in most of Nigerian universities has been attributed to poor secondary school background, admission criteria, lack of goal and institutional commitment and students and staff indiscipline, while the university's negligence attitude in ensuring compliance with school rules and regulations, pave ways for gross misconducts which affects learning and results to poor academic achievement.

The current situation in Nigeria University system has been hit by a wave of indiscipline among students, unnecessary protest, bullying, and arson cases in universities, increase alcoholism and improper dressing. In some universities today students are habitual late comers contrary to the university rules and regulations; they leave the campus premises without notice, refuse to do the assignment given to them by their lecturers, are insubordinate to authority, and resist any disciplinary measure taking against them.

In the recent time, the university intra flow system is weakened and the marginal cost of education is increased, students are spending

more than the minimum year to finish their programs, many could not proceed into the next academic session because of poor academic achievement in the previous session, many Nigerian graduates are being rejected by the labour market that they lack employability skills, these and other problems of poor academic achievement could be traced to school discipline and university admission criteria. It is therefore against this backdrop that the study examined the dynamics of school discipline, admission criteria and students' academic achievement in Universities in Oyo State.

### **Objectives of the Study**

The objectives of the study sort to;

1. Examine the relationship between school discipline and students' academic achievement in Universities in Oyo State, Nigeria.
2. Establish the relationship between university admission criteria and students' academic achievement in Universities in Oyo State, Nigeria.
3. Ascertain the composite contributions of school discipline and admission criteria to students' academic achievement in Universities in Oyo State
4. Investigate relative contribution of school discipline and admission criteria on university students' academic achievement

### **Hypotheses**

The following hypotheses were formulated and tested in the study

- a. There is no significant relationship between school discipline and students' academic achievement in Universities in Oyo State?
- b. There is no significant relationship between admission criteria and students' academic achievement in Universities in Oyo State?
- c. There is no composite contribution of school discipline and admission criteria on students' academic achievement in Universities in Oyo State?
- d. There is no relative contribution of school discipline and admission criteria on students' academic achievement in Universities in Oyo State?

### **Methodology**

The study adopted descriptive design of the survey type. The population of the study consist of ten (10) universities in Oyo State with the population of seventy six thousand eight hundred and one (76801) (NUC, 2021). The sample of the study was made up of 496 respondents from seventy six thousand eight hundred and one (76801). Multi stage sampling technique was used in selecting the sample of the study, simple random sampling technique was used to select three

universities out of the 10 universities in Oyo State, a federal, state and private university was selected. A self designed instrument tagged Dynamics of School Discipline, Admission Criteria and Students’ Academic Performance Questionnaire “(DSDACSAPQ)” was used to collect data and it was validated by experts in the field of Educational Management. A reliability of 0.76 was obtained; meanwhile, 489 copies of the questionnaire were eventually retrieved

from the respondents making a total of 98.6% return rate. The data collected were analyzed using Pearson Product Moment Correlation (PPMC) and Multiple Regression. The hypotheses were tested at 0.05 level of significance.

**Testing of Hypotheses**

**Ho1:** There is no significant relationship between school discipline and student academic achievement in Universities in Oyo State

**Table 1: Relationship between School Discipline and Student Academic**

Variable	N	Mean	Std. Dev.	r	P	Remark
School Discipline	489	25.95	2.219	0.263	-0.051	Not Significant
Student Academic Achievement	489	25.62	2.339			

**Source: Field work, 2023**

Table 1 showed the relationship between school discipline and student academic achievement in Universities in Oyo State. The result revealed that there was no significant relationship among the variables (r=0.263, p<0.05). The result shows that status of school discipline has no significant influence on Student Academic

Achievement. Therefore, there was no statistical reason while null hypothesis should be rejected. Therefore, null hypothesis was retained.

**Ho2:** There is no significant relationship between admission criteria and student academic achievement in Universities in Oyo State

**Table 2: Relationship between Admission Criteria and Student Academic Achievement**

Variable	N	Mean	Std. Deviation	r	P	Remark
Admission Criteria	489	12.50	2.377	-0.043	0.344	Not Significant
Students’ Academic Achievement	489	25.62	2.339			

**Source: Field work, 2023**

Table 2 showed the relationship between admission criteria and student academic achievement in Universities in Oyo State. The result revealed that there was a negative not significant relationship between admission criteria and student academic achievement in Universities in Oyo State ( $r = -0.043$ ,  $p < 0.05$ ). The result shows that the standard of admission criteria has no

significant influence the Student Academic Achievement. Therefore, there is no statistical reason while null hypothesis should be rejected. Therefore, null hypothesis was not rejected.

**H<sub>03</sub>:** There is no significant composite contribution of school discipline, admission criteria and student academic achievement in Universities in Oyo State.

**Table 3: Composite Contribution of School Discipline and Admission Criteria to Academic Achievement in Universities**

R	R Square	Adjusted R Square	Std. Error of the Estimate			
.072	.005	.001	2.344			
ANOVA						
Model	Sum of Squares	df	Mean Square	F	Sig.	Remark
Regression	12.289	2	6.295	1.145	.319	NS
Residual	2401.500	487	5.495			
Total	2414.089	489				

**Dependent Variable: Students' Academic Achievement**

**Predictors: (Constant), school discipline, admission criteria**

Table 3 presents the result on the composite contribution of school discipline, admission criteria to student academic achievement in Universities in Oyo State. The result shows various statistics for regression analysis. The R value of 0.072 is an indication that multiple correlations among independent variables and dependent variables are low. The  $R^2 = 0.005$  shows that independent variables accounted for 0.5% of total variance observed in dependent variable (student academic achievement) which implies that

independent variables could explain 0.5% of the changes observed in student academic achievement leaving the remaining 99.5% to the other factors that were not consider in the study. ANOVA Table also shows that independent variables are not reliable predictors of student academic achievement ( $F_{(2, 487)} = 1.145$ ,  $p < 0.005$ ). Therefore, the two independent variables made no significant composite contribution to the student academic achievement in universities in Oyo State.



**H04:** There is no significant relative contribution of school discipline, admission

criteria on student academic achievement in universities in Oyo State.

**Table 4: Relative Contributions of School Discipline and Admission Criteria on Student Academic Achievement in Universities**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	27.843	1.507		18.474	.000
School Discipline	-.061	.050	-.059	-1.220	.226
Admission Criteria	-.052	.048	-.052	-1.083	.281

a. Dependent Variable: Students' Academic Achievement

Table 4 presents the result on the relative contribution of school discipline and admission criteria to student's academic achievement. The result revealed that admission criteria ( $\beta = 0.052$ ,  $t = -1.079$ ,  $p < 0.05$ ) and school discipline ( $\beta = -0.061$ ,  $t = -1.213$ ,  $p < 0.05$ ) to students' academic achievement were not significant. Therefore, hypothesis 4 was not rejected.

**Discussion of the Findings**

The result of hypothesis one revealed that there is no significant relationship between school discipline and student academic achievement in selected universities in Oyo State. The result revealed that there is no significant relationship among the variables ( $r = 0.263$ ,  $p < 0.05$ ). The result shows that status of school discipline has no significant relationship on Student Academic Achievement in Universities in Oyo State.

The result is in line with the work of Gitome et.al (2013), that school discipline has no significant relationship with academic achievement and Njoroge and Nyabuto (2014) which opined that, discipline is not a vital criterion for students' academic achievement. This study further revealed that there is no significant relationship between school discipline and academic achievement of students in the study area which is not in tandem with the study of (Kabandize, 2001) that shows that school discipline has significant relationship with student academic achievement.

The result of hypothesis two revealed that there is a negative not significant relationship between admission criteria and student academic achievement in Universities in Oyo State ( $r = -0.043$ ,  $p < 0.05$ ). The result shows that the standard of admission criteria has no significant relationship on the students'

academic achievement. The study further opined that there is no significant relationship between the two variables which is negating the work of Obioma and Salau (2007) which reported that effectiveness of admission criteria in Nigeria universities, they discovered that the public examinations in Nigeria, including the UTME, have weak positive relationship with students' academic achievement in the universities.

The study revealed that admission policy influences student's academic achievement in terms of discriminatory school fees which in line with the work of Oduwaiye (2011) who reported that consistency of admission criteria has direct impact on student's academic achievement. This is also in line with the work Okpilike (2011) who report of findings revealed that Undergraduates who gained admission through Pre-Degree programme performed significantly better than their counterparts who were admitted through the UTME/PUTME in all courses combined together. The result of this finding also report that there is no significant relationship between admission policy and student academic achievement

The result of hypothesis three revealed that there is no composite contribution of school discipline, admission criteria to students' academic achievement in selected

universities in Oyo State. This is in line with the work of Gitome et.al (2013) that school discipline has no significant relationship with academic achievement. The study negated the findings of Agboola, Adeyemi and Ogbodo (2014) who concluded that there was significant relationship between admission policy and students' retention

The result of hypothesis four revealed that there is no relative contribution of school discipline, admission criteria and student academic achievement in selected universities in Oyo State. The study negated the findings of Kabandize (2001) which showed that school discipline has significant relationship with student academic achievement. The study also negated the findings of Oduwaiye (2011) who reported that consistency of admission criteria has direct impact on student's academic achievement.

### **Conclusion**

The study concluded that school discipline and admission criteria do not have impact of academic achievement of university students in Oyo State.

### **Recommendations**

The study therefore recommended that efforts must be put in place by all the stake holders to foster discipline in various

institutions of learning; government should adopt principle of equal opportunity for all when it comes to admission, irrespective of tribe or location

FINAL DRAFT BJEA VOL 9 No3

REFERENCES

- Agboola, B., Adeyemi, J.K., & Ogbodo, C.M. (2014). Academic Achievement and Admission Policy as correlates of students' retention in Nigeria Federal Universities. *Journal of Education*, 1(8), 324-335
- Brown, L. (2011). An exploratory study of predictors of academic success in a graduate nursing programme. *Masters Thesis*. Available at: <https://scholarworks.gvsu.edu/cgi/viewcontent.cgi?article=1686&content=theses>
- Federal Republic of Nigeria (1982). National Policy on Education. Revised Edition Lagos
- Gitome, J. W, Katola, M. T., & Nyabwari, B. G. (2013). Correlation between Students' Discipline and Performance in Kenya Certificate of Secondary Education. *International Journal of Education and Research*, (1)8, 1 – 10.
- Kabandize, L.I. (2001). *The management of students*. Discipline in secondary schools. Heinemann
- Koko, M.N. (2015). *Teaching business*. Port Harcourt, Nigeria: Harey Publications Company
- National Universities Commission (NUC, 1999). Admission guidelines.
- Njoroge, P.M. & Nyabuto, A.N. (2014). Discipline as a factor in academic performance in Kenya. *Journal of Educational and Social Research*, 4(1), 289-307
- Obima, G & Salau, M. (2007). *Predictive validity of public examinations*. A case study of Nigeria. A paper presented at the 23<sup>rd</sup> Annual Conference of International Association of Education held in Baku, Azerbaijan.
- Oduwaiye, O.R. (2011). *Access and Equity in Nigerian Universities: Challenges and way forward*. Retrieved from [www.unilorin.edu.ng/ejournals/index.php/IJEM/articles/view/129](http://www.unilorin.edu.ng/ejournals/index.php/IJEM/articles/view/129) p.68
- Ojedele, P. & Ilusanya, G. (2006). *Planning and policy of higher education in Nigeria*. In J.B Babalola, A.O. Ayeni, S.O. Adedeji, A, Suleiman, A and Arikewuyo, M.O (eds). *Educational management: thoughts and practice*, Ibadan: Colat Publications
- Okpilike, M.E. (2011). Mode of admission of undergraduates and their academic performance in a Nigerian University. *Pakistan Journal of Social Sciences*, 8, 108-110
- Sithole, S. (2008). The participation of students in democratic school governance. *Unpublished M.Ed Thesis*, University of Kwazulu-Natal

## Guided Inquiry Instruction and its Impact on Biology Students Performance on Ecology Concept

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### ABSTRACT

The study investigated the impact of guided inquiry instruction on biology student's performance on ecology concept. The study is based on the pretest post test experimental and control group design. A total of 180 SSII Biology students were randomly selected from senior secondary schools in Dutsinma, the research was guided by two research hypotheses. Ecology performance test was used as an instrument for data collection. The data obtained were analysed using t-test statistics at 0.5 alpha level, the findings of the study reveals that, there was a significant difference in the performance of SSII senior secondary school students exposed to inquiry based instruction and those taught using lecture method of instruction in favor of the inquiry instruction group this shows that, the findings also reveals that, inquiry instruction of teaching shows no gender difference in learning of ecology concepts in biology this indicated that, both benefited equally from the teaching instruction inquiry instruction. the researcher therefore recommends that federal, state and non-governmental organizations should assist in providing materials required for effective utilization of guided inquiry instruction for senior secondary schools in Dutsinma to enhance their professional skills.

**Keywords:** *Guided Inquiry Instruction*, Biology Students, Ecology Concept, Performance.

### Introduction

Man's impact on the environment is not only alarming, but venomous. This is evident in the report produced by the Millennium Ecosystem Assessment (MA, 2005) that, over the past 50 years, human beings have changed ecosystems more rapidly and extensively than in any comparable period in human history, to a substantial and largely irreversible loss in biodiversity. The degradation of ecosystem services could grow significantly worse during the first half of this century (MA, 2005). The challenge of reversing the

degradation of ecosystem involves significant changes in policies, institutions and practices' that are not currently under way. The possible causes for ecosystem degradation as suggested by MA include illiteracy, mismanagement of ecosystem services, poor policy and negative institutional response. As a panacea to annul the effect of the ecosystem disequilibrium, Environmental Education (EE) was recommended for integration into existing subject curricula at all levels of education in Nigeria (Ukor & Isah, 2015).

Environmental Education is represented as ecology in biological science. Ecology is the scientific study of organisms in relation to their environment. In secondary school curriculum, ecology is an aspect of biology divided into three themes across the entire curriculum. The essence of teaching ecology in secondary schools is to enable students demonstrate Sufficient knowledge of the concepts of the interdependence and unity of life; account for continuity of life through reorganization, and for students to be able to apply biological principles and concepts to everyday life, especially to matters affecting individual, society, the environment, community health and the economy. This may account for the reason the unit of ecology in secondary school biology contributes to significant measure to students' understanding of this interdependence of life, and is therefore seen as an important aspect of the Environmental Education (Ukor & Isah, 2015). Ecology creates the opportunity for students to explore ecological issues and human activities affecting the environment (Nwagbo & Obickowe, 2010). The knowledge of ecology can help to solve problems such as poor environmental attitude, over-population, resources depletion, pollution and other forms of technological impact on the environment (Carrier, Thomson & Thailin 2013). An

efficient understanding of ecological issues and human activities affecting the environment require higher order critical thinking and reasoning skills (Suarez, 2011). Most of the teaching methods employed in teaching ecology in secondary schools tend to foster students' performance in cognitive test alone ignoring other relevant domains such as psychomotive and affective behaviours, problem solving skills or science process skills of the student. This weakness in classroom instruction necessitates the search for more effective instructional technique that will foster the students' learning domains simultaneously.

Ever since the United State of Soviet Russia (USSR) successfully launched the satellite "sputnik" in 1957, many science associations emerged and there were science reform movements all over the world. The contemporary science reform movement lay emphasis on inquiries in science teaching and students should be taught science by means of inquiry (Duran & Dikme, 2016). Inquiry-Based Instruction (IBI) is a method of teaching where the learner seeks to discover and create answers to recognized problems through procedure of making a diligent search (Bello, 2018). In inquiry situation students learn not only concept but also self-direction, responsibility, social interaction, assimilate

and accommodate information (Bello, 2018). IBI is a student-centered approach that fosters students' motivation to learn as well as decision-making and problem-solving skills independently improved (Metwally & Ebrahim, 2017). According to Ryan and St-Laurent (2017), teaching through inquiry helps teachers to facilitate students' learning by providing a variety of tools, resources, and experiences that enable learners to investigate, reflect, and rigorously discuss potential solutions to their own questions. Teaching all students science and cultivating them to be scientifically literate citizens through inquiry-based curriculum are the goals for many national science curriculum reforms around the world (Tuan et al., 2005).

There are three types of IBI, namely: structured IBI, open IBI and guided IBI. The structured IBI is the traditional or teacher-centered inquiry method where the teacher provides fairly structured procedures for the inquiry activity, and students carry out the investigations. The open inquiry is purely student-centered which requires little or no teacher's intervention and allows the students to work in groups and plan all phases of their investigations. The guided IBI involves students to carry out activities under the guidance and direction of the teacher. According to Bello (2018), guided IBI falls

in the middle of the structured IBI and open IBI because it involves students being given topics and materials while the students develop methods to find answers to the problem given to them. In this study, the guided IBI will be used as treatment.

### **Objective of the Study**

1. To examine the impact of guided inquiry instruction on biology students' performance in ecology concept.
2. To find out the gender difference in the performance of biology students taught ecology concept using guided inquiry and lecture method of instruction.

### **Hypotheses**

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

**H<sub>01</sub>:** There is no significant difference in the performance of biology students taught ecology concept using guided inquiry instruction and those taught using lecture method.

**H<sub>02</sub>:** There is no significant difference between male and female biology students' performance taught ecology concept using guided inquiry instruction and lecture method of instruction.

### **Methodology**

The study was conducted using quasi-experimental control pretest and post-test group design comprising of two groups; one experimental and the other control both

experimental (E1) and Control (E2) were pre-tested (O1 and O3). The pre-test was administered to determine the equivalence of performance of students while the post-test was administered to determine the level of academic performance of students after the treatment. The experimental group were given experimental treatment (X) guided inquiry instruction to be precise after the pre-test, while the control group received no treatment (X0). Both groups were subjected to a post-test (O2 and O4) respectively. The population of the study

comprises the entire SSII students from Dutsinma Senior Secondary Schools Katsina, a total number of 180 123 males and 57 females. Hence the choice of SSII were believe to be academically more stable. Purposive random sampling was employed to select two schools from the population schools, experimental groups 35 students were randomly selected and control group 35 students were been selected the researcher ensures each sample constitute 50% of each gender to take care of gender bias.

**Table 1: Sample size of the study**

S/N	Groups	Schools	No of students		Total
			Male	Female	
1	Experimental	GSSS Kurfi	17	16	35
2	Control	GSS Dutsinma	16	17	35

The instrument used for this study is ecology performance test (EPT) which was administered to both experimental and control groups after 4 weeks of treatment, the instrument carried topics on ecology that comprises of 25 multiple choice objective questions developed by the researcher validated and pilot tested with reliability coefficient of 0.63. Data collected were analyzed using t-test to test

the null hypothesis at alpha level of 0.05 significance for accepting or rejecting the null hypothesis.

**Results**

*H<sub>01</sub>*: There is no significant difference in the performance of biology students taught ecology concept using guided inquiry instruction and those taught using lecture method.

**Table 2: t-test sample of post test scores of biology student's in experimental and control groups.**

Variables	N	Mean	SD	SE	t-value	df	P
Experimental group	70	30.00	3.32	0.42	11.59	98	0.001
Control group	70	16.30	3.50	0.40			

P<0.05

The result from the table shows that the calculated t-value was 11.59, df is 98 and P is 0.001 which is below the P critical 0.05

this indicated that there is significant difference between biology students performance in ecology concept in



experimental and control group, therefore the null hypothesis which says that there is no significant difference in the performance of biology students taught ecology concept using inquiry instruction and those taught using lecture method considered rejected.

Variables	N	Mean	SD	SE	t-value	df	P
Male Score	70	17.28	3.40	0.48	6.48	98	1.98
Female Score	70	21.56	3.27	0.45			

$P > 0.05$

The result shows that the calculated t-value is 6.4 and P is 1.98 which is greater than the P-critical 0.05. This indicated that there is no significance difference between male and female biology students performance exposed to inquiry instruction method; therefore the null hypothesis is accepted hence inquiry instruction approach is gender friendly.

### Discussion

From the findings in table 2&3 the analysis shows that, there was significant difference in the performance of SSII senior secondary school students exposed to inquiry based instruction and those taught using lecture method of instruction in favor of the inquiry instruction group this shows that, inquiry instruction appears to be more effective than lecture method in teaching and learning ecology concept (Udoh, 2022). The findings also reveals that, inquiry instruction of teaching shows no gender difference in learning of ecology concepts in biology this indicated both benefited

**H<sub>02</sub>:** There is no significant difference between male and female biology students' performance taught ecology concept using guided inquiry instruction and lecture method of instruction.

equally from the teaching inquiry instruction (Odagboyi 2021).

### Conclusion

Based on the findings of this study, it is concluded that the use of appropriate teaching instruction such as (inquiry based instruction in teaching and learning of biology tends to enhance students performance effectively. Therefore its full implementation could empower learning of ecology concepts of biology at all level of education.

### Recommendations

1. Federal, state and non-governmental organizations should assist in providing materials required for effective utilization of inquiry instruction.
2. Instructors should be trained through workshop/seminars on how to use inquiry instruction in teaching and learning of biology.
3. Educators should strive to employ new recent innovative method like inquiry to enhance their professional skills.

## REFERENCES

- Bello, M. (2018). Effects of Inquiry and Lecture Methods of Teaching on Students Academic Performance and Retention Ability Among N.C.E 1 Chemistry Students of Federal College of Education. *An Unpublished MSc. Dissertation*, Ahmadu Bello University Zaria.
- Carrier, S. J., Thomson, M. M., & Tugurian L. P. (2013). Science outdoor and in: elementary students' science knowledge, environmental attitudes and outdoor comfort levels in. *Online NARST Annual Conference Abstracts*. Retrieved on 10<sup>th</sup> Feb, 2020 from [www.narst.com/abstract/pdf/carrier-thomson](http://www.narst.com/abstract/pdf/carrier-thomson)
- Duran, M., & Dokme, I. (2016). The effect of inquiry-based learning approach on student's critical-thinking skills. *Eurasia Journal of Mathematics, Science and Technology Education*, 12(12), 2887-2908. <https://doi.org/10.12973/eurasia.2016.02311a>
- Metwally, N. S., & Ebrahim, R. M. (2017). Effect of Inquiry-Based Learning versus Conventional Approach on Maternity Nursing Students' Satisfaction, Motivation and Achievement. Retrieved from <http://doi.org/10.5829/idosi.wjns.2017.33.44>
- Millennium Ecosystem Assessment, (2005). *Ecosystem and human well-being: synthesis*. Washington, DC: Island Press.
- Nwagbo, C., & Obiekwe, C. (2010). Effect of constructivist instructional approach on students' achievement in basic ecological concepts in biology. *Journal of Science Teachers Association of Nigeria*, 45(1&2), 26-35.
- Odagboyi, I. & Amedu, Ph.d. (2021). The Effect of Gender on the Academic Performance of Students in Biology: *Journal of Education and Practice*. 6(7), 224-228.
- Ryan, T. G., & St-Laurent, M. (2017). Inquiry-based learning: Observations and outcomes. *Journal of Elementary Education*, 6(1), 1-22.
- Suarez, M. L. (2011). The relationship between inquiry-based science instruction and student achievement. *ProQuest Dissertations and Theses*, 83. Retrieved from <https://search.proquest.com/docview/896590898?accountid=142908>
- Tuan, H. L., Chin, C. C., Tsai, C. C., & Cheng, S. F. (2005). Investigating the effectiveness of inquiry instruction on the motivation of different learning styles students. *International Journal of Science and Mathematics Education*, 3(4), 541-566.
- Udoh, F.S. (2022). The Relationship Between Teachers Instructional Behaviour and Students' Academic Achievement. *International Journal of Academic Research*, 3(8), 129-139.
- Ukor, D. D. & Isah, S. A. (2015). Effect of fieldtrip instructional strategy on senior secondary one students' interest and achievement in ecological concept. *International Journal of Research in Science, Technology and Mathematics Education*, 3(1), 1-11.

**Impact of Audiovisual Instructional Resources on Senior Secondary School Students Academic Performance in Algebra in Kano Metropolis, Nigeria**

By

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**ABSTRACT**

The study investigated audiovisual Instructional Resources on Senior Secondary School Students Academic Performance in Algebra in Kano Metropolis, Nigeria. Two research questions and two hypotheses were formulated and tested at  $\alpha = 0.05$  level of significances. The study adopted quasi experimental research design. Purposive and simple random techniques were used for the study and sample size was 159 SS two students made of 71 and 88 in experimental and control groups respectively. Algebra Performance Test (APT) was used for data collection. The APT was validated by experts and subjected to pilot testing in which reliability coefficient of 0.94 was obtained using Pearson Product Moment Correlation (PPMC). The research questions were answered using the mean and standard deviation while the Null hypotheses were analyzed using Independent t-test. The result of the analysis showed that the experimental group AVIR performed significantly better than their counterpart in the control group (TLM). The study also revealed that there was a significant difference between male and female students taught algebra with (AVIR). Based on the findings of this study it was recommended among others that, teacher training institutions such as universities, colleges of education should ensure that pre- service teachers are trained on the use of AVIR in teaching mathematics.

**Keywords:** *Audiovisual instructional resources, performance, algebra, gender.*

**Introduction**

Mathematics is one of the most important school subjects in the curriculum worldwide. It is a subject that has direct relationship with other subjects, particularly sciences and technology. Equally, in Nigeria, Mathematics occupies a central place in educational system. The importance of Mathematics to nation building has led the federal government of Nigeria to make mathematics a core subject to be offered by students at all levels of education in Nigeria as stipulated in

National Policy on Education (FRN, 2013). It is also a subject that cuts across primary and secondary school as a compulsory subject and a compulsory subject made for entry requirement into university education. One is expected to get at least a minimum of credit in Mathematics in order to qualify him/her to study any course in a Nigerian University. However, mathematics has always been taught in traditional way in every institution of teaching (Williams, 2004). This implies

that mathematics has been taught manually with the teacher illustrating on the blackboard through diagrams and symbols using chalk, textbook among other while the students copy the problem solved in their note books. The teacher then explains the diagrams and symbols to the students, making the learning process teacher centered. Today, the teaching of mathematics has taken a different turn with the introduction of technology into the mathematics classroom. But the extent to which this innovation impacts on students' interest is the focus of this study.

Algebra is one of the branches of mathematics and a subject taught in Nigeria Secondary School. Algebra as described by Adeniji and Ibrahim (2015), is a branch of Mathematics in which symbols, usually letters of alphabets, represent numbers or numbers of a specific set and are used to represent quantities and to express general relationship that hold for all numbers of a set. Vast majority of students perform poorly in mathematics annually especially in algebra (Achor, Imoko & Jimin, 2012)

Audio visual resources are those instructional materials that are used by the teacher and students in the classroom to encourage teaching and learning process. In educational literature more than few terms can be used,

alternatively, for audio-visual resources i.e. audio-visual aids, Educational technology, audio-video media, and instructional technology, learning resources, audio-video equipment's, communication technology and educational media (Selvi, 2007). According to Anzaku (2011), the term audiovisual materials are commonly used to refer to those instructional materials that may be used to convey meaning without complete dependence upon verbal symbols or language. Anzaku further stated that audio-visual materials include materials and equipment alike, that materials are considered to be system, or body of content of potential value when put to work, while equipment or instructions, often referred to as hardware, components, are the means of presenting such content. Moreover, according to the multimedia principles, words and graphics are more conducive to learning, rather than just text or graphics alone (Clark, 2011), in the spatial contiguity principle, people learn better when corresponding words and pictures are presented near rather than far from each other on the page or screen, in temporal contiguity principle, people learn better when corresponding words and pictures are presented simultaneously rather than successively (Mayer, 2005), educational

videos have been observed to facilitate thinking and problem solving (Mayer, 1990), increase motivation, enhance learning experience (Kearney, 2002) and assist students achieve mastery learning (Galbraith, 2004).

The studies on effects of audiovisual instructional resources on students' performance were investigated by Ofili and Okore (2012) in Biology, Sani (2012) in Chemistry, Igbojinweakwu (2013) in mathematics and Akinwole (2015) in Speaking Skill reported that students taught using video instructional package produced better learning outcome than their counterparts taught with conventional method. Also, Yunusa (2016) reported that students taught English Literature using video instructional package outperformed their counterparts that were taught the same concept using the conventional method. Similarly, Audu (2016) reported that instructional video enhanced the academic performance of students taught Social Studies at junior secondary school level. In contrast, Gambari, Yaki, Gana and Ughovwa (2014) reported that students in conventional teaching method had better retention than other groups (Animation + Narration; Animation + On-screen Text; Animation + Narration + On-screen Text).

Academic performance refers to the sum total of a person after a period of examination or test. A number of research studies have investigated and documented the major factors which contributed to secondary school poor performance in their study of secondary school Mathematics in Nigeria. One of such researches includes that of Gambari (2010) who stressed that most teachers of mathematics at secondary levels do not use teaching aids. He added that in most cases, mathematics teachers stick to only lecture method by doing most talk and leave the students as passive listeners. Also include poor teaching and learning environment and lack of modern equipment (Adegoke, 2013).

Gender has been identified as one of the factors influencing students' performance in mathematics and sciences at senior secondary school level. Obinna and Nnena (2008), Dopemu (2011) and Akinwole (2015) reported no significant difference in the mean achievement scores between males and females students taught Social studies, English, and Integrated science using audiovisual instruction. Similarly, Gambari, Ojiaku, Fagbemi, Wushishi, and Ughovwa (2016) found no difference in the achievement of male and female Biology students exposed using Picture + Audio,

Picture + Text; Picture + Audio + Text Packages. However, Aninweze (2014) reported that the male students achieved significantly higher scores than the female students when taught with Videotaped instructions (VTI). Gambari, Tajudeen, Daramola and Jimoh (2016) found significant difference on the post-test mean scores of male and female students taught mathematics using Text + Animation + Narration (TAN) Video Type Instructional . In contrast, Audu (2016) reported that female students outperformed their male counterparts after exposing them to instructional Video Package in social studies class at junior secondary school level. Obviously, there is a strong association between gender and academic performance in mathematics education. The likely influence of gender on students' academic performance in mathematics when taught using Audiovisual instructional Resources was examined by this study.

### **Objective of the Study**

The main objective of the study was to examine the effects of audiovisual instructional resources on performance and retention in algebraic concepts. Specifically, the study sought to:

1. investigate the impact of audiovisual Instructional Resources (AVIR) and Traditional Lecture Method (TLM) on senior secondary school students' performance in algebraic concepts.
2. determine the impact of AVIR on academic performance of male and female students in algebraic concepts.

### **Research Questions**

The following research questions are formulated to guide the study:

1. What is the difference between the mean performance scores of senior secondary school students taught algebraic concept using Audiovisual Instructional Resources (AVIR) and their counterparts in Traditional Lecture Method (TLM)?
2. Would there be any difference between the mean performance scores of male and female students when taught algebraic concepts using AVIR?

### **Null Hypotheses**

The following null hypotheses were tested at  $P \leq 0.05$  levels of significance:

H<sub>01</sub>: There is no significant difference among the mean performance scores of senior secondary school students exposed Audio- visual Instructional Resources

(AVIR) and those exposed the same concept using Traditional Lecture Method (TLM).

H<sub>02</sub>: There is no significant difference between the mean performance score of male and female students taught algebraic concepts using AVIR.

### **Methodology**

The research design for the study was quasi-experimental control group design adopting pretest, post-test and post posttest. The population for the study covered all the Senior Secondary Two (SS II) students in Municipal and Nasarawa Education Zone of Kano state Metropolitan totaling 21,397. From this figure, 11,595 were male while 9,438 were female of average age of 17 years plus. Purposive sampling was used to select two schools (one each for experimental and control groups respectively) and simple random for the allocation of experimental classes. Sample size for this study was 159 senior secondary one students comprised 82 male and 77 female selected from two schools. Seventy one (31 male and 40 female) students participated in the experimental group while eighty eight (51 male and 37 female) students were used in the control group.

Algebra Performance test (APT) was meant to measure the Performance of students in algebra. It was adapted from New General

Mathematics for Senior Secondary School Two and West African Examination Council (WAEC) past questions because of the standardization of the questions. It consists of two sections: section A and B, Section A was for students' Bio data information and section B was also made up of fifty objective questions and was validated by two senior lecturers with a minimum of PhD in Mathematics Education in the Department of Science and Technology Education, Bayero University Kano, and also the AVIR (videos package) were validated by other two individual experts (one senior lecturer and one professor) in the field of Educational Technology from the Department of Science and Technology Education, Bayero University Kano. They validated the packages (videos) in terms of their suitability for instruction, simplicity, quality video and good sound; content, adequate covering of the sub-topics, clarity and suitability of the package for the level of the students they were meant for.

The reliability coefficient of APT was computed using Pearson Product Moment Correlation (PPMC) and reliability of 0.94 was obtained.

Data collected were subjected to both descriptive and inferential statistics. Research questions were answered with the

use of mean and standard deviation. The hypotheses were tested using Independent t-test and were tested at  $\alpha = 0.05$  level of significances.

**Data Presentation**

The performance of the students in algebra using Audiovisual Instructional Resources (AVIR) and Traditional Lecture Method (TLM) were analyzed by the descriptive statistics presented in Table 1

**Table 1: Mean ( $\bar{X}$ ) and Standard Deviation (SD) of Students' Performance Scores in AVIR and TLM Groups**

Methods	N	$\bar{X}$	S.D	Mean Difference
Exp. Group (AVIR)	71	41.24	9.092	
Control Group (TLM)	88	36.20	7.144	5.035

Table 1 highlighted the means and standard deviation of the experimental and control groups with 41.24, 9.092 and 36.20, 7.144 respectively. This revealed that mean of the experimental group was higher than that of control group with mean difference of 5.035

Data on Performance in algebraic concepts using AVIR by gender was analyzed with descriptive statistics of mean and standard deviation as shown in Table 2

**Table 2: Mean ( $\bar{X}$ ) and Standard Deviation (SD) of Male and Female Performance Scores in AVIR Group**

Treatment	Gender	N	$\bar{X}$	SD	Mean Difference
Exp. Group(AIIR)	Male	31	48.45	7.928	12.80
	Female	40	34.65	5.162	

Table 2 revealed that the mean scores of male and female in the experimental Group (AIIR) were 48.45 and 34.65 respectively with the mean difference of 12.80. The male students achieved higher than female students.

**H<sub>01</sub>:** There is no significant difference among the mean performance scores of senior secondary school students exposed to Audiovisual Instructional Resources (AVIR) and those taught using Traditional Lecture Method (TLM)

**Analysis**

The following null hypotheses formulated were tested at  $\alpha = 0.05$  level of significances. The analyses of the result were presented as follows

To determine whether there were significant differences in the post-test mean scores of the AVIR and TLM group, data were analyzed using Independent t-test as shown in Table 4.3



**Table 3: t-test Comparison of the Posttest Mean Scores of the Experimental Group (AVIR) and Control Group**

Group	N	Mean	SD	Df	t-value	P-value	Remark
Exp. Group (AVIR)	71	41.24	7.928	131	3.812	0.001	Sig.
Control	88	36.20	5.162				

\*Significant at  $P \leq 0.05$

Table 3 revealed that the calculated t-value ( $t=3.812$ ) was significant at  $\alpha = 0.05$ . Similarly, P-value (0.001)  $<0.05$ . Therefore  $H_{01}$  was rejected and it was concluded that, there was significant difference between the mean scores of students exposed to Audiovisual Instructional Resources and Traditional Lecture Method.

**H<sub>02</sub>: There is no significant difference between the mean performance scores of**

**male and female students taught Algebraic concept using AVIR**

To test the hypothesis two, the posttest performance means scores of male and female students in the experimental group (AVIR) were analyzed using t-test statistics. The result of the t-test analysis is shown in Table 4

**Table 4.4: t-test Comparison of the Posttest Mean Scores of Male and Female Students of the Experimental Group (AVIR)**

Group	N	Mean	SD	Df	t-value	P-value	Remark
Male	31	48.45	7.928	49	7.800	0.001	Sig.
Female	40	34.65	5.162				

\*Significant at  $P \leq 0.05$

The result in Table 4 revealed that the calculated t-value ( $t=7.800$ ) was not significant at  $\alpha = 0.05$  similarly, the p-value (0.001)  $<0.05$ . Hence  $H_{02}$  was rejected and it was concluded that there was a significant difference between the mean scores of male and female students exposed to Audiovisual Instructional Resources (AVIR). The result of the experiment was in favor of the male subject.

**Discussion of Findings**

The results of the analyses of hypothesis one revealed significant difference in academic performance of students taught algebraic concepts using AVIR and those taught using Traditional Lecture Method (TLM). Which was in favor of those in the experimental group (AVIR). This result agrees with the findings of Igbojinweakwu (2013), who stated that students taught mathematics with Videotaped instruction had higher mean

academic achievement than the control group. These findings also agree with earlier findings of Ofili and Okore (2012) in Biology, Sani (2012) in Chemistry, and Akinwole (2015) in Speaking Skill who reported that students taught using Audiovisual Instructional Resources (video package) produced better learning outcome than their counterparts taught with Traditional Lecture Method.

The Audiovisual group outperformed conventional group perhaps because watching audiovisual context can aid the learners to have a more retentive memory and retrieve them easily when they are needed. This finding can be justified according to dual coding theory which emphasizes on the effect of images on better retention. However, this finding disagrees with that of Gambari, et al. (2014) who reported that students in conventional teaching method had better retention than other groups (Animation + Narration; Animation + On-screen Text; Animation + Narration + On-screen Text).

The results of the analyses related to hypothesis two indicated significant difference in the academic performance of male and female students taught algebraic concepts using AVIR, which was in favor of male students. These findings supported Aninweze (2014) who reported that the male

students achieved significantly higher scores than the female students when taught with VTI. It also agreed with that of Gambari et al. (2016) who revealed that there was significant difference on the post-test mean scores of male and female students taught mathematics using Text + Animation + Narration (TAN) Video Type Instructional package, which was in favor of male students. However, this finding contradicts the findings of Obinna and Nnena (2008), Dopemu (2011) and Akinwole (2015) who reported no significant difference in the mean achievement scores between males and females students taught integrated science, social studies, English and speaking skill using video instruction. This finding varies with the report Aninweze (2014) who reported that male students taught using VTI had higher mean achievement score than their female counterparts. It also contradicts the result of Audu (2016) who found that female students outperformed their male counterparts after exposing them to instructional Video Package in social studies class at junior secondary school level.

### **Conclusion**

Since Traditional Lecture Method (TLM) does little effective in enhancing performance of students in learning mathematics. This present study was able to

investigate that Audiovisual Instructional Resources (AVIR) was effective in enhancing students' performance in learning algebra, based on the empirical evidence presented. Regarding gender, AVIR is gender bias, which means gender has influence on students' academic performance in favor of male students.

**Recommendations**

The following recommendations are made based on the findings of this study:

1. Mathematics teachers should partner with educational technology specialists in producing digital video packages for use in the secondary school.
2. Teacher training institutions such as universities, colleges of education should ensure that pre-service teachers are trained on the use of AVIR in teaching mathematics.

FINAL DRAFT BJEAVOL9NO3

REFERENCES

- Achor, E.E., Imoko, B.I., & Jimin, N. (2012). Improving some Nigeria secondary school students' achievement in geometry: a field report on team teaching. *New York Science Journal*, 5(1), 37-43. Retrieved March 3, 2016 from <http://www.sciencepub.net/newyork/ny0501/0077175ny05013743.pdf>
- Adegoke, B. A. (2013). Modeling the Relationship between Mathematical Reasoning Ability and Mathematics Attainment. *Journal of Educational and Practices*, 4(17), 54-61.
- Adeniji, K.A. & Ibrahim, M.O. (2015). Analysis of Common Errors Among senior Secondary School Students in Algebra in Katsina State. *FUDMA Journal of Science and Education Research*, 1(1), 40-47.
- Akinwale, O .I. (2015). The Effects of Audiovisual Materials in the Teaching and Learning of the Speaking Skill in Junior Secondary Schools Damale College Katsina, Nigeria. *International Journal of Social Science and Humanities Research*, 3(3), 50-58. Retrieved on April 17, 2019 from [www. researchpublish.com](http://www.researchpublish.com)
- Aninweze, C. A. (2014). *Effects of Two Instructional Delivery Approaches on Senior Secondary Schools Students' Achievement and Retention in Biology*. Unpublished M.Ed thesis, Department of Science Education, University of Nigeria, Nsukka.
- Anzaku, F. (2011). Library Experts Speaks on Audiovisual Material. A paper presented at the United Nations Educational, Scientific and Cultural Organization (UNESCO) World Day for Audiovisual Heritage. Lafia.
- Audu, A. A. (2016). *Effect of instructional Video on Academic performance of Social Studies students in Secondary Schools in Katsina State, Nigeria*. Unpublished M.Ed. thesis, ABU Zaria Nigeria
- Clark, R. C., & Mayer, R. E. (2011). *E-Learning and the science of instruction: proven guidelines for consumers and designers of multimedia learning* (3rd ed.) San Francisco, CA: John Wiley & Sons.
- Dopemu, E. A. (2011). Effects of Teaching Listening and Speaking Skills Using Audiovisual Materials on Students' Oral English Performance in Senior Secondary Schools in Kano State. Federal Republic of Nigeria. (2013). *National Policy on Education*. Lagos: NERDC Press.
- Galbraith, J. (2004). Active viewing: and oxymoron in video-based instruction? *Society for Applied Learning Technologies Conference*, designer. [50g.com/docs/Salt\\_2004.pdf](http://50g.com/docs/Salt_2004.pdf)
- Gambari, A. I. (2010). Effect of Instructional Models on the Performance of Junior Secondary School Students in Geometry in Minna, Nigeria. *DELSU Journal of Educational Research and Development*, 9(1), 54 – 65.
- Gambari, A., Ojiaku, F. C., Fagbemi, O. P., Wushishi, D. I and Ughovwa, Q. E. (2016). Effects of Three Modes Of Digital Video Instructional Packages on Senior Secondary School Biology Students' Achievement And Retention in Abuja, Nigeria. *International Journal of Applied Biological Research (IJABR)*, 7(2), 164 – 184.
- Gambari, A. I., Tajudeen, S.A., Daramola, F.O., & Jimoh, M. A. (2016). Effects of Video Instructional Packages on

- Achievement of Senior Secondary School Students in Mathematics in Minna, Nigeria. *Journal of Science, Technology & Education (JOSTE)*, 4 (2), 179-196.
- Gambari, A. I., Yaki A.A., Gana E. S., & Ughovwa Q. E. (2014). Improving Secondary School Students' Achievement and Retention in Biology Through Video-based Multimedia Instruction. *A Journal of Scholarly Teaching*, 9, 78–91.
- Igbojinweakwu, P.C. (2013). Impact of Videotaped Instruction on Learning of Mathematics at Senior Secondary School Level. *Journal of pristine*, 7(1), 1-9.
- Ilobeneke, S. C. (2015). *Effect of audio and video instructional packages on achievements of secondary school students in Igbo vowels and consonantal Sounds in Minna, Nigeria*. Unpublished M.Tech. Thesis, Federal University of Technology, Minna.
- Kearney, M. (2002). Using digital video to enhance authentic technology-mediated learning in science classrooms. Paper presented at the Australian Computers in Education Conference, Hobart. Available: <http://www.tasite.tas.edu.au/acec2002>
- Mayer, R.E. (2005). Principles for managing essential processing in multimedia learning. Coherence, signalling, redundancy, spatial contiguity and temporal contiguity principles.
- Mayer, R., Gallini, J (1990). When is an illustration worth ten thousand words? *Journal of Educational Psychology*, 82(6) (715-726) Available: <http://www.uq.edu.au/teach/video-teach-learn/ped-benefits.html>
- Obinna, O. K. & Nnenna, C. I. (2008). Effects of videotape instruction on primary school pupils achievement in social studies. Retrieved 21, January, 2011 from [www.wkii.edu.org/images/44/king-obinna.ordor.pdf](http://www.wkii.edu.org/images/44/king-obinna.ordor.pdf)
- Ofili, G. O. & Okore, A. (2012). Effect of video compact disc instructional package on academic performance of senior secondary school biology students in Uyo Local Government area of Akwa-Ibom State. *Journal of Science, Mathematics, Technology and Education*, 8(2), 270- 284.
- Sani, I. D. (2012). Effect of digital video instruction on senior secondary school students achievement in chemistry in Minna, Nigeria. *Journal of Science, Technology, Mathematics and Education (JOSTMED)*, 8(1), 244-252. Retrieved on June 2, 2018 from <http://www.jostmed.com>
- Selvi M. S. (2007). Audio Visual Aids in Education. Retrieved April 12, 2012, from <http://nursingempower.blogspot.com/2007/10/audio-visual-aidsin-education.html>
- Williams, C. P. (2004). Promoting the teaching of mathematics through the use of instructional communication technology and development, *African Journal of Mathematics and Computer Science Research*, 17(1), 64-73.
- Yunusa, S. A. (2016). *Effect of video instruction on academic performance of secondary school students in English literature in Niger State, Nigeria*. Unpublished M.Ed thesis, Ahmadu Bello University Zaria Nigeria.

**Factors Militating Against Effective Management of Teaching in Secondary Schools (A Review)**

By

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**ABSTRACT**

This review essay x-rayed major factors that militate against effective management of teaching in secondary education in Nigeria. Major roles of the school principals were highlighted, effective Administration of secondary schools in Nigeria; factors militating against effective teaching include poor funding, wrong appointment of school administrators etc. The review essay is an extrapolation of a tripartite classification of basic concerns in secondary education in Nigeria. The consequence of the main causes of the problems in secondary education in Nigeria is largely student-specific with a far-reaching implication to the future and general well-being of the society. The student-specific concerns are presented and discussed from guidance and counselling perspective. A case is finally made for additional official attention to student concerns in order to be able to achieve the set objectives of secondary education.

**Keywords:** *Militating*, Secondary school, Nigeria, Education.

**Introduction**

Secondary education is the education that children receive after the primary education and it is the education which prepares children for the tertiary education. It prepares children for job and for admission into tertiary level of education. Secondary education is a very important sector in the educational system because of its laudable objectives in moulding sound citizens. The achievement of any educational objective is sometimes dependent on the effectiveness of the school Management. This is due to the fact that when the head is faulty, all other segments of the system will also be faulty hence, the saying "garbage in and garbage out". It is generally known that

when the school environment is conducive, effective teaching, school management and learning will be achieved with little effort, but when the climate is not favourable as well as the management, there is the tendency that educational efforts will be hampered. Considering the fact that school principals play significant roles in enhancing the achievement of educational goals, the functions in the changing environment must be appreciated. The responsibilities of school administrators as establishing and implementing an implicit or explicit mission and administration that result to:

1. Supporting the teaching and learning process
2. Creating a climate for high quality research
3. Managing the academic personnel
4. Co-ordinating students' affairs

These activities highlight the importance of conducive environment which will ensure peace and harmony amongst members of the school community. The changes that are imminent in any school setting are influenced by diverse factors, for instance, when there is instability in a school as a result of unstable government, disagreement between the leaders and the led, or even strikes by workers or students to press for one demand or the other. This situation in the school is challenging and would hamper the effectiveness of the school administration. It is on this premise that the writer will x-ray the factors hindering the effective management of teaching in secondary school education in Nigeria and proffer solutions on how secondary schools can be effectively administered for the achievement of the goals of secondary education.

The problems in the educational sector in Nigeria have their roots in what may be described as a complicated mixture of economic, political, and social situations. A civil war in the late 1960s and about three decades of political instability all have their

roles in the deteriorating conditions of education. Poorly conceived programmes and/or poor implementation of well-planned programmes coupled with worldwide drop in oil prices in the 1980s are the major culprits in the crippling economic conditions, (Ajaja, 2002). In spite of these facts many attempts have been made to use education for the amelioration of the economic conditions and to address political instability for the benefit of citizens and the nation, which is to make education more relevant to the needs and aspirations of the individual and the society. For example, in 1973 there was this famous seminar under the chairmanship of Chief S. O. Adebayo which deliberated on all aspects of education with a view to evolving a national policy on education. There were also about three different revisions of the national policy on education which evolved as a result of the 1973 seminar, in 1981, 1989 and 2004.

In 2006 a 10-year education development plan was worked. In 2009 again a roadmap for educational development was also conceptualized and launched. In spite of these and many other similar attempts as exemplified in changes and reforms from 1977 to date, Nigeria's educational system is still bedevilled by a myriad of problems. The causes of such problems are multifaceted but, accusing fingers are

mostly pointing at the worsening funding profile. Others see the problems as basically in the enrolment derive, high rate of dropout and underachievement. These are really part of the main problems bedevilling secondary education in Nigeria. But also they are problems to do mostly with the government, the system and the society. Most often than not we tend to pay little or no attention to the other side of the problem, which is viewing the problem from students' angle. Problems with secondary education in Nigeria are multifaceted as mentioned earlier and therefore, deserve a holistic approach. That is a complete system review rather than any analysis or dissection of constituent parts. Any approach to the problem of education in Nigeria may not be holistic without paying specific attention to students-specific concerns.

Secondary education is of six-year duration and given in two stages, junior and senior levels of three years each. Secondary education completes the provision of basic education that began at the primary level, and aims at laying the foundations for lifelong learning and human development, by offering more subject- or skill-oriented instruction. The introduction of universal basic education (UBE) in 1999 as a follow up to the 1976 universal free primary education (UPE) was also an important

educational milestone which became a major focus of government in line with its drive to reform the sector.

In 2006 government has also worked out a 10-year education development plan as part of the drive to reform the education sector.

In 2009 a roadmap for the revitalization of the education sector was conceptualized and introduced. The roadmap was introduced mainly because of the sorry state in which the education sector found itself. The quality of education had declined so much that many of the graduates produced by the nation's tertiary institutions were simply unemployable. Teachers' morale was also at an all-time low. The sector remains grossly under-funded and basic school necessities like laboratories and well-equipped libraries were simply not there. The roadmap had four components: Access and Equity, Quality Assurance, Technical and Vocational Education and Training and Funding. The document outlines improvement and turn-around strategies for each of the sub sectors of education namely basic, post-basic and tertiary. The roadmap seemed really divorced from the general problems of underdevelopment in the society. The major problems identified with the sector are funding, access and quality were more of a typical characteristic of underdevelopment. Early in 2012 a four-



year strategic plan for the education sector was unveiled by the Minister of Education, Professor Ruqayyatu Ahmad Rufa'i which would hopefully transform it by 2015.

The main goal of the Strategic Plan is that by 2015, there would be significant changes in the state of the educational institutions as well as the quality of the products. The Plan identified and classified the challenges and concerns in the education system into some focal areas as follows: access and equity; standard and quality assurance; strengthening institutional management of education; teacher education and development; technical and vocational education and training; funding partnerships; resource mobilization and utilization. The Plan had also evolved some turn around strategies for meaningful achievement of the focal areas. Timelines as well as those responsible for their implementation were also clearly identified.

### **Objectives of the Review Essay**

1. To recognize the factors that partake in the problem of teaching in secondary school.
2. To suggest the approaches that could cure the difficulty of teaching in secondary school.

### **The Challenges in the Management of Secondary Education in Nigeria**

Truthfully, secondary education in Nigeria had undergone series of transformations and changes partly as a result of changes in the leadership in the country. These changes have passed through varying degrees of problems in the process of planning and implementation stages. The problems facing effective teaching in Secondary Education in Nigeria are x-rayed below.

#### **1. Poor Primary Education**

Primary education according to Federal Government of Nigeria (2004) is a type of education given to children between the ages of 6 to 11 years. The major aims of primary education are to prepare the child to be able to read and write and for secondary education. Mbayuav (2012) sees primary education as the recruitment ground for secondary education, and when the section is weak, it will affect the secondary education in the country. The products of the primary education in the country recently have been very poor; hence the product cannot prepare adequate grounds for quality production of secondary education products. Thus, a house built on a weak foundation is bound to fall. The poor and weak products of our primary education which form the foundation of our secondary education makes it very difficult

to miraculously change these weak primary school products, hence "garbage in and garbage out". The secondary school administrators find it very difficult to effectively manage this set of students for higher productivity.

## **2. Appointment of School Principals**

Appointment of school principals in Nigeria has been politicized. The appointment of principals in Nigeria at times is being influenced by the Government in power, hence relatives, friends and well-wishers who may not be qualified to head the schools are appointed to the detriment of the effective administration of the schools which invariably would affect achievement of the objectives of secondary education. The appointment can be seen as a misfit. The continuation of appointing unqualified school administrators in Nigeria will practically hamper effective school administration (Nwiyi, 2003).

## **3. Poor Funding of Secondary Education**

Mbayuav (2012) opined that the gross under funding of the educational sector in Nigeria is general, and the neglect of the maintenance of the physical facilities, instructional and living conditions have deteriorated in these schools, classroom blocks, libraries and laboratories are nothing to write home about. According to Nwiyi (2012) adequate funding is very

important in education as there are many compelling education needs like purchase of equipment, instructional materials, in-service training programme, seminars, workshops and conferences for teachers. These items require adequate funding in order for the system to actualize the millennium Development Goals. Adequate funding will assist the school principals to effectively actualize the goals of secondary education. In the contrary the government's budgetary allocation to the educational sector is grossly inadequate as it is below the United Nations Educational Scientific and Cultural Organizations (UNESCO) recommendation of 26% of the Nation's Annual Budgetary Allocation. This impedes effective administration of secondary education in Nigeria.

## **4. Inadequate Facilities in Schools**

School facilities are material resources that help to facilitate effective teaching and learning in schools. Jaiyeoba and Atanda (2005) in Mbayuav (2012) posited that educational facilities are those things which enable a skilled teacher to achieve a reasonable level of instructional effectiveness that far exceeds what is possible when they are not provided. Ahmed (2003) revealed that in most of the country's secondary schools, teaching and learning take place under uncondusive environment, schools are lacking the basic

materials and this hinders the effective administration of the schools and the fulfilment of educational objectives of secondary education.

#### **5. Examination Malpractice**

Admittedly we have had to contend with examination malpractices at all levels of examination especially in school certificate examinations and there have almost called to question our integrity and the worthiness of some certificates and diplomas inclusive (Mbayuav, 2012). School administrators are faced with this challenge because most teachers in secondary schools that are supposed to assist the school principal are also involved in aiding and abetting examination malpractices. Visits to secondary schools during WAEC/NECO examinations by the writer revealed that teachers now write solutions to examination questions on the chalk boards for students to copy. What a secondary education! This is why many products of secondary schools with good grades in certificate examinations like WAEC/NECO cannot defend their certificates when the need arises. This has affected the performance of these students in tertiary institutions and the general development of the Nigerian economy. This situation is giving the few Godly principals in secondary schools a serious headache in administering their schools.

#### **6. Indiscipline Among Staff/Students**

Indiscipline is an act of negative behaviour or unwanted behaviour which could be exhibited by a student or a teacher/ non teacher in a school setting. Nwakpa (2013) opined that today disciplinary behaviours or unethical behaviours have enveloped all the public schools in Nigeria, and the cause of this cankerworm is not farfetched. Nwakpa (2013) maintained that the high level of indiscipline in our schools has actually brought down the standards of education in Nigeria. Secondary schools in Nigeria are currently faced with the problem of indiscipline which is on the increase. The newspapers are full of reports of unrest, examination malpractices, kidnapping, secret cult activities fighting among the students and staff, drug abuse, rape, dishonesty and so on (Nwiyi and Kalagbor, 2013). Nwakpa (2013) was of the view that there are many indisciplinary behaviours among students and teachers that are confronting the effective running of secondary schools in Nigeria by the school Principals. The most pressing among them are:

- Examination malpractices.
- Lateness
- Absenteeism.
- Poor teaching.
- Poor invigilation of examinations.
- Extortion.

- Poor handling of examination results.
- Sexual immorality.
- Loitering.
- Alcoholism and smoking.
- Cultism etc.

This situation does not guarantee effective teaching and learning and smooth running of secondary schools. This situation possesses great concern to parents, government, teachers, principals and almost all stakeholders in the Secondary Education.

A major Factor that influence teaching in secondary school is in-service training for the teachers. This is a program or training which enriches the skills of the full time worker needed to carry out their normal duties with a view of becoming more efficient on the job. In-service training program that intended to provide updating, improvement, conversion and support to teaching professionals along their careers; the training actions can be drawn by schools, according to the needs of their teachers or simply result from the individual initiative of the teacher (Pereira *et al.*, 2013). Teacher can be referred to as a catalyst that brings about changes in the behaviour of the students/ learners. He/ She plays a central role in the actualization of educational goals and the survival of the educational system (Okecha, 2008). A continuous teacher training is the keys tone

of improvement and transformation in schools, for personal growth and professional development (Abuseji 2007; Okoro 2011). In-service training can be in the form of on-the-job training, workshops, post qualification courses, formal or informal, structured or unstructured (Mohammed, 2006). In-service on the job education create conducive environment for further learning which expose the workers to new development and ideas in their area of study. It could also be refreshing courses which make the professional not to lose grips with their skills, attitude or knowledge. In some cases, the reward for such training usually leads to a new rank or the acquisition of better and higher status; hence, absent of this training affect the teachers in delivery of their duties effectively.

The importance of in-service training and professional development of teacher has been given serious thought and effort. Okoro (2011) conducted a study on teacher education, school effectiveness, improvement and also stressed that teachers require professional knowledge and professional teaching skills, as well as a broad base of general knowledge in order to carry out instructional processes effectively. He further suggests that teachers should be both academically and professionally trained. Higher academic

qualification and professional training improve teacher effectiveness on the job. It is a source of enthusiasm and devotion to teaching and helps them understand students better than untrained teachers. Dori and Barnea (2007) viewed that training for the teachers should be conducted in a comfortable and relaxed environment that is conducive to change. The theory and rationale behind the novelty and its detailed description should be unambiguous; and training should incorporate supervision and assistance from the teachers who have grasped the new teaching method and solved problems associated with its implementation for a teacher's training to be effective and influential.

### **Implications of the Guidance and Counselling Perspective**

Of major concern here is that the majority of the population of Nigeria, West Africa and even the entire Sub-Saharan Africa, fall within the youth category (age 15-35), a trend which is projected to persist for some decades to come. Data from the National Population Commission (NPC) of Nigeria (1997) show a high proportion of children in the population. Those under 15 years of age constituted about 45 per cent of the total population. The proportion of aged persons (60 years and above) in the population constituted only 3.3 percent. The age

structure of the population, according to the 2006 census, shows a very broad-based pyramid, reflecting the large proportion of children and young persons. Those children and young persons are ideally expected to pass through the education system. If the educational environment is crowded with the kind of problems presented here, then the dream of bright future is apparently threatened because the very basic requirement for a meaningful life for the youth is grossly being compromised. Whatever is thought of as a recipe for the amelioration of standards in secondary education in Nigeria will likely head to the rocks so long these basic student-specific concerns have not been adequately and meaningfully addressed. The question is how can the student-specific concerns be addressed? In Nigeria the answer is simple. The current national policy on education (FGN 1977, 1981 and 2004) has provided for the introduction and/or implementation of guidance and counselling in schools. Guidance and counselling as a support service is deemed by the national policy as a catalyst for resolving student related concerns. Professional school guidance counsellors are expected by the national policy to provide a broad range of services in schools under the direction of their professional ethics. Students especially secondary school age, who are mostly in the

age range of pre- and post- adolescence period, are today living in exciting and demanding times with an increasingly diverse society, evolving technologies and expanding opportunities in a competitive global economy. As they transit from childhood through adolescence and to adulthood, secondary school students are faced with multifaceted challenges impacting achievement and readiness for post-secondary success. It is only the proper implementation of the provisions of the national policy that can adequately address students' concern and ensure success at this level of education.

### **Conclusion**

In conclusion it should be emphasized that the school system plays a crucial role in the socialization of students because the family alone cannot adequately fulfil the role of training responsibilities of its ever growing adolescents. The socialization role of the school is not limited to provision of skills and practical knowledge to teachers, parents and counsellors alone. It also involves instilling among students' forms of positive interpersonal relationship, commitment to self-development, dedication to social integration and growth, selflessness, honesty and sincerity. It is therefore essential for schools to develop and review school policy to address student-specific concern.

### **Recommendations**

Based on the issue at stake, the following recommendations were made:

1. The appointment of school principals should be based on merit and qualification. Thus, politics should be discouraged in the appointment of school principals.
2. Primary education whose products are recruited into secondary schools should be adequately funded to achieve its objectives and aims as poor raw materials must beget poor products.
3. There should be adequate supervision of secondary schools to ensure that rules and regulations are carried out as expected. This will go a long way to checkmate in-disciplinary behaviours in schools.
4. Government should see that the UNESCO 26% recommendation of National budget goes to education as this will enhance effective school administration.
5. Adequate number of professionally qualified teaching and non- teaching staff should be made available in every public secondary school in Nigeria to actually assist the school principals in school administration.
6. Finally, the welfare of both the teachers and students must be taken seriously for them to give their full support for effective management of teaching in secondary schools in Nigeria.

## REFERENCES

- Abuseji FA 2007. Student and teacher related variables as determinants of secondary school students' academic achievement in chemistry. *Journal Pendidikan*, 32(1): 3-18.
- Ahmed, T.M (2003) Education and National Development in Nigeria. *Journal of studies in Education* 10,35-46.
- Ajaja, K. B. (2002). Problems of Evaluation in Nigeria's secondary school. *Education Studies*, 4(2), 70-79.
- Dori YJ Barnea N 2007. In service Chemistry Teachers' Training: The Impact of Introducing Computer Technology on Teachers' Attitudes and Classroom Implementation, *International Journal of Science Education* Published online first February 24, 2007. From <<http://www.tandfonline.com/toc/tsed20/19/5#.VE910CKUeSo>> (Retrieved on 13 October 2014).
- Federal Republic of Nigeria (2004). National Policy on Education NERDC, Abuja.
- Mbayuav, S.T (2012). The Challenges of Secondary Education in Nigeria: the way forward. *Journal of pristine* 4(1) 104-112.
- Mohammed AM 2006. Creating Opportunities for Continuing Professional Development of Teachers: The National Teachers' Institute Experience. Paper Presented at the 1<sup>st</sup> National Conference of the Faculty of Education, University of Abuja. From <[http://www.ntinigeria.org/doc/Address\\_Creating\\_Opportunities\\_for\\_Continuing\\_Prof\\_Development\\_of\\_Teachers.pdf](http://www.ntinigeria.org/doc/Address_Creating_Opportunities_for_Continuing_Prof_Development_of_Teachers.pdf)> (Retrieved on 10 October 2014).
- Nigeria, F. G. (1977). *National Policy on education*. Lagos: Government Printers.
- Nigeria, F. G. (1981). *National Policy on education*. Lagos: Government Printers.
- Nigeria, F. G. (2004). *National Policy on education*. Lagos: Government Printers.
- Nigeria, N. P. (1997). *Numeric and Percentage distribution of 1991 census figures*. Abuja: Govt. printers.
- Nwakpa (2013) School Administrators the Brain behind Indisciplinary behaviours in schools in Nigeria. *The Intuition* 5(1) 37-44.
- Nwiyi, G.U (2003). *Academic Administrators and Politics of Higher Education in Rivers State*. Unpublished M.E.D Thesis of Rivers State University of Science and Technology Port Harcourt.
- Nwiyi, G.U (2012). Attainment of Millennium Development Goals (MDGS) through Teacher Education programme in Nigeria. *The Journal of Teacher Perspective* 6(13) 496-501.
- Nwiyi, G.U. & Kalagbor, L. D. (2013) Factors that Militate Against Effective Secondary Education Administration in Rivers State, *African Education Indices* 6(1) 52-57.
- Okecha RE 2008. Teachers' perception and perceived contributions towards the success of the Universal Basic Education (UBE) programme. *College Student Journal*, 42(2): 554-564.
- Okoro M 2011. *Funding Teacher Education: a Catalyst for Enhancing the Universal Basic Education in IMO State of Nigeria*. PhD Theses, Unpublished. South Orange NJ 07079: Seton Hall University.
- Pereira AI, Ferreira OA, Silva A, Afonso E, Barreiro MF 2013. In-Service Teacher Training in Portugal: Objectives, Organization and Impact on Teacher's Career. *International Conference Initiatives in Chemistry Teacher Training, Limerick, Portugal*, 29 November.

**Impact of Social Studies Education in Promoting Soco-Cultural Integration among the Nigeria Certificate in Education Students in Colleges of Education Kaduna State**

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**ABSTRACT**

Socio-cultural integration is the most important thing that brings about religious and cultural tolerance which make people live in peace and harmony within the society regardless of all the differences that exist among them. This paper is titled “Impact of Social Studies Education in promoting socio-cultural integration among the Nigeria Certificate in Education (NCE) students in Colleges of Education, Kaduna State, Nigeria. The study has two objectives, two Research Questions and two hypotheses. The study used symbolic interactionism theory the study explores the concept of Social Studies, General Objectives of Social Studies, the concept of Togetherness, the concept of teamwork and the concept of Socio-cultural Integration. The study used Descriptive Survey Method. The Population of the Study comprised the total number of the NCE students in Colleges of Education, Kaduna State. The study also used proportionate and simple random sampling techniques. The sample of 333 was arrived at. The study used descriptive and inferential statistics, the Bio-date variables of the respondents were analyzed using percentage and frequency count, The Research questions were answered using Arithmetic means and standard deviation and the hypothesis postulated by the study were tested using independent t-test. The study concluded that NCE Social Studies programme promotes Socio-cultural Integration among NCE students in colleges of education, Kaduna State. The study recommended among others that The Teaching of Social Studies Curriculum Contents that promotes Socio-Cultural integration among students should be deepened in Colleges of Education, Kaduna State, at each level of the three years programme.

**Keywords:** *Social Studies, Socio-cultural, Integration*

**Introduction**



There is no any society that can achieve its goals and objectives if the people of that society are not fully integrated. It is only when people dispel all the differences that exist among them they can work together for the purpose of the attainment of their societal goals and objectives. Socio-cultural integration is the process by which people of different cultures, religions and origin can live in peace and harmony, see themselves as one and work together for the development and survival of their society by tolerating each other.

Williams (2008) Nigeria as a nation emerged from diverse socio-cultural entities with an estimated population of about 150,000,000 based on the 2006 population census. As a result of our differences, it has not been possible to build a sense of common unity, national pride and single purpose because the spirit of cohesiveness at national level is very weak when compared with the ethnic sense of belonging. Hence, to achieve the goal of building a united, viable and prosperous Nigeria, the school curriculum became the bedrock on which national unity was to be established. Social Studies is a core subject in Nigeria's educational system. It is compulsory for all students in primary and junior secondary schools. It is an elective subject at the senior secondary school level.

Since 1963 when the subject was re-introduced into the school curriculum, its impact has been limited. For example, ethnic loyalty rather than national loyalty continues to be promoted.

#### **Statement of the problem**

Nigeria is a country that contains people with different ethnic groups practicing different religions. Students of different ethnic and religious background live and study in Colleges of Education to obtain NCE. They are expected to harmoniously interact among themselves. Unfortunately, not all NCE students of different ethnic and religious background relate in harmony with one another which sometimes lead to ethnic and religious intolerances and consequently students' violent demonstrations on the campuses. In addition, their interaction as manifested in their groupings and associations are mostly ethnic, religious, sectional and regional. This is very inimical to socio-cultural integration and development in Nigeria.

The problem of Socio-Cultural integration among NCE students in Kaduna State persist right from the enrollment of new students in the Colleges of Education where people from the catchment areas are more priority than the others, which as a result, students from

the ethnic groups of the catchment areas dominate the schools.

Conclusively, Nigeria is made up of diverse cultural groups with over 400 languages and dialects and these cultural groups live in different geographical locations. In order to promote peaceful co-existence among these groups there is need for integration.

It is in light of these, the researchers intended to carry out a research to “Assess the Impact of Social Studies Education in promoting Socio-cultural Integration among NCE students in Kaduna State” because the students are the leaders of tomorrow when they are well trained through Social Studies Education, they can promote unity in the country and move the country forward.

### **Objectives of the study**

The objectives of the study are to:

- i. Assess the Impact of Social Studies Education in promoting Socio-Cultural Integration among NCE Social Studies students in Kaduna State.
- ii. Find out if FCE and KCOE NCE students embrace togetherness and team work among them.

### **Research Questions**

The following are the research questions for this study:

- i. To what extent does Social Studies Education promotes Socio-cultural

Integration among NCE students at different ages in Colleges of Education, Kaduna State?

- ii. To what extent do FCE and KCOE NCE Social Studies students embrace togetherness and team work among themselves irrespective of their Socio-cultural background?

### **Research Hypotheses**

Null hypotheses would be formulated at 0.05 level of significant. Thus,

HO<sub>1</sub>. There is no significant difference among the views of NCE Social Studies students on the impact of Social Studies Education in promoting Socio-cultural integration in colleges of education, Kaduna State based on age;

HO<sub>2</sub>. There is no significant difference between the views of FCE and COE NCE Social Studies students on the impact of Social Studies Education in promoting the virtues of togetherness and team work in colleges of education, Kaduna State;

### **Significance of the Study**

The findings of this study will help the government and non-governmental Organizations (NGOs) to identify ways by which the much needed Socio-Cultural integration in Nigeria could be perfectly spread from person to person, group to group, village to village, town to town and from state

to state until we attain Socio-Cultural integration among Nigeria society.

The findings of this study will also be very useful to parent in urging the attention of their children to adapt any new environment they found themselves. It will guide parents the way they can interact with different people from different cultures and religious background. The findings of this study will therefore help parent to guide their children on how to contact their class or course mates to together for the attainment of high academic performance.

The findings of this study can also be used as guide to religious leaders and traditional rulers to preach and teach the members of the community about the importance of respecting people from other cultures and religious background and make them know that interaction and working with them is allowed and important in order to attain Socio-Cultural Integration in our society.

The study will also be very useful to teachers more especially those teaching in the schools where students are from different religions and cultures. This can be done by making students to interact and work together by giving group assignment or forming discussion group with students of different cultures and religion.

The study will be very useful and it will equip Educational planners and curriculum designers in designing effective and formidable Social Studies Education curriculum contents that will take care of de-ethnicizing and de-tribalizing to emphasize Socio-Cultural Integration for National Development.

This research is very important to researchers who may carry out research on similar issue with the topic of this research. It is also significant to school administrators in assuring unity among the students in order to achieve socio-cultural integration among not only NCE two and three students but students at all levels. Nevertheless, this research can urge the attention of the readers towards the importance of togetherness, team work, and tolerance for the attainment of socio-cultural integration.

#### **Scope of the Study**

This study is delimited to the students offering Nigeria Certificate in Education at the Federal College of Education (FCE), Zaria and the Kaduna State College of Education (KSCOE), Gidan Waya. Only NCE Social Studies students are involved in the study. The study considers the variables of Tribe, Age and School type (i.e. Federal and State Colleges of Education).

#### **Review of Related Literature**

Related literature on the impact of Social Studies Education on Socio-Cultural Integration among students in Colleges of Education in Kaduna State, Nigeria are discussed under the following sub-headings:

### **Concept of Social Studies**

It is important to note that Social Studies covers a wide range of studies since it takes and uses concepts, ideas, skills, knowledge, attitudes and values from the Social Science subjects like geography, government, economics, religion, sociology and others. The researcher view Social Studies as a neutral school subject, that can be applied to any situation man is found, and can be used to solve any societal problem. Akanbi, (2003) said that “social studies is the overall subject of instruction which stresses human relationships”. According to Bayero (2007) Social Studies is the sum of learning derived from the various aspects of human thoughts and experiences for the purpose of solving ‘man’s interminable problems. Njoku and Sunday(2014) posited that social studies is an interdisciplinary subject which enables the learners to acquire wide knowledge of the surrounding complex phenomena and forces that influence man in his society (Edinyang & Mezieobi, 2013).

Okam (2006) Define Social Studies as a study comprising conscious efforts and

incidental made by a given society to satisfy the needs of the individuals and that of the society where programmes are based. He further explained that Social Studies is a way of viewing and approaching things with special regards to their proper place and functions for good utilization in solving individual and societal problems.

### **General Objectives of Social Studies**

There are varieties of objectives of Social Studies as there are varieties of social needs and problems. The objectives of Social Studies vary from one country to another depending on the social conditions of the country concerned. But according to Ololobou (2007) a typical Social Studies School programme must encompass four cardinal objectives. These are: (a) The environment, (b) Values, (c) Attitudes and The various skills and emerging issues. (That is current affairs). He also explained that Social Studies in Nigeria seeks to re-establish the precolonial African educational values, which include honesty, hard work, mutual cooperation, consent and conformity to traditional social order.

According to Mezieobi (2014) a cautious identification of some vital attributes of social studies which are germane to cohering national integration would be most appropriate. These include: its social

sensitivity nature, curriculum content emphasis, interactive process strategies and goal-objectives.

### **The concept of Togetherness**

Togetherness is the feeling of being close to another person emotionally and physically. According to Salas, Sims and Burke (2005), Togetherness can be described as the pleasant feeling of being united with other people in friendship and understanding. They further explained that togetherness is hugely important aspect of life. It unites us, gives us security, much needed support and sense of belonging and encourages us to love one another.

Togetherness is seen as a way of contributing to the development of an independent individual. Only through these binding relations and through mutual responsibility between people in a certain social setting, in casu the school, can the individual develop into an independent, not to say, whole person. When looking at togetherness we have to keep in mind that it is both a notion and a practice. It is both something we talk about and something we do. Or, to put it more precisely, it is something some of us have come to talk about and/or have come to practice, because we form part of the same field of education (Moltmann, 2004).

### **The concept of Teamwork**

Teamwork has emerged in recent times as one of the most important facilitators in achieving positive, cost-effective outcomes in various organizational settings. It has been argued that teamwork offers greater adaptability, productivity and creativity than any one individual can offer (Procter & Currie 2004). The importance of teamwork has been emphasized in numerous documents. In the United Kingdom (UK), the National Health Service (NHS) Plan [Department of Health (DoH) 2000] clearly stated that throughout the NHS previous hierarchical ways of working should give way to more flexible teamwork between the different healthcare professionals (Procter & Currie 2004). Greenwood, (2012) see a team as a group of individuals who come together to work cooperatively on a task in order to achieve a common goal, while teamwork refers to the activities of a group of individuals, which can include effective communication and interaction among the team members to promote knowledge sharing, understanding of each other on a personal level, helping others in achieving a level of perfection, building a sense of unity in the team and working towards the achievement of common goals.

### **Concept of Socio-cultural Integration**

Integration has been subjected to a myriad of interpretations, but one of the most consistent elements conveyed by the term remains ‘bringing together of different parts into a whole’. In this context, Socio-cultural Integration in Nigeria would refer to the processes of bringing the various Nigerian ethnic groups to cohere, on a continuing basis. It is the views of these researchers that cohering often involves the development of cherished norms and values respected by all the cohering groups, in order to enable all component parts in the integration process to continue to have a sense of belonging to the political community created, not out of ‘social-contract’ through the colonial process of integration. When they both stressed the ‘idea that a society is like an organism, the parts of which are in a natural balance that should not be disrupted by arbitrary innovations derived from abstract reasoning’ (Oladiti & Gbadamosi, 2012). Thus, socio-

cultural integration can be seen as a situation whereby people of different cultures see themselves as one, work together as team for the attainment of their societal goals.

**Research Methodology**

**Research Design:** The research design used in this study was descriptive survey method.

**Population of the Study**

The population of this study comprised of the total number of Social Studies students of Nigeria Certificate in Education (NCE) two of the Federal College of Education (FCE), Zaria and Kaduna state College of Education (KSCOE) Gidan Waya, Kafanchan. There are Two thousand two hundred and sixty two (2262) Social Studies students at NCE II. This is based on the official data collected from the two institutions within the scope of the study as at 10<sup>th</sup> July, 2023.

Table 1 shows the population distributions of students according to their respective Institutions.

**Table 1: Population of NCE II Students in two Colleges of Education In Kaduna State**

Colleges	Male	Female	Total
FCE, Zaria	980	559	1539
COE, Gidan Waya	479	244	723
<b>Total</b>	<b>1459</b>	<b>803</b>	<b>2262</b>

**Sample and sampling procedure**

This study adopted proportionate sampling technique to determine the percentage of the instrument distributed and Simple Random sampling Technique was used to give equal

chance to respondents selected as sample. A sample of 333 respondents from the population of 2262 was arrived at by using Research advisors (2006) table for sample selection. It indicates that for a population

2262 at 95% confidence level and margin error of 0.05%, 333 is adequate. The sample of this study is drawn from the second year NCE Social Studies Students at the Federal College of Education (FCE), Zaria and Kaduna State College of Education (KSCOE) Gidan Waya.

The study used descriptive and inferential statistics, the Bio-date variables of the respondents were analyzed using percentage and frequency count. Research questions were answered using Arithmetic means and standard deviation and the hypothesis were tested using independent t-test.

**Statistical Analysis Procedure**

**Table 2 below shows the Distribution of Sample Size Selected**

College	Population	Sample
FCE, ZARIA	1539	227
COE, Gidan Waya	723	106
Total	2262	333

**Presentation, Analysis and Discussion**

Integration among NCE students in colleges of education, Kaduna State?

**Question One.** To what extent does Social Studies Education promotes Socio-cultural

**Table 3: Summary of Means and Standard Deviations on views of NCE Social Studies on Socio-cultural Integration**

S/N	Items	Mean	SD
1	Social studies education as a subject that inculcates in learners the positive attitudes on socio-culture integration.	3.84	.388
2	The objectives of social studies on national unity promotes socio-culture integration among students	3.73	.641
3	The teaching of learners about the constitution of the federal republic of Nigeria can enhance socio-cultural integration among them	3.24	.759
4	Inter-tribal and inter-faith marriage and other forms of marriages can promote socio-culture integration among students	3.25	.471
5	Social studies education uses the NYSC Scheme as an instrument for the promoting of socio-cultural integration among learners	3.85	.354
6	The symbol of Coat of Arm is not a useful tool for inculcation spirit of socio-culture integration.	2.09	1.154
7	Drama as a method of teaching cannot be used to teach or promote socio-cultural integration among students	2.25	1.212
8	Nepotism is not a factors undermining socio-cultural integration among students.	1.80	1.038
9	Group discussion as method used in teaching social studies does not encourage socio-cultural integration among students.	2.27	1.169

10	Social studies education cannot be used to solve any societal problem.	2.09	1.146
<b>Cumulative Mean</b>		<b>2.84</b>	

Decision mean =2.500

**Question Two** To what extent do NCE Social Studies students embrace togetherness and team work among themselves irrespective of their Socio-cultural background?

**Table 4: Summary of Means and Standard Deviations on views of NCE Social Studies student on togetherness and team work among themselves irrespective of their Socio-cultural background**

S/N	Items	Mean	STD
1	Social studies contents on peace and tolerance is enough to promote the virtues of togetherness and team work among students.	3.22	.493
2	Proper implementation of social studies curriculum by teachers can promote the virtues of togetherness and team work among students	3.75	.633
3	Small Groups as a teaching pedagogy can be used by the social studies teacher to inculcate in learners the culture of togetherness and team work.	3.95	.211
4	The objectives of social studies derived from the Nigerian philosophy is adequate to promote the culture of living together in peace and also working as a team.	3.74	.452
5	Social studies education can use the Mass Media as a tool for promoting togetherness and team work among students.	3.65	.723
6	The teaching resources in social studies are not useful in teaching topics that have relationship with togetherness and team work among students	2.00	1.089
7	There is no need to use teaching aid in teaching any topic that encourages togetherness and team work among students	2.39	1.259
8	Exposing students to the curriculum contents on peace cannot encourage students to imbibe the spirit of togetherness and team work	1.83	1.059
9	Democratic values will not encourage togetherness and team work among students.	2.18	1.141
10	Social studies teaches what the society stands against, thus cannot inspire togetherness and team work among students.	1.98	1.108
Cumulative Mean7		2.86	

Decision mean =2.500

**Hypothesis One** There is no significant difference among the views of NCE Social Studies students on the impact of Social Studies Education in promoting Socio-cultural integration in colleges of education, Kaduna State based on age.

**Table 5: Summary of ANOVA on the impact of Social Studies Education in promoting Socio-cultural integration**

	Sum of Squares	Df	Mean Square	F	Sig.
<b>Between Groups</b>	.549	3	.183		



				1.135	.335
<b>Within Groups</b>	51.226	318	.161		
<b>Total</b>	51.775	321			

**Hypothesis Two** There is no significant difference between the views of FCE and COE NCE Social Studies students on the impact of Social Studies Education in

promoting the virtues of togetherness and team work in colleges of education, Kaduna State.

**Table 6: Summary of Independent sample t-test on the impact of Social Studies Education in promoting the virtues of togetherness and team work**

Group	N	Mean	SD	T	Df	P
FCE ZARIA	227	2.9079	.43133	2.681	320	.008
KSCOE	95	2.7758	.32640			

**Summary of Findings**

The following are summary of major findings arising from the analysis of research questions and testing of null hypothesis:

- i. Respondents perceived that Social Studies Education promotes Socio-cultural Integration among NCE students in colleges of education, Kaduna State and there was no significant difference among the views of NCE Social Studies students on the impact of Social Studies Education in promoting Socio-cultural integration in colleges of education, Kaduna State based on age ( $p > \alpha = 0.05$ );
- ii. NCE Social Studies student embrace togetherness and team work among themselves irrespective of their Socio-cultural background and there was a significant difference between the views of

FCE and COE NCE Social Studies students on the impact of Social Studies Education in promoting the virtues of togetherness and team work in colleges of education, Kaduna State ( $p < \alpha = 0.05$ ); and

**Discussion of Result**

On research question one; this study investigates the impact of Social Studies Education in promoting Socio-cultural integration among students in colleges of education, Kaduna State. It was found that Social Studies Education promotes Socio-cultural Integration among NCE Social Studies students in colleges of education, Kaduna State. This finding is expected as one of the ideals of introducing the teaching of Social Studies in Nigeria educational system is for the purpose of ensuring integration divers among the cultural groups in the

country. The implication of this finding is that if Social Studies is well taught there will be unity among the different socio-cultural groups in Nigeria. This finding corroborates the study of Peter (2014) who found that Social Studies education had imparted positively on national integration in Nigeria among learners and teachers from diverse ethnic group. On corresponding hypothesis, this study found that there was no significant difference among the views of NCE Social Studies students on the impact of Social Studies Education in promoting Socio-cultural integration in colleges of education, Kaduna State based on age. This means that views of NCE Social Studies students did not differ on the impact of Social Studies Education in promoting Socio-cultural integration in colleges of education, Kaduna State. This implies that age difference is not a factor influencing views of students. This finding lay credence to the study by Rajeswari (2008) who found that there was no significant difference between student and teachers in the perception of national integration values with regards to gender, Personal Qualification, Native places, locality of the institution, religion, community and father's educational qualification.

On research question two; this study investigates the impact of Social Studies Education in promoting the virtues of togetherness and team work in colleges of education, Kaduna State. It was found that NCE Social Studies student embrace togetherness and team work among themselves irrespective of their Socio-cultural background. This finding is expected and a plausible reason for this is that NCE Social Studies content is loaded with experiences that promote living together and cooperation. The implication of this finding is that if Social Studies is well taught, students will continue to demonstrate the spirit of togetherness and team work. On corresponding hypothesis, this study found that there was a significant difference between the views of FCE and COE NCE Social Studies students on the impact of Social Studies Education in promoting the virtues of togetherness and team work in colleges of education, Kaduna State ( $t = .008$ ,  $df = 320$ ,  $p = .008 < \alpha = 0.05$ ). This indicates that, the level of views of the respondents differ base on institution. Obviously, descriptive statistics shows that respondents from FCE had a mean of 2.90 while their counterpart in the SCOE had a mean of 2.77 with a mean slight difference of 0.13 in favour of FCE respondents. This implies that

the extent of views of FCE respondents is slightly higher than that of SCOE respondents.

### **Conclusions**

Arising from the findings of this study the following conclusions were made:

- i. NCE Social Studies programme promotes Socio-cultural Integration among NCE students in colleges of education, Kaduna State;
- ii. NCE Social Studies programme promotes togetherness and team work among themselves irrespective of their Socio-cultural background among NCE students in colleges of education, Kaduna State.

### **Recommendations**

This study revealed the potency of Social Studies programme for the attainability of sustainable development goals in Nigeria. Therefore, for a maximum utilization of Social Studies programme in meeting the 2030 global agenda, this study recommends the following:

- iii. The Teaching of Social Studies Curriculum Contents that promotes Socio-Cultural integration among students should be deepened in Colleges of Education, Kaduna State, at each level of the three years programme.
- iv. Social Studies Curriculum should be regularly reviewed so as to make the subject more relevant in terms of promoting virtues of togetherness and Team work in Colleges of Education, Kaduna State and beyond.

FINAL DRAFT

BEA VOL 9 NO 3

REFERENCES

- Adebayo, R. I. (2010). Ethno-religious crises and the challenges of sustainable Development in Nigeria. *Journal for Sustainable Dev.in Africa*, 12(4), 213-225.
- Adebayo, R.I. (2003). Religion and National Unity: The Gap between Theory and Practice. *Ado Journal of Religions*. 2 (2), 113-119.
- Adeniyi, C.S (2009). *Teacher's perception of the new social Studies in Secondary Schools*. Unpublished M. Ed thesis of university of Ilorin
- Agbo E. O. (2016). *Influence of Social Studies Education on Ethical and Religious Tolerance among National Certificate in Education students in Kaduna State*. Unpublished M.ED Dissertation, Ahmadu Bello University, Zaria.
- Agbolahor, R. O. (2006) *Lecture notes on FSC 712 (research method in information science)* delivered at Africa Regional Centre for Information Science (ARCIS) 2006/2007 Session.
- Akanbi, M. (2003). *Fighting corruption: the Journey so far: the Punch*, Monday, March 31, 2003 pp. 86.
- Apebendel, E. U., Egong, A. I., & Uuwa-Unyin, A. (2008). Social studies and cultural integration in early childhood education. *Journal of Educational Research*, 7(1 & 2), 43-47.
- Asman I. & Abdul K. (2014) Social Studies Education as a Means for Combating Social Problems in Nigeria. *Secondary School. Journal of Techno Social* 6(2) 2229-8940.
- Arisi, R. (2011). Social Studies Education as a means to National Integration and Unity in Nigeria. *European Journal for Educational studies*, 3(3), 102-110. Ozean publication.
- Azide J.J (2007) Social Studies and Promotion of Cultural Values and Political Stability in Nigeria. *Nigerian Journal of Social Studies Education* 5(3), 78-83
- Bamisaieye, O.A. (2003). *Political Parties and national Integration in Nigeria (1960-1983)*. In Eleazu, U.O. (Ed.) Nigeria. The First 25 years: Lagos; Infodata Limited.
- Bayero, H.I.R. (2007). The Impact of information Technology on Social Studies Learning: Prospect and challenges. *Journal of Educational Research and Development*. 2(1), 34-45
- Bulliant. D. J. & Sun, H. (2011). Protein adsorption behavior on the methoxy-polyethyleneoxide-propyl-trimethoxy silane modified silicon surfaces. *Journal of Functional Materials*, Gongneng Cailiao, ISSN: [10019731](#)
- Edinyang A. & Umoh, S. U. (2016). Prospects and challenges of social studies teachers professional development in Nigeria. In *Handbook of Research on Teacher Education and Professional Development* (pp. xx-xx). DOI: 10.4018/978-1-5225-1067
- Falola, T., & Heaton, M. M. (2008). *A history of Nigeria*. Cambridge: Cambridge
- Fageyinbo, K. T. & Akanle, O. (2019). European football clubs and football betting among the youths in Nigeria. *Soccer and Society*, ISSN 1743-9590. DOI: 10.1080/14660970.2016.12676
- Gambo, S. (2012). *The Social Forces behind Religious Crisis/ Ethno religious Crisis: A Study of Jos North L.G.A*. Unpublished B.Sc. (Sociology) project Submitted to the Dept. of Sociology, Faculty of the Social Sciences, Bayero University Kano.
- Greenwood, B. (2012). Benefits of collaboration and teamwork.

- <http://work.chron.com/benefits-collaboration-teamwork-3618.html>  
(Accessed 10 October 2012).
- Heckmann, F. (2005). *Integration and Integration Policies*. Bamberg: European Forum for Migration Studies.
- Ifeanacho, M. I. & Nwagwu, J. (2009). Democratization and National Integration in Nigeria. *Research Journal of International Studies*, 2(2) 100-109.
- Jackson, I. G. & Chinatu, I. H. (2014). Social studies education: An introduction text. Port Harcourt, alheri books. *Journal of Social Studies*, 10 (1&2) 161-168.
- Kur, J.T. (2012). Peace Journalism: A Pathway to Unity in Nigeria for Sustainable Development. In I.O. Albert, W.A. Eselebor & N.D. Danjibo (Eds.). *Peace, Security and Development in Nigeria*. Pp. 207-224.
- Makinde, M. A. (1979). *Integrated Social Studies: a Handbook for Social studies Teachers*. Oxford University Press.
- Mezieobi A. S. (2013). *Social studies in Nigeria: Teaching methods, instructional Materials and Resources*. Owerri:Acadepeak publishers.
- Michael J. & Fuller C. (2015), Symbolic Interactionism, *Sociopedia-isa*, Dol; 10. 1177/205684601561.
- Moltmann F. (2004). The semantic of Togetherness, *Natural Language semantics* 120, 289-318.
- National Teachers Institute (2000). *Nigeria Certificate in Education, course book on Social Studies*. Cycle 2 Kaduna, N.T.I. Published.
- National Commission for Colleges of Education (2012) *Nigeria Certificate in Education Minimum Standard TETFUND Project 2012*.
- NCSS (2009). *About the National Council on Social Studies*. Retrieved on November 21, 2017, from <http://www.socialstudies.org/publications>
- Ndampson, P. K. (2004). *The Impact of Social Studies Education on Students-Teachers Value Dispositions for effective citizenship in the colleges of Education in the Central Geo-Political Zone of Nigeria*. PhD Thesis, University of Jos.
- Njoku, P.C.& Sunday D.E (2014), Socio-Cultural Factors Affecting the Teaching and Learning of Social in Nigeria. *Journal of Education and Practice*. 5 (24), ISSN 2222-1735
- Obeka, S.S (2011) *Panacea of Science Education Research*. Zaria: ABU Press
- Odetomi, G.E. (2013). Social Studies Education: A tool for enhancing National Unity in Nigeria. *Nigerian Journal of Social Studies*, XVI (1) of Social in Nigeria. *Journal of Education and Practice*. 5 (24), 211-219
- Ogundare, S.F., (2003). *Foundation of Social Studies: A Handbook of Concepts and Principles of Social Studies*. Ibadan, Faculty of Education, University of Ibadan.
- Ogunsanya B. K., Aremu, I. V. & Odugbesan, I. O. (2022). Lecturers' Perception of the Use of a Digital Language Laboratory. *British Journal of Applied Linguistics*, 2(1), 28–33. <https://doi.org/10.32996/bjal.2022.2.1.5>
- Ojedokun, O. E. (2001). Teaching the ideal of Social Studies for national rebirth and sustainable democracy in Nigeria. In Fasanrni, F. O.; Ogunsanya, M. and Ogundere, S. F. (eds). *National rebirth and poverty alleviation in Nigeria: challenges for Social Studies education in the 21s'*

- century - book of readings of SOSAN, 87 - 95.
- Ojo, E. O. (2009) Federalism and the search for national integration in Nigeria. *African Journal of Political Science and International Relations*, 3(9) 384-395, September. <http://www.academicjournals.org/AJPSIR>.
- Okam O.J (2006) Critique of Students Vices and the Effect on Quality of Graduates of Nigerian Tertiary Institution. *Journal of Social Science*, 12(3): 193-198
- Okobia, O. S. (2016). "The new National Policy on Education and the Development of Social Studies Curriculum for the Nigeria School". *Nigeria Journal of Curriculum Studies*, 4(2), 57-68
- Oladiti, A.A. Gbadamosi, V.T. (2012). "Problem of National Integration in Olapade, C.B. and Awosolu, E.O. (Eds.). *Nigerian Nationhood*. Ibadan. Adexsea Printing and Publishing.
- Olayiwola, A. O. (2010) *Procedures in educational research*, Kaduna: Kingo Nigeria Ltd.
- Onyabe, V. O. (1980). Defining social studies for Nigeria. In NERC (Ed.), *Social studies teaching issues and problems* (pp. 42-51).
- Orakwe, I. (2001). *Social Studies Education Basics for Tertiary Institutions*. Onitsha. Desvic Publishers
- Osahon O. E. (2013). National integration and the role of social studies in the promotion of national integration. *Nigerian South-south Journal of social studies and civic education*. 8 (7), 168-175.
- Osulala, A. (1990). *The Causes of Students Unrest in Post-Primary Schools in Zaria Township*. Unpublished M.ed Thesis. Department of Education. Ahmadu Bello University, Zaria.
- Razaq, B. & Ajayi, O.S (2000). *Research Methods and Statistical Analysis*. Ilorin, Haytee Press.
- Research Advisors (2006). *Sample Size Table*. Retrieved 20<sup>th</sup> January, 2016. <http://research-advisors.com>
- Salas E., Sims D.E. & Burke C. S. (2005). Is there a "big five in Teamwork?" small group Research 36 (5) 555-599.
- Traughott E. C.& Dasher R. B.: (2002). *Regularity in semantic change*, Cambridge U. P. Cambridge.
- Wiley, J. & Sons inc. (2011). CliffsNotes.com. Theories of Education. 10 Apr. <<http://m.cliffnotes.com/study-guide/topicArticleId-26957,articleId-26914.htm>>.
- Williams, L. (2008). *Nigeria: The bradt travel guide (2nd Ed.)*. Chalfont St Peter.
- Woolman, D.C., (2001). Educational reconstruction and post-colonial curriculum development: A comparative study of four African countries. *International Education Journal*, 2 (5), 27-46.

## **Globalization and National Policy in Nigeria**

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### **ABSTRACT**

The Nigerian policy on education (2013) stated that Education is an instruments par excellence for effective national development it has witnessed active participation by communities, individuals, non-Governmental agency and government functionaries. Nigerian Government has stated that for the benefit of all citizens, the countries educational goals shall be clearly set out in terms of their relevance to the needs of the individuals and those of the society in consonance with the realities of our environment and the modern world. This paper discusses the issues and challenges in Nigerian culture and the national policy on Education statements and how Globalization phenomenon affects Educational policies of underdeveloped countries. The conversation will help us all to response to these very real threats to the development of our Nation, Africa and beyond. Suggestions will also be provided on how we can empower and work in the community to activate collective social imagination through creativity, public partner with stakeholders and non – Governmental organizations to meet the Globalization needs of Education in Nigeria.

**Keywords;** *Globalization, Policy, National policy, Education Policy*

### **Introduction**

Education is a basic factor for a rapid and sustainable social, economic, political, and Technological development of every nation. It transforms individuals and harness their abilities to become useful, functional, productive, and responsible citizens. A sound Education systems anchored on effective and implementable educational goals, policies and plans provides the citizens with quality education which enables them to develop their full potentials, improve their standards of living and contribute meaningfully to national integration stability and progress.

Globalization is a complex term which has generated much controversy, whether or not it benefits all nations and people. According to Oranusi (2011) in Ogunleye (2009) noted that essentially globalization has three dimensions: the economic, political and cultural and it has undergone along historical process that is sweeping across the whole world and turning it into global village. In such a way that people in different parts of the world are being connected to each other like never before, such that what happens to people in one part of the world will have direct consequences for others in a

completely different part of the decision. And by the interest of some in one country may impact on the lives of many other countries. The phenomenon of Education for Globalization aimed at touching all aspects of life which was developed in 1978 during a UNESCO Expert seminar in Paris which map out a programme for global education for the 21<sup>st</sup> century. This programme has then been circulated to the governments of all the member countries of the United Nations. It was clearly observed that the projected scheme of global education did not consider any possible input from the third world countries and if the projected scheme was adopted, Africa would by default be subjected to the cultural, social, and intellectual domination. As highlighted by Benjamin (2011) in Wilfred (1997) who emphasized that if any local culture or people fail to get integrated to this all embracing process of globalization, it will be left behind and suffer isolation, he went on to say that there are many unanswered questions such as; how can those culture and traditions be integrated within the main stream constituted by the process of globalization, how can there be integration of local and global cultures; how within the frame work provided by globalization could inter cultural communication take place today?

### **The Nigerian Policy on Education**

It has been generally accepted that education is the biggest industry for National Development and it touches on every fabric segment of human endeavors, Janguza (2015). Various governments of Nigeria at both federal and state levels have consistently placed education as a vehicle for national development. The national policy on education (2013) state as follows;

Not only is education the force that can be used to Bring out redress; it is also the greatest investment That the nation can make for quick development of its Economic, political, sociological and human resources.

Education is highly rated in Nigeria for its value; there is a very popular demand for education and its passionate desire of parents to send their children to better school.

One of the outstanding gab in the early development of education in Nigeria According to Fafunwa (1974), was that it was not rooted in any philosophy rather than the efforts of the colonial officers to expand the education base on the course content and philosophy obtain in British schools. To say the last emphasis opened to have been placed more on literacy and numeracy, mostly given a vacuum as far as the hopes and aspiration of Nigerians. While the colonial government revolved in appointment of commissions to



report on education code, grant in aids etc, little was done to give education the type of direction it required to shape the destiny of the products of the educational system.

#### Challenges of National Policy on Education in Nigeria

The education introduced by the colonial masters was meant to train those who would serve the system and acquire its values, which affect the system in Nigeria to be faced with many challenges, that lead to the decline in quality of education in Nigeria due to rapid expansion in student numbers without comparable expansion in resources, staff and facilities. However Eka. E. (2011) highlight some of the challenges as follows;

- a- The problem of qualitative education
- b- The unemployment of the educated youth
- c- Explosive increase in the demand for education
- d- Obsolete system of managing education
- e- Unnecessary changes in the educational policies
- d- Financing of education
- f- Bribery and corruption

These and many more challenges affect the educational sector of Nigeria which lead to its many trial and errors, in an effort to change the direction of education in the country some of these efforts were not well planned and many were the products of political

expediency. Adamu (2002) observed that the structure, content and purpose of education in the country has been treated with levity and nonchalance over the years to the point that we are today operating a system of education that leads to the acquisition of certificate or to put in another way “paper qualification” only which are the source of frustration to the recipients because of their irrelevance to present day societal needs.

In the years before Nigeria attained its political independence two reports which were to have tremendous influence on Nigerian educational development were produced. The first was the World Bank mission report of 1954 and the second was the Ashby commission of 1959. Both reports were significant for the contribution they made in fashioning the policy which dictated the direction to which education in Nigeria would go ( Adamu 2002: 21 ).

From independence to date Nigerian policy on education witness second ups and downs ranging from military to civilian rules several committees and commission were appointed to study and write reports on various aspect of education up till today the result of the work of some of the committees were neither made public nor implemented. It is necessary at this point to draw the attention to a very important development in education which

occurred in 1997. This has to do with the formulation of a comprehensive national policy on education which clearly gives direction to the development of education at all levels.

However issue of frequent changes in policies remain the major challenges in Nigerians national policy on education, even though there is hardly any country in black Africa that has not experience crisis in its educational system. What is required is for us to be aware of the existence of the crisis and do something about them. Mbayuav (2011) opined that challenges of educational policies in Nigeria can be solved if we use political will and do away with pursuing a shadow rather than substance.

#### Globalization and Nigerian Philosophy on Education

The philosophy of education in Nigeria that concerned with culture, values, democratic and equal educational opportunity of all citizens is challenged by the implication of globalization which shows that the western culture has become the standard by which all other cultures must be measured. However the philosophy of education in Nigeria is affected by globalization to face same challenges (Ogunleye, 2009). Saka (1986) opined that Nigeria philosophy of education aims at providing equal educational

opportunities for all citizens at all levels of education, despite the tremendous expansion of all levels of education, there is yet no equality of education in Nigeria.

Education is still inaccessible to the vast majority of children in the rural areas. The policy of recognizing Hausa, Igbo and Yoruba as the three major Languages in Nigeria and of ordering every child to learn all of them other than his mother tongue as means of fostering national unity is questionable. If language is a means of preserving peoples culture then this policies seems to imply the gradual extinction of the culture of those Nigerians whose ethnic language is Hausa, Igbo, or Yoruba.

Nigeria's attempt to democracy or democratic way of life in 1960 and then in 1979, 1983, 1993, 1999 to date have failed, Saka (1986), As pointed out by Dewey (1959). Education is a necessary condition for the success of democracy, it enables individuals to be aware of the right and responsibilities and to choose according to reason not emotions. Yet the vast majority of Nigerians are uneducated and ignorant and therefore many cast their votes during political election for the man from their ethnic or religious group. Not necessary because he is competent to govern. This

narrow mindedness can be attributed largely to lack of education.

The question that arises therefore, is to what extent have the five national objectives been attained, almost forty six years (46) years since the National Policy on Education was launched in 1977, An objective assessment would lead to the inevitable conclusion that at the time of this write- up Nigeria is yet to achieved 100% A free and Democratic society; A just and egalitarian society; A strong and self reliant nation; A great and dynamic economy ; and full opportunity for all citizens. Base on the for-going the National policy on Education in Nigeria is yet to meet the Global practices.

#### **Way Forward**

To reduce the challenges of globalization in Nigerian policy on education can be done in realization and producing the much needed human capital requirement of the nation in line with the roles specified by the world conference on education held in Spain 1994. These roles include the production of entrepreneurial grandaunts who are vectors of modernization of the citizenry to fight corruption and poverty reduction and sound ethical behavior as well as training of students in leadership, good government and good business practices Mbayuav (2011).

For Nigeria policy of education to be functional and relevant, creative innovation and reform should be the hall mark. The goals of education for all (EFA) and Millennium Development Goals (MDGs) are indeed the most significant reform strategies to meet the demand of the international community. Obanya (2009) explained that nations of the world are expected to work in realization of the set target of the Dakar “Education For All” (EFA) and the eight goals of Millennium Development Goals ( MDGs) as follows;

The goals of Education for All (EFA) are prerequisite which Nigerians must comply as pointed out by Obanya (2009) as follows;

- 1- Expanding and improving comprehensive early childhood and education for most vulnerable and disadvantage children.
- 2- Ensuring that girls children and those belonging to ethnic minorities have access to a free and compulsory education of good quality.
- 3- Ensuring that the learning needs of young people and adult are met through equitable access to appropriate learning and life skills program.
- 4- Achieving 50% improvement in the level of adult literacy especially women through continue education.

5- Eliminating gender disparities in pursuing education by 2005 and achieving gender equality in education by the year 2015.

6- Improving all aspect of the quality education and ensure excellent of all so that good learning outcome are achieved by all in literacy and essential life skill.

The goals of Millennium Development Goals (MDGs) as prerequisite which Nigerians must also comply are as follows; Obanya (2009)

- 1- Eradicate poverty and hunger,
- 2- Achieve universal primary education,
- 3- Promote gender equality and empower women,
- 4- Reduce child mortality,
- 5- Improve maternity health,
- 6- Combat HIV/AIDS, malaria and other diseases,
- 7- Ensure environmental sustainability,
- 8- Develops global partnership for development,

The eight Millennium Development Goals are considered basic for building a solid foundation for sustainable human development .Obanya 2009 explains that the nations of the world are expected to work in realizing the set target by the year 2015.

However the states and federal ministry of Education in Nigeria in collaboration with National Teachers Institute (NTI) embarked

on massive Teacher Training and re-training to meet up with the global practices.. Another effort was that of Sustainable Development Goals (SDG) programs and a host of other National and international agencies that has a stake in Educational Development toward Global Practices

Other strategies for improving National Policy on Education to meet the global needs are;

Re-structuring of UBE curriculum: The UBE curriculum should be restructured with accountability and assessment of the needs of various group of people who should benefit from the programme. The NERDC should stand up to the challenge of making the curriculum more focused as opined by Oduolowu (2007.) It should provide entrepreneurship programmes for vocational Development of pupils and Adults in order to make them self-sustainable, in realizing the MDGs and EFA. The Education should be equal and assessable.

School Management Reforms: There should be measures put in place periodically for ensuring the professionalization of teachers through in-service training, seminars and work-shops for teachers.

Role of Guidance and Counseling: The Role of guidance and counseling cannot be over emphasize in Educational programme for

instance Nwachukwu (2007) reported that both the teachers and counselors roles are complementing one another therefore counseling is very essential in enlightenment in the side of the learner to assist in guiding them toward their problems.

**Provision of adequate Facilities:** Government, stakeholders and NGOs should provide adequate facilities to cater for the population need of the country, in addition modern facilities should be provided in line with the Technology such as Computers, ICT centers, Instructional materials among others.

### **Conclusion**

Education in the globalized context was designed to produce individuals enlightened enough to understand value of the world outside their environment. This legacy seems to be apparent today for the fact that most educated Nigerians are still not equipped to think inward for the betterment and salvation of their country. Rather thinking of what the

country will do for them or even incapacitate the country economically and otherwise. The policy of Nigerian education shall be the centerpiece of its curricular focus and priority should be the type of education that will lay emphasis on our traditional, cultural norms as means of solving the persistent self-doubt about who we are, where we have come from, and where we are going? The validity of educational process should lie in the content to which it produces individuals who are not ashamed to be called by their identity, individual who will take pride in talking about their values as a people and their aspiration as a nation. These can be achieved when our leaders have political will and the common man is obedient to the rule of law.

**REFERENCES**

- Adamu B. (2002) Recurrent issues in Nigerian Education; Zaria, Tamazu Publishers co.ltd. Benjamin N. N. and Oranusi S. N. (2011) Globalization and African culture and values challenges And Prospect; west and solomon publishers coy. ltd Onitsha
- Daisy I. D (2011) Reforms in Primary Education in Nigeria: A review of UPE and UBE Scheme: Issues and Challenges in Nigerian Education West and Solomon Publishing Coy. Ltd Lagos, Kano, Warri, Onitsha.
- Dewey, J. (1959) Democracy and Education; Macmillan publishers New York.
- Eka .E. M. (2011) quality promotion in Nigerian Education system; Issues and challenges in Nigerian Education; In the 21 century. West and Solomon Publishers coy. Ltd..Lagos, Kano, Warri, Onitsha.
- Fafunwa A. B (1974) History of Education in Nigeria; George Allen and Unwin Ltd Federal Republic of Nigeria (2013) National Policy on Education; Abuja Nigeria.
- Janguza S.S. (2015) A guide to Educational Planners, Administrators and Supervisors. Albarka Publishers Coy. Ltd. Kano.
- Mbachu C. E. (2011) Curriculum Reforms and Innovation in Nigeria; Issues and challenges in Nigerian Education. in 21<sup>st</sup> century west and Solomon pub onisha.
- Mbayuav S.T. (2011) Issues and challenges in Nigerian Education (ed) Olubadewo S O, Emma C.O. and Ajaegbo D.I.
- Nwachukwu D.N. (2007) The Teacher Counselor for today's School (Enhancing Millemum Teaching-learning process. University of Calabar press.
- Obanya P.I.A (2009) Dreaming living and doing Education Ibadan Educational research and studies group institute of education University of Ibadan.
- Oduolowu E.A. (2007) A Comparism of universal basic Education Programme in Nigeria and Grundskola of Sweden. Essay in Education
- Ogunleye A. O. (2009) Globalization and its challenges in African cultural values in Education (ed) Iwov U.M.O. Publishers Lagos.
- Saka A.Y. (1986) Introduction to Philosophy of Education; Devis co .press ltd Kano.
- Wilfred F. (1997) Globalization and culture the other voice bulleting of economical theology.

## A Review of Technological Advancements on Counselling Psychology

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### ABSTRACT

This Paper explores the concomitant effects of technological advancements on counselling psychology in education. It examines the benefits and challenges brought about by the integration of technology in counselling services and its impact on the practice and effectiveness of counselling psychologists. It highlights the ethical considerations that arise with the use of technology in counselling psychology. This paper provides insights into the implications of technological advancements in counselling psychology within an educational context; and recommendation was provided for counselling psychologists, educators, and policymakers.

**Keywords:** *Technological advancements, counselling psychology and Education.*

### Introduction

Technology has significantly impacted counselling psychology in both positive and challenging ways. On the positive side, it has increased accessibility to mental health services, offering convenience and efficiency through online counselling and Tele-therapy. Personalisation of treatment plans and enhanced education and training for therapists have also emerged as benefits. There are notable challenges, including

concerns about privacy and security, ethical considerations regarding AI and automated interventions, potential impacts on the therapeutic relationship, the digital divide's equity implications, complex regulation and licensing issues, and the risk of technology misuse. Striking a balance between the advantages of technology and ethical practice remains crucial for the field's continued development.

Counselling prior to the widespread integration of technology was primarily characterised by in-person interactions between counsellors and clients within private settings. Sessions were held in environments like offices or clinics, fostering an atmosphere conducive to open discussions of clients' concerns and the provision of personalised guidance (Lambert & Barley, 2002).

It is important to note that counselling was rooted in the principles of psychotherapy and psychology. Pioneers such as Sigmund Freud, Carl Rogers, and Albert Ellis laid the groundwork for diverse therapeutic approaches that shaped the landscape of counselling in the early 20th century (Freud, 1900; Rogers, 1951; Ellis, 1962).

Emphasising verbal communication, active listening, and empathetic responses, the counselling process was built on a foundation of confidentiality and collaboration. Clients found comfort in sharing their inner thoughts and emotions, while the counsellor's empathy and expertise played pivotal roles in assisting them in overcoming personal challenges (Lambert & Barley, 2002).

Technology encompasses the application of scientific principles and tools to develop, modify, and utilize resources for the purpose of addressing challenges and improving

human existence. This broad concept spans electronic devices, digital systems, software applications, and communication networks, influencing various aspects of contemporary life (Merriam-Webster.com, 2023).

In the context of counselling, technology has introduced transformative changes to traditional therapeutic practices. Online platforms, Tele-therapy, and digital tools have become integral components of delivering mental health services in innovative ways (Simpson & Reid, 2014; Grist et al., 2020).

Thus, technology has become an integral part of various aspects of our lives, transforming the field of counselling psychology in education. The integration of technological advancements has brought about significant changes in how counselling services are delivered and has influenced the general practice and effectiveness of counselling psychologists. In order to fully comprehend the impact of these technological advancements, it is essential to examine the benefits and challenges they present, as well as the ethical considerations that arise from their implementation.

### **Technological advancements in counselling psychology**

These are various type of technology involved in counselling psychology which are:



### **1. Tele-therapy and Remote Counselling:**

According to O'Donnell, Doerfler, & Van Slyke (2020), technology particularly in the form of Tele-therapy and remote counselling, has revolutionised the accessibility of mental health support in educational settings. Tele-therapy allows individuals to receive counselling services from the comfort of their own homes, eliminating geographical barriers and increasing convenience. Luxton, McCann, Bush, Mishkind, & Reger (2016), argued that the positive outcomes of Tele-therapy, including reduced stigma and enhanced engagement, particularly for individuals who face barriers to in-person counselling sessions. The advent of Tele-therapy has significantly expanded the reach of counselling services, allowing students and clients to receive support regardless of their location.

Online counselling and Tele-therapy which involves conducting counselling sessions remotely using video conferencing tools, has gained popularity due to its convenience and accessibility. With the widespread availability of internet connectivity and communication tools, counsellors can now provide support to clients remotely, transcending geographical barriers (Titov et al., 2018; Simpson & Reid, 2014). These approaches allows individuals who may face

challenges accessing traditional counselling services to receive the help they need. Research indicates that online counselling can be as effective as in-person therapy, demonstrating positive outcomes for various mental health concerns. It offers greater convenience and flexibility for clients, reducing travel time and enhancing accessibility.

### **2. Online Assessment Tools:**

The integration of online assessment tools has transformed the evaluation and diagnostic processes in counselling psychology. Saylor, Finch, Spirito, & Bennett (2012), emphasised that online assessments provide standardised measures of psychological functioning, enabling counsellors to make informed decisions about treatment planning and interventions. These tools offer advantages such as increased efficiency, reduced administration time, and enhanced accuracy in data collection (Luxton, Pruitt, & Osenbach, 2014). The utilisation of online assessment tools facilitates a more comprehensive understanding of an individual's psychological state, aiding counsellors in developing targeted interventions.

### **3. Virtual Reality (VR) Applications:**

Virtual reality (VR) applications have also emerged as a promising technological

advancement in counselling psychology. Maples-Keller, Yasinski, Rothbaum, & Pittenger (2017), asserted that VR therapy provides an immersive and controlled environment where individuals can engage in exposure therapy for anxiety disorders, phobias, and trauma-related conditions. The use of VR allows for a safe and realistic simulation of real-world scenarios, facilitating effective therapeutic interventions (Rizzo, Koenig, & Isabella, 2019). VR applications offer a unique opportunity to enhance counselling outcomes by providing a controlled environment for individuals to confront and overcome their fears. Virtual reality therapy is a cutting-edge technology that simulates realistic environments to facilitate therapeutic interventions. VR therapy allows clients to confront and manage anxiety-provoking situations in a safe and controlled environment. For instance, individuals with phobias can undergo exposure therapy by interacting with virtual stimuli that trigger their fears (Botella et al., 2017). VR therapy can be highly effective in treating various anxiety disorders, post-traumatic stress disorder (PTSD), and substance abuse.

#### **4. Data Analytics and Personalised**

##### **Interventions:**

The integration of data analytics has revolutionised the field of counselling psychology by enabling the collection and analysis of large amounts of data. It can lead to valuable insights into individual preferences, needs, and progress. This information empowers counselling psychologists to develop personalized interventions that align with the unique requirements of each student or client (Bickmore, Gruber, & Picard, 2016). By leveraging technology, counselling psychologists can optimise treatment outcomes by tailoring interventions and monitoring progress more effectively.

##### **5. Mobile Applications and Mental Health:**

The proliferation of mobile applications has transformed how individuals manage their mental health. Mobile apps offer a range of features such as mood tracking, meditation exercises, cognitive-behavioural therapy tools, and access to supportive communities. These applications provide users with self-help resources, psycho-education, and techniques for managing symptoms. For instance, Mood-GYM, a web-based program developed by Christensen and colleagues, employs cognitive-behavioural therapy techniques to address depression and anxiety.

The integration of mobile applications into counselling practice complements traditional therapy, empowering individuals to actively participate in their mental health journey (Christensen et al., 2004). Digital tools, such as mobile apps and online self-help resources, have provided clients with a range of resources to support their mental well-being outside of traditional sessions (Grist et al., 2020). These tools offer psycho-education, coping strategies, and even guided meditation, enabling individuals to proactively manage their mental health.

#### **6. Artificial Intelligence (AI) and Natural Language Processing (NLP):**

Artificial intelligence and natural language processing have the potential to revolutionise counselling practices by augmenting therapist-client interactions. AI-powered chatbots and virtual assistants can engage in text-based conversations, offering support, guidance, and resources. These tools have demonstrated effectiveness in promoting self-reflection, psycho-education, and providing immediate assistance. AI algorithms can analyse large datasets to identify patterns and insights, contributing to evidence-based decision-making and personalised treatment plans (Ernsting et al., 2019).

#### **Benefits of technological advancements in counselling psychology within an educational context**

The field of counselling psychology has witnessed significant advancements in technology in recent years by revolutionising the way mental health professionals deliver support and interventions. These technology offer numerous benefits when applied within an educational context, enhancing the effectiveness, accessibility, and reach of counselling services (Hilty et al., 2013; Kauer et al., 2014; Russo & Kapesa, 2021; Freeman et al., 2017, & Sucala et al., 2017). Some of the benefits include the following:

##### **1. Increased Accessibility**

Technology in counselling psychology have paved the way for increased accessibility to mental health services within educational institutions. With the integration of online counselling platforms and Tele-therapy, students can access counselling services remotely, eliminating barriers such as geographical distance, transportation issues, and scheduling conflicts (Hilty et al., 2013). This improved accessibility ensures that more students can benefit from counselling support, regardless of their location or personal circumstances.

## **2. Enhanced Reach and Outreach**

It enables counselling psychologists to extend their reach and provide support to a larger number of students within an educational context. Online platforms, such as video-conferencing and chat-based counselling, allow counsellors to connect with students who may be reluctant to seek in-person assistance due to stigma or personal preferences (Kauer et al., 2014). These virtual counselling options broaden the scope of intervention and help reach students who might otherwise go unnoticed or underserved.

## **3. Personalisation and Individualised Support**

It facilitate the provision of personalised and tailored counselling interventions for students. Digital assessment tools and intelligent algorithms can assist in gathering and analyzing data, enabling counsellors to develop accurate profiles of students' needs and preferences (Russo & Kapesa, 2021). This information allows counsellors to customise interventions and provide individualised support that addresses specific concerns and challenges faced by students.

## **4. Utilisation of Innovative Therapeutic Approaches**

It offers counselling psychologists the opportunity to explore and incorporate

innovative therapeutic approaches within an educational context. Virtual reality (VR) therapy, for example, can simulate real-world scenarios to help students develop coping strategies and practice skills in a controlled environment (Freeman et al., 2017). Such cutting-edge interventions can enhance engagement, motivation, and general effectiveness of counselling within educational settings.

## **5. Enhanced Data Analysis and Outcome Measurement**

It enable the collection and analysis of vast amounts of data, facilitating evidence-based practice and outcome measurement within counselling psychology. Digital platforms can track and monitor various aspects of the counselling process, including session frequency, treatment adherence, and progress indicators (Sucala et al., 2017). This data-driven approach allows counsellors to evaluate the effectiveness of interventions, make data-informed decisions, and continuously improve the quality of services provided.

Therefore, technological advancements on counselling psychology in education are far-reaching. Tele-therapy, online assessment tools, VR applications, and data analytics, Mobile Applications and Mental Health, and Artificial Intelligence (AI) and Natural

Language Processing (NLP) will transformed the delivery of counselling services, assessment procedures, and therapeutic interventions.

### **Challenges associated with the integration of technology in counselling services**

The integration of technology in counselling brings about challenges. Privacy and security concerns related to online communication have raised questions about confidentiality of teletherapy sessions (Sucala et al., 2012). The absence of nonverbal cues in digital interactions can impact the depth of understanding and rapport-building between counsellors and clients (Simpson & Reid, 2014). The obstacles and concerns associated with the use of technology in counselling services, drawing on insights from research and expert opinions are:

#### **1. Ethical and Legal Considerations:**

One of the primary challenges in integrating technology into counselling services lies in navigating the ethical and legal considerations associated with the use of technology in therapy. Issues such as confidentiality, privacy, and data security become paramount when utilizing digital platforms for therapeutic purposes (ACA, 2014). Counsellors must adhere to professional codes of ethics and ensure they

are using secure platforms that protect client information.

#### **2. Technology Competence and Training:**

Ensuring that counsellors possess the necessary technological competence and training to effectively utilize digital tools. While technology is becoming more prevalent in society, not all counsellors have received comprehensive training in integrating technology into their therapeutic practices (Gonzalez et al., 2018). This lack of expertise can hinder the seamless integration of technology and may result in suboptimal implementation or miscommunication with clients.

#### **3. Digital Divide and Accessibility:**

The digital divide refers to the disparity in access to technology and the internet among different populations. Integrating technology into counselling services may inadvertently exacerbate existing inequalities if certain individuals or communities lack access to reliable internet connections, hardware devices, or digital literacy skills (Cicchetti et al., 2020). This issue can limit the reach of technology-enabled counselling services and reinforce disparities in mental health care.

#### **4. Therapeutic Alliance and Rapport:**

Establishing a strong therapeutic alliance and rapport is fundamental to successful counselling outcomes. The use of technology

can present challenges in building and maintaining this crucial connection between counsellors and clients. The absence of nonverbal cues, such as body language and facial expressions, in digital interactions can impact the depth of emotional understanding and may require counselors to adapt their approach to ensure effective communication and rapport building (Haberstroh et al., 2018).

#### **5. Ethno cultural Considerations:**

Technology integration in counselling services must also take into account the diverse ethno cultural backgrounds of clients. Cultural nuances, traditions, and language barriers may present challenges in providing culturally sensitive care through digital platforms (Constantino et al., 2019). Counsellors must be mindful of these factors to avoid potential miscommunication, misunderstanding, or cultural insensitivity when using technology in therapy.

#### **Ethical considerations arise from the use of technology in counseling psychology**

The field of counselling psychology has witnessed significant advancements with the integration of technology in therapeutic interventions. The use of technology, such as online therapy platforms, video conferencing, and mobile applications, has expanded access to mental health services. While technology offers numerous benefits,

it also raises ethical considerations that need careful attention. These are as follows:

#### **1. Confidentiality and Privacy**

The use of technology introduces unique challenges to maintaining client confidentiality and privacy. Electronic communication platforms and data storage systems can be vulnerable to breaches, hacking, or unauthorised access. It is crucial for counsellors to implement stringent security measures and ensure the encryption of client data. Furthermore, counsellors must educate clients about the potential risks and limitations of technology, obtaining informed consent for the use of electronic communication (Cavoukian, 2013). It was emphasised that there is need to address issues related to privacy, data security, and the potential reduction in the therapeutic alliance in remote counselling (Luxton, Pruitt, & Osenbach 2020). The ethical use of technology requires adherence to guidelines and standards that safeguard client confidentiality and privacy while ensuring the well-being of individuals receiving counseling services.

#### **2. Competence and Training**

The integration of technology necessitates that counselling psychologists possess the necessary technological competence to ensure effective and ethical practice. Ethical

guidelines emphasise the importance of ongoing professional development to stay abreast of technological advancements (APA, 2017). It is the responsibility of the counsellor to be knowledgeable about the appropriate use of technology, to understand the limitations and potential risks, and to seek training or consultation when necessary.

### **3. Informed Consent and Boundaries**

Informed consent is a critical ethical consideration in the use of technology. Counsellors must ensure that clients are fully informed about the nature of online therapy, including the potential benefits, limitations, and risks involved. It is important to establish clear boundaries around the use of technology and maintain appropriate therapist-client relationships. This includes avoiding dual relationships on social media platforms, maintaining professional communication channels, and establishing guidelines for responding to client emergencies and crisis situations (Cavoukian, 2013).

### **4. Digital Divide and Access Disparities**

The use of technology in counselling psychology raises concerns about the digital divide and access disparities among clients. Not all individuals have equal access to technology or possess the necessary digital literacy skills. This may limit the reach of mental health services and exacerbate

existing health disparities (American Psychological Association, 2017). Ethical practitioners must consider these access disparities and strive to provide alternative modes of therapy for individuals who may not have access to or prefer in-person sessions.

Therefore, technology offers significant advantages, careful attention must be paid to ethical considerations and potential challenges to ensure the responsible and effective integration of technology into counselling psychology practice.

### **Conclusion**

The integration of technology has significantly impacted the field of counseling, transforming the way therapeutic services are delivered and accessed. Online platforms, Tele-therapy, and digital tools have become increasingly prevalent, offering new avenues for clients to receive support and counsellors to connect with their clients. The incorporation of technology in counselling has undoubtedly reshaped the field, offering both opportunities and challenges that counsellors and clients must navigate in the digital age.

### **Recommendations**

The following recommendations were made for counselling psychologists, educators, and policymakers:

1. **Training and Professional Development:** It is crucial for counselling psychologists to receive adequate training and professional development opportunities to stay updated with the latest technological advancements. Training programs should include modules on ethical guidelines, privacy protection, and the effective use of technology in counselling practice.
2. **Ethical Guidelines and Standards:** Professional organisations and regulatory bodies should establish clear ethical guidelines and standards for the use of technology in counselling psychology. These guidelines should address issues such as privacy, data security, informed consent, and maintaining the therapeutic alliance in remote counselling settings.
3. **Integration of Technology in Counselling Curricula:** Counselling psychology programs should integrate technology-related coursework into their curricula to prepare future counsellors for utilising technology in their practice. This includes training on Tele-therapy, online assessment tools, virtual reality applications, and data analytics.
4. **Collaboration and Interdisciplinary Approaches:** Collaboration between counselling psychologists, educators, and technology experts is crucial for the effective integration of technology in counselling services. Interdisciplinary teams can work together to develop innovative technological solutions that meet the specific needs of students and clients.
5. **Continued Research and Evaluation:** Further research is needed to explore the long-term effectiveness and outcomes of technology-based counselling interventions. Studies should focus on assessing the impact of different technological tools on treatment outcomes, client satisfaction, and the therapeutic alliance.
6. **Accessibility and Equity:** Efforts should be made to ensure equitable access to technology-based counselling services, particularly for underserved populations and those with limited resources. Policies and initiatives should be implemented to bridge the digital divide and address disparities in access to technology.
7. **Data Privacy and Security:** To protect the confidentiality and privacy of clients, counseling psychologists must adhere to strict data protection protocols. Secure platforms and encryption measures should be utilized to safeguard client information during Tele-therapy sessions and online assessments.



REFERENCES

- American Counseling Association. (2014). ACA Code of Ethics. Retrieved from <https://www.counseling.org/resources/aca-code-of-ethics.pdf>
- American Psychological Association. (2017). Ethical Principles of Psychologists and Code of Conduct. Retrieved from [https:// www.apa.org/ethics/code/](https://www.apa.org/ethics/code/)
- Bickmore, T., Gruber, A., & Picard, R. (2016). Establishing the computer-patient working alliance in automated health behavior change interventions. *Patient Education and Counselling, 99*(4), 738-753.
- Botella, C., García-Palacios, A., Villa, H., Baños, R., Quero, S., Alcañiz, M., & Riva, G. (2017). Virtual reality exposure-based therapy for the treatment of post-traumatic stress disorder: A review of its efficacy, the adequacy of the treatment protocol, and its acceptability. *Neuropsychiatric Disease and orders, 13*, 253-260.
- Cavoukian, A. (2013). Privacy and security: A modern, ethical approach to responsible practice. *Canadian Psychology/Psychologie Canadienne, 54*(1), 1-12.
- Christensen, H., Griffiths, K. M., & Jorm, A. F. (2004). Delivering interventions for depression by using the internet: Randomised controlled trial. *BMJ, 328*(7434), 265. [https:// doi.org/10.1136/bmj.37945.566632.EE](https://doi.org/10.1136/bmj.37945.566632.EE)
- Cicchetti, A., Drapeau, M., & Saint-Laurent, L. (2020). E-mental health: A rapid review of the literature. *Psychiatric Services, 71*(7), 759-762.
- Constantino, M. J., Marn, K. L., Manber, R., Arnow, B.A., Klein, D.N., Rothbaum, B.O., & Zhang, N. (2019). The interactive effects of patient personality and therapist experience on alliance
- Ellis, A. (1962). Reason and Emotion in Psychotherapy. Lyle Stuart.
- Ernsting, C., Dombrowski, S.U., Oedekoven, M., O Sullivan, J. L., Kanzler, M., & Kuhlmeier, A. (2019). Using smartphones and health apps to change and manage health behaviors: A population-based survey. *Journal of Medical Internet Research, 21*(2).
- Freeman, D., Reeve, S., Robinson, A., Ehlers, A., Clark, D., Spanlang, B., & Slater, M. (2017). Virtual reality in the assessment, understanding, and treatment of mental health disorders. *Psychological Medicine, 47*(14), 2393-2400.
- Freud, S. (1900). The Interpretation of Dreams. Macmillan.
- Gonzalez, A., Ramirez, M. T., & Viadero, V. (2018). Digital competencies in counseling psychology: A systematic review. *International Journal of Environmental Research and Public Health, 15*(6), 1222.
- Grist, R., Porter, J., & Stallard, P. (2020). Mental health mobile apps for preadolescents and adolescents: A systematic review. *Journal of Medical Internet Research, 22*(12).
- Haberstroh, S., Parlamis, J. D., & Winek, J. L. (2018). Exploring counseling students' experiences and attitudes toward online counseling: A mixed methods study. *Journal of Technology in Counseling, 9*(1), 1-13.
- Hilty, D. M., Ferrer, D. C., Parish, M. B., Johnston, B., Callahan, E. J., & Yellowlees, P. M. (2013). effectiveness of telemental health: A 2013 review. *Telemedicine and e-Health, 19*(63), 444-454.
- Kauer, S. D., Mangan, C., & Sancil, L. (2014). Do online mental health services improve help-seeking for young people? A systematic review. *Journal*

- of *Medical Internet Research*, 16(3), 66.
- Lambert, M. J., & Barley, D. E. (2002). Research summary on the therapeutic relationship and psychotherapy outcome. *Psychotherapy: Theory, Research, Practice, Training*, 38(4), 357-361.
- Luxton, D. D., McCann, R. A., Bush, N. E., Mishkind, M. C., & Reger, G. M. (2016). mHealth for mental health: Integrating smartphone technology in behavioural healthcare. *Professional Psychology: Research and Practice*, 47(6), 505-512.
- Luxton, D. D., Pruitt, L. D., & Osenbach, J. E. (2014). Best practices for remote psychological assessment via telehealth technologies. *Psychological Services*, 11(3), 272-282.
- Luxton, D. D., Pruitt, L. D., & Osenbach, J. E. (2020). Ethical considerations in telebehavioral health: Best practice guidelines for technology-based mental health services. *Rehabilitation Psychology*, 65(4), 429-441.
- Maples-Keller, J. L., Yasinski, C. W., Rothbaum, B. O., & Pittenger, C. (2017). Virtual reality-enhanced extinction of phobias and post-traumatic stress. *Neurotherapeutics*, 14(3), 554-563.
- Merriam-Webster.com, (2023). Technology. Retrieved from <https://www.merriam-webster.com/dictionary/technology>
- O'Donnell, C. A., Doerfler, L. A., & Van Slyke, J. (2020). The effectiveness of telemental health with children and adolescents: A systematic review and meta-analysis. *Psychiatric Services*, 71(1), 20-32.
- Rizzo, A. S., Koenig, S. T., & Isabella, G. (2019). Virtual reality applications for the assessment and treatment of PTSD. In C. J. Gatchel & D. C. Schultz (Eds.), *Handbook of Virtual Environments in Clinical Psychology and Neuroscience*, Elsevier.
- Rogers, C. R. (1951). *Client-Centered Therapy: Its Current Practice, Implications, and Theory*. Houghton Mifflin.
- Russo, A., & Kapesa, L. (2021). Technology in school counseling: Current trends and future directions. In S. Springer, J. J. Athanasiou, & T. J. Kozlowski (Eds.), *Handbook of Research on Technological Integration in Counseling and Psychotherapy*, IGI Global.
- Saylor, C. F., Finch, A. J., Spirito, A., & Bennett, B. (2012). The children's depression inventory: A systematic evaluation of psychometric properties. *Journal of Consulting and Clinical Psychology*, 60(6), 773-780.
- Simpson, S. G., & Reid, C. L. (2014). Therapeutic alliance in videoconferencing psychotherapy: A review. *Australian Journal of Rural Health*, 22(6), 280-299.
- Sucala, M., Schnur, J. B., Constantino, M. J., Miller, S. J., Brackman, E. H., & Montgomery, G. H. (2012). The therapeutic relationship in e-therapy for mental health: A systematic review. *Journal of Medical Internet Research*, 14(4), 110.
- Sucala, M., Schnur, J. B., Glazier, K., Miller, S. J., Green, J. P., & Montgomery, G. H. (2017). Clinical outcomes of a brief motivational intervention for reducing anxiety and depressive symptoms in patients with cancer: A feasibility study. *Journal of Clinical Psychology in Medical Settings*, 24(3-4), 204-215.

**Relationship between Training and Development of Business Educators and their Perceived Job Performance in Colleges OF Education in Kano State**

By

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**ABSTRACT**

The main objective of this research study was to examine the relationship between the training and development of Business educators and their perceived job performance in colleges of education of Kano State. The research specifically investigated the relationships between on- the- job training and development and off- the- job training and development of Business educators and their perceived job performance in colleges of education of Kano State. The study employed a cross sectional research and descriptive research design in which data was collected with quantitative approach. The sample size of 150 business educators was selected from five colleges of education out of ten in Kano State. Results from Pearson linear regression analysis did not support the two null hypotheses that there were no significant relationship between training and development variables and perceived job performance of Business educators in Kano State. Specifically, there were significant relationship between the two independent variables, on the job and off the job training and development with Business educators' perceived job performance in colleges of education in Kano State. On- the- job (t – statistic = -2.464) was significant at  $P < 0.000$  and off-the-job (t – statistic = .427) was significant at  $P < 0.000$ . The study recommends that training and development of all Business educators should be dynamically followed and made obligatory and the employers should give compulsory training programs for all employees (Business educators) in order to improve performance.

**Keywords:** *Training, Development, Business educator, job performance*

**Introduction**

Public and private sector colleges of education are experiencing a significant phase of decline with regard to service delivery Imeokparia and Kennedy (2021). This has seen limited investment in human capital development and a notable exodus of available skilled Business educators, which has added to the acute shortage of skills in the sector. Moreover, the sector is lacking in intermediate skills, which could be resolved

by a significant investment in human capital and workplace exposure which can rapidly develop skills in addition to interpersonal and analytical skills. Against this backdrop, most educators in the sector are affected by weak service delivery (Egele, 2021), with the educators in the institutions not performing their tasks up to expected standards. Business educators are experts who have undergone business education training in higher

institutions in the country. Business education as a skill-based course aimed at exposing the learners or graduates to business and education competencies that will enable the learners or graduates to either be employees or employers of labour (Imeokparia & Kennedy 2021).

Business education programme is so designed and structured so as to equip the learners with life-long skills that will enable them to compete favourably in the world of work. The contributions of business educators in the world of work are reflected in their job performance.

Training and development are a part of an organization's subsystem that focuses on improving individual and group of employees. Training is viewed as a systematic approach of learning and development that improve individual, group and organization (Nda, & Rashad 2013). Training is the method of improving an employee's skill, knowledge, and abilities in order for them to perform a specific job. Employee development refers to their overall improvement. It is a process by which employees (business educator) develop experience and competency in their current job, as well as the ability to perform future tasks (Topiwala & Anuradha, 2021). They identified the following types On-the-job

training methods as: Job rotation, Job instruction, Coaching and Committee assignments, and the off-the-job as: Vestibule training method, Case study method, Incident method, Conference, Lecture method Simulation method and Outward bound training method.

**Job rotation:** In this method, an employee is given the opportunity to work on a variety of jobs, each with its own set of responsibilities, without incurring any additional cost.

**Job instruction:** An employee is guided by a trainer or supervisor who advises him/her on the exact steps to complete the job in this form of training.

**Coaching:** In every organization, both practical and theoretical development of employees is needed. Most organizations opt for this method of training. In this method, the organization assigns a coach to the employees who will train them. He also receives regular feedback from the trainer.

**Committee assignments:** Under this method of training, the company hosts a meeting or seminar for employees who are given real-life problems to solve. As a result, all the staff of the organization develops teamwork, leadership skills, and so on.

**Vestibule training method:** For manual workers, the vestibule training method is well-known. If organizations begin to train

workers in the factory or at the workplace, there is a risk of miss happening with the machinery in the factory. Similar tools and machinery are arranged outside of the organization in this method.

**Case study method:** In general, a case study focuses on a problem that an organization is facing. This provides a chance to examine the problem and formulate a workable situation. This method encourages workers to be more analytical and productive in their thinking.

**Incident method:** Under this method, the organization creates a list of series of real-life events. The employees are then asked to express their feelings about the incident or circumstances. After that everybody sits down and decides the common solution based on individual and group decisions.

**Conference:** A conference occurs when a group of people gathers to discuss a specific topic or issue. Each employee investigates and discusses a variety of topics relevant to the subject. Furthermore, this method allows each employee to convey their individual opinion.

**Lecture method:** The lecture method has been used in organizations to train white-collar or administrative workers. Trainers offer structured talks on particular topics. This method is appropriate for developing fundamental theoretical knowledge that must

be acquired prior to practice. The audio-visual aids appropriate for a wide audience.

**Simulation method:** This simulation training method appears to use specially designed equipment or machines to improve employee operative awareness and skills, with an emphasis on proper use in the real world. The majority of simulation training is done on a computer or with virtual reality systems. When very expensive machinery or equipment is used to do the job, the simulation method is usually used.

**Outward bound training method:** The OBT method requires managers and employees to live in cabins or tents outside of the workplace for a specific number of days. Participants must take part in a variety of tests in order to determine their survival skills. They gain insight into their own personality, hidden potential, creativity, and leadership abilities. One of the costliest trainings and development strategies is OBT. Employees are always regarded with development in career-enhancing skills which leads to employee motivation and retention. There is no doubt that a well-trained and developed staff will be a valuable asset to the company and thereby will increase the chances of their efficiency and effectiveness in discharging their duties. On the other hand development means those learning opportunities designed

to help employees to grow. Development is not primarily skills oriented. Instead it provides the general knowledge and attitudes, which will be helpful to employers in higher positions. Development programs are regarded as specific framework for helping employees to develop their personal and professional skills, knowledge, attitudes, behavior and consequently improve their abilities to perform specific task in the organization. It provides knowledge about business environment, management principles and techniques, human relations, specific industry analysis and the like is useful for better management of company. Training and development have become one of the necessary functions in most organizations, because they lead to high performance in the same field and are important part of human resource department, it has a significant effect on the success of an organization through improving employee performance (Nda, & Rashad 2013, Mozael, 2015).

Employee job performance is normally looked at in terms of outcomes that are expected by the organisation. To Egele (2021), Performance can be looked at in terms of behaviour towards goals, this is in conformity with Abubakar and Abubakar (2013) who defined Employee's job

performance as behaviours or actions that are useful in the realization of the goals of the organization. In this context, both the productive and counterproductive behaviours exhibited by business educators are described as their job performance. Job performance is measured against the performance standards set by the organization which includes productivity, efficiency, effectiveness and quality and profitability. To Franklin, Richard and Anis (2014), Job performance is continuously done to learn new skills for capital improvement, morale improvement and ability to adapt to change.

In order to investigate the training and development and Business educators' perceived job performance in colleges of education in Kano State, the following sub objectives were achieved;

i To examine the relationship between on-the-job training and development and Business educators' perceived job performance in colleges of education in Kano State.

ii To explore the relationship between off-the-job training and development and Business educators' perceived job performance in colleges of education in Kano State.

To support the objectives the following questions were answered:

i What is the relationship between on- the - job training and development and Business educators' perceived job performance in colleges of education in Kano State.

ii What is the relationship between off-the- job training and development and Business educators' perceived job performance in colleges of education in Kano State.

Also the following null hypotheses were tested:

i  $H_{0i}$ : There is no significant relationship between on-the-job training and development and Business educators' perceived job performance in colleges of education in Kano State.

ii  $H_{0ii}$ : There is no significant relationship between off- the -job training and development and Business educators' perceived job performance in colleges of education in Kano State.

### **Empirical review**

Prior empirical studies have established a positive relationship between Training and development and employee performance. For example, Franklin, Richard and Anis (2014), investigated the impact of training and development on employee performance: a case study of ESCON in South Africa consulting, using 60 employees who were randomly selected with questionnaire. The data collected was analysed with charts and

result revealed that training provided in the organisation is aligned with business objectives, a clear directions provided during training and hat with training the following were achieved: improves behaviour, morale, motivates that enhance their performance also quality of products produced, reduces mistakes as well as defects in products, reduction in staff turnover and increases opportunities for career development. This suggests that employee who pays attention and acquire training in the firm will perform well.

Nguyen and Duong (2021) investigated employee retention: do training and development, job satisfaction and job performance matter, using quantitative design with a sample size of 300 employees in Vietnam. The data collected was analysed with correlation and exploratory factor analysis (EFA), results confirmed that there was a positive correlation between training and development and employee retention, job satisfaction also positively affects employee retention as well as job performance positively affect employee retention. This suggests that employee who is satisfied will be able to stay long in an enterprise.

In another study, Mohammed, Abedallah and Mohammed (2015) evaluated training and its impact on the performance of employees at

Jordanian Universities, a case of Yarmouk University using questionnaire on 80 employees. The data collected was analysed and presented with means and standard deviations on tables, the results showed positive attitudes towards the identification of training needs through the developers of training programs and also positive attitudes towards the performance of employees at the university. This also implies that when employee are aware training needs and developers, they can be influenced to acquire the training thereby apply it on the work which improve their performance.

In a related study, Topiwala and Anuradha (2021) examined a study on the effectiveness of training and development on employee's performance at JK Paper Ltd, using 100 respondents who answered the questionnaire. Data collected was analysed with standard deviation, mean, reliability test, frequency, coefficient of skewness. Their results revealed positive relationship with the following; more expertise, improvement for effectiveness, higher employee performance and productivity, reduced turnover and absenteeism, more understanding of their job clearly and provision skill, mould employee's attitudes towards job and encouragement to perform job passionately. The implication that stand out from Topiwala

and Anuradha (2021) is that the performance of any employee depends on the level of training acquired which will enable him attain these variables of performance.

Mobarak, Musfiq and Wasib (2019) investigated the impact of training and development on employees' performance: an analysis of quantitative data. Using convenience sampling technique on 30 respondents with questionnaire designed on 5point liket scale. The data collected was analysed using tables with frequencies and percentages and charts too. Their result revealed that average employee strongly belief that training improves skills, knowledge, and abilities and it helps to create job satisfaction and potential motivators which can lead to many possible benefits for both individuals and the organization. This indicates that absence of training in an enterprise is the down fall of such organization.

Similarly Chhy, (2019) examined the impact of training and development on employee performance: a case study of selected private secondary schools in Phnom Penh Cambodia. Using 90 respondents with question to sample the observation of the respondents, the data collected were analyzed, presented and interpreted using descriptive statistics of SPSS and ANOVA analysis. The result



showed benefits of training and development on employee performance which enabled the school to maintain competitive advantage, increase in job satisfaction, and reduce employee turnover is enhanced competence. This competence contributed to higher productivity that promoted successful succession planning aligns with school objectives. Implying that school that want to remain in operation should pay priority responsiveness to acquisition of training.

Rahman and Malik (2021)), evaluated the relationship between training and development and employees performance: an analysis using qualitative method to analyse different literature and discuss the issues. Their finding revealed that training and development are regarded as one of the important functions of the company's Human Resource department, and there is need for capacity building, which has three different levels: individual, organizational and systemic. This suggests that capacity building levels will help in developing attitude, behaviour, and knowledge through learning experiences to attain higher organizational performance.

In another study, Mohamed (2022) examined the impact of training and development on employee performance during covid-19 pandemic, using a sample of 35 persons, data

was collected through questionnaire was presented with tables, graphs, and pie charts. Result of the findings showed that there is a positive relationship between training and development and employee performance. The implication that stands out from Mohamed (2022) is that the success of firm depends on training and development; staffs that acquire skills ease problems.

### **Methodology**

The study used descriptive research design and population consists of all Business educators' in ten colleges of education in Kano State. Random sampling technique was used to select 5 colleges, 30 lecturers were randomly selected from each, making the total number of participants one hundred and fifty (150). The researcher's made questionnaire was designed and used for data collection for the purpose of this study. The instrument was made up of three sections, A, B and C. Section A, comprised of the participants' Demographic information such as gender, age and educational level. Section B, Independent variable and C Dependent variable. The researcher made questionnaire items, which consists of 38 items cut across various variables. The questionnaire used was thoroughly assessed and corrected by the expert. It was subjected to both face and

content validity to ensure that the questions were in line with the formulated research question in the study. The researcher physically went round the selected colleges where the questionnaire was administered to the participants and this lasted for four weeks owing to the fact that the colleges were scatter in different locations. The completed instruments were collected immediately and

there was no case of slow destruction. Relation between the independent variables (training and development) and the dependents variable (Business educators perceived performance) was ascertained using mean and standard deviations, Pearson correlation, t-test in multiple regressions Analysis.

**Results**

**Table 1: Mean and standard deviation of responses on-the-job training and development and Business educators’ perceived job performance in colleges of education in Kano State (n = 150)**

S/N	Items	Mean	SD	Rank	Interpretation
1	Contest method	3.81	.708	7	High Agreement
2	Job instruction	3.87	.527	6	High Agreement
3	Committee assignment	4.17	.680	5	High Agreement
4	Role playing method	4.37	.497	4	Very high Agreement
5	Job rotation	4.39	.490	3	Very high Agreement
6	Coaching	4.46	.729	2	Very high Agreement
7	Mentoring	4.47	.609	1	Very high Agreement
	<b>Average Mean</b>	3.60			

Source: Researcher’s Computation (2023)

The results in table (1 shows that item (7), which is mentoring method of on-the- job training had the highest mean (4.47), which indicates that the respondents agree very highly with the content of the item. Item 1

which is contest method had the lowest mean (3.81) which indicates that the respondents agree highly though they were not very familiar with the method how was done.

**Table 2: Mean and standard deviation of responses off-the-job training and development and Business educators’ perceived job performance in colleges of education in Kano State (n = 150)**

S/N	Items	Mean	SD	Rank	Interpretation
1	Case study method	3.54	.587	7	High Agreement
2	Lecturing	4.17	.628	6	High Agreement
3	Vestibule	4.18	1.024	5	High Agreement
4	Conferences method	4.34	.554	4	Very high Agreement
5	Incident method	4.41	.545	3	Very high Agreement
6	Simulation method	4.41	.533	3	Very high Agreement
7	Workshops	4.43	.497	2	Very high Agreement
8	Outward bound training method	4.56	.524	1	Very high Agreement
	<b>Average Mean</b>	4.23			

Source: Researcher’s Computation (2023)

Table (2) shows that item (8) which is Outward bound training method had the highest rating (4.56) which indicates a high degree of agreement with the content of the item among the off-the-job training and development. This result can be ascribed to the fact that Outward bound training method is more favored training method among

Business educators in colleges of education in Kano state. Agreement with the remaining items ranges were between (4.43-3.54), which indicates also a high level of agreement with the content of these items among Business educators in colleges of education in Kano State.

FINAL DRAFT

**Table 3: Mean and standard deviation of responses on Business educator’s perceived performance in colleges of education in Kano State (n = 150)**

S/N	Items	Mean	SD	Rank	Interpretation
1	Decreases the routine of daily work	4.25	.504	15	Very high Agreement
2	Achieves the aims of the college	4.25	.477	15	Very high Agreement
3	Reduce employee turnover	4.25	.504	15	Very high Agreement
4	Performance of the college can be evaluated	4.28	.451	14	Very high Agreement
5	Educator’s prior and after training can be compared	4.29	.523	13	Very high Agreement
6	Identify the potential for further development	4.31	.697	12	Very high Agreement
7	Reduce absenteeism	4.35	.579	11	Very high Agreement
8	Improve self-confidence	4.37	.573	10	Very high Agreement
9	Enhance the level of educators	4.37	.485	10	Very high Agreement
10	Solves work problems	4.41	.508	9	Very high Agreement
11	Enhance morale among employee	4.43	.524	8	Very high Agreement
12	Enhances the mastery of the skills/competence	4.45	.500	7	Very high Agreement
13	Promotes succession plan	4.46	.513	6	Very high Agreement
14	Performance of business educator can be assessed	4.47	.774	5	Very high Agreement
15	Salary increases after training	4.48	.515	4	Very high Agreement
16	Increase the efficiency of educators	4.50	.502	3	Very high Agreement
17	Enhance expertise	4.50	.621	3	Strongly Agree
18	Cope with the constantly changing technology	4.53	.527	2	Very high Agreement
19	Improves job satisfaction	4.55	.500	1	Very high Agreement
20	Molds attitude toward job	4.55	.525	1	Very high Agreement
	<b>Average Mean</b>	4.40			

Source: Researcher’s Computation (2023)

Table (3) shows that items (20 & 19 ) which are “Molds attitude toward job” and “Improves job satisfaction” had the highest mean (4.55) respectively with a standard deviation at (.525 & .500). Item (18) which states that "Cope with the constantly changing technology” came second with a mean at (4.53) and a standard deviation at

(.527) which indicates that training and development provided Business educators with the capacity to cope with constantly changing with technology.

Items (1, 2 & 3) which state that “Decreases the routine of daily work”, “Achieves the aims of the college” & “Reduce employee turnover” had the lowest mean (4.25)

respectively which indicate that Decreases the routine of daily work”, “Achieves the aims of the college” & “Reduce employee turnover” were not frequently visible with

acquisition of training and development among Business educators in colleges of education in Kano State.

**Table 4: Pearson’s linear Correlation Coefficients for training and development and Business educators’ perceived job performance in colleges of education in Kano State**

Variables correlated	Zero order	Sig value	Interpretation
On-the-job training and development Vs Business educators’ perceived job performance	-.197	.000	Significant correlation
Off-the-job training and development Vs Business educators’ perceived job performance	.015	.000	Significant correlation

Correlation Significant at the 0.01 (1-tailed)  
Source: Researcher’s Computation (2023)

The foundation upon which regression analysis is based is the correlation coefficient between dependent variable and each of the independent variables. Results in Table 4 showed that the relationship between dependent variable (Business educators’ perceived job performance) and each of the

independent variables were significant at 0.000; this is because these results are all within the threshold of its significance level which is below 0.05. As indicated, the study design was supported in establishing whether the study variables were co-related or not.

**Testing the null hypotheses**

**Table 5: Multiple regression analysis for training and development and Business educators’ perceived job performance in colleges of education in Kano State**

Variables Regressed	Adjusted R Square (r <sup>2</sup> )	F	Sig	Findings
Training and development Vs Business educators’ perceived job performance	.027	3.053	.000	Significant
<b>Relations</b>	<b>Beta</b>	<b>t-value</b>	<b>p-value</b>	<b>Decision on all H<sub>0</sub></b>
(Constant)	35.183	10.504	.000	Rejected
On-the-job training and development	-.429	-2.464	.000	Rejected
Off-the-job training and development	.088	.427	.000	Rejected

Source: Researcher’s Computation (2023)

The results of multiple linear regressions in Table 5 show that adjusted r<sup>2</sup> which is the explained variance = .027, it means that 2.7% of variations found in Business educators’

perceived job performance has been jointly and significantly explained by Training and development consisting on-the-job training and off- the- job training and development.

Similarly, F -statistic which is basis for significant level was = 3.053 and significant at 0.000. Also t- statistic which is the basis for accepting or rejecting null hypothesis showed that the two variables of the independent variable namely: on-the-job training and off-the-job training and development exerted significant relationship on Business educators' perceived job performance.

The first null hypothesis "There is no significant relationship between on-the-job training and development and Business educators' perceived job performance in colleges of education in Kano State" This null hypothesis was tested using the result of coefficient in the multiple linear regression. Results in Table 5 show that on-the-job training t - statistic = -2.464 and significant at 0.000. By this result the null hypothesis earlier formulated is rejected because the sig value is below the threshold of its acceptance level (0.05) and we infer that on-the-job training and development is significantly related with Business educators' perceived job performance in Kano State. Therefore the alternative hypothesis is accepted thus: There is a positive and significant relationship between on the job training and development and Business educators' perceived job performance in Kano State.

The second null hypothesis "There is no significant relationship between off-the-job training and development and Business educators' perceived job performance in colleges of education in Kano State" This null hypothesis was tested using the result of coefficient table in the multiple linear regression. The result of the multiple linear regression in Table 5 showed that off- the-job t- statistic = .427 was significant at 0.000. By this result the null hypothesis earlier formulated is hereby rejected because the sig value is below the threshold of its acceptance level (0.05) and we infer that off-the-job training and development can significantly relate with Business educators' perceived job performance in colleges of education in Kano State. The alternative hypothesis is therefore accepted thus: There is significant relationship between off-the-job training and development and Business educators' perceived job performance in colleges of education in Kano State.

### **Discussion of Findings**

Generally, this study succeeded in advancing the current understanding of the key determinants Business educators' perceived job performance by providing answers to the two research questions on the relationship of:

- i) On-the-job training and development and
- ii) Off-the-job training and development and

Business educators' perceived job performance in colleges of education in Kano State.

The hypotheses derived from these research questions were tested using linear regression, the result revealed a significant relationship of on-the-job training and off-the-job training and development and Business educators' perceived job performance. These findings were not surprising because they were consistent with prior empirical studies. Specifically, the relationship between training and development and Business educators' perceived job performance consistent with the findings by Franklin., et al (2014), they indicated that possession of training and development improves employee performance, improves employee morale, motivates employees to enhance their performance, improves the quality of products produced, reduces mistakes as well as defects in products, reduction in staff turnover and increases opportunities for career development. Likewise, Nguyen and Duong (2021) who found results similar to those of this present study. They reported that employee who possessed training and development had job satisfaction and therefore is retained. Additionally, this present result was consistent with similar results reported regarding the positive

relationship of level of training and development on successful performance of employees such as positive attitudes towards the identification of training needs through the developers of training programs and also positive attitudes towards the performance of employees (Mohammed., et al 2015); more expertise, improvement for effectiveness, higher employee performance and productivity, reduced turnover and absenteeism, more understanding of their job clearly and provision of enough skill required to perform a task, mould employee's attitudes towards job and encouragement to perform job passionately (Topiwala & Anuradha, 2021); improves skills, knowledge, and abilities and it helps to create job satisfaction and potential motivators (Mobarak., et al 2019); increase in job satisfaction, and reduce employee turnover to include: enhanced competence to perform their jobs and contributed to higher productivity that promoted successful succession planning (Chhy, 2019); important functions of the company's Human Resource department, and there is need for capacity building (Rahman & Malik (2021).

### **Conclusion**

Training and Development are one of the most important parts of an organization, because it has rightly been said, employee

development is the key to organizational sustainable development. Organizations must have employees who are able to quickly adapt to an ever-changing world market. It accelerates organizational process, enhances employees' morale and abilities, and ensures maximum utilization of resources, most importantly, human resources. This research was performed to examine the training and development and Business educators' perceived job performance in colleges of education in Kano State. The study revealed that there is a significant effect of training and development on employee performance in colleges of education in Kano State. Business educators felt that training and development helped them in their personal growth and encouraged them to perform their job enthusiastically as it molds attitude toward job and improves job satisfaction. Employee turnover and absenteeism have reduced after allocating the training to employees. Providing formal out bound training programs and mentoring to new employees as well as to existing employees and evaluating the outcome are the factors leading to the success of their performance. The results of multiple linear regressions show that on-the-job training and off-the-job training and development exerted significant

relationship on Business educators' perceived job performance.

### **Recommendations**

The study suggested that

1. Training and development of all staff should be dynamically followed and made obligatory by managements and the employers.
2. Managements and the employers should give compulsory training programs for all employees (Business educators) in order to improve performance.
3. Management of colleges of education should make training and development of staff a priority in order to get the best out workforce as well as improving productivity and have a broader understanding of its valuable impacts.
4. Business educators should be made to understand that training and development is a must in their career because as the world keeps changing, delivery styles changes too, therefore they must be available to continuous learning.



## REFERENCES

- Abubakar, T. & Abubakar, A. N. (2013). Assessing the Effects of Human Resource Management Practices on Employee Job Performance: A study of Usman Danfodiyo University, Sokoto. *Journal of Business Studies Quarterly*, 5(2), 113.
- Chhy S, (2019). The Impact of Training and Development on Employee Performance: A Case Study of Selected Private Secondary Schools in Phnom Penh Cambodia. *Global Journal of Human Resource Management* Published by European Centre for Research Training and Development UK 7(3), 40-49.
- Egele, A. C. (2021). Skills Acquisition in Business Education and Career Performance of Self-Employed Graduates of B.Sc (Ed.) in Kano State, Nigeria. *International Journal of Educational Research and Policy Making (IJERPM)*, Doi:10.13140/ijerpm. ISSN. (P): 2695-2351. 4(1), 898-910.
- Franklin, D. K., Richard, C. and Anis, M. K. (2014). The Impact of Training and Development on Employee Performance: Case Study of Escon Consulting .Singaporean *Journal of Business Economics and Managt Studies*. 3(3),72-105.
- Imeokparia, P. O. & Kennedy, E. (2021). Reward Systems as Determinants of Business Educators' Perceived Job Performance and Retention in Colleges of Education in Niger Delta, Nigeria. *International Journal of Educational Research and Policy Making (IJERPM)*, Doi:10.13140/ijerpm. ISSN (P): 2695-2351. 4(1), 722-730.
- Mobarak, K., Musfiq M. C., and Wasib B. L. (2019). The Impact of Training and Development on employees' Performance: An Analysis of Quantitative Data. *Noble International Journal of Business and Managet Research* ISSN (e): 2520-4521ISSN: 2522-6606 3(2), 25-33.
- Mohamed, H. A. (2022). A Research Study on Impact of Training and Development on Employee Performance during Covid-19 Pan demic. *International Journal of Managerial Studies and Research ch* (IJMSR) ISSN 2349-0330 (Print) & ISSN 2349-0349 (Online) <https://doi.org/10.20431/23490349.1007001www.arcjournals.org> 10, 1-10.
- Mohammed, M. M. A., Abedallah, M. A. & Mohammed, O.E. (2015). Training and its Impact on the Performance of Employees at Jordanian Universities from the Perspective of Employees: The Case of Yarmouk University. *Journal of Education and Practice* [www. iiste.org](http://www.iiste.org) ISSN 2222-1735 (Paper) ISSN 2222-288X (Online) 6(32), 128- 140.
- Mozael, B. M. (2015). Impact of Training and Development Programs on Employee Performance. *International Journal of Scientific and Research Publications*. 5(11):38-42.
- Nda, M. M. & Rashad Y. F. (2013). The Impact of Employee Training and Development on Employee Productivity. *Global Journal of Commerce and Management Perspective* Published by *Global Institute for Research and Education*. G.J.C.M.P. ISSN: 2319 – 7285, 2(6):91-93.
- Nguyen, C. & Duong, A. (2021). Employee retention: do training and development, job satisfaction and job performance matter? The 4th International Conference on Business. Ho Chi Minh City Open University, HCMC, Vietnam. Digital transformation for smart business smart city in post pandemic world. 349 - 359.
- Rahman, A.& Malik, A.R. (2021)). Relationship between Training and Development and Employees Performance: An Analysis. *International Journal of New Technology and Research* ISSN: 2454-4116. 7(2), 57-61.
- Topiwala, M. & Anuradha, P. (2021). A Study on the Effectiveness of Training and Development on Employee's Performance at JK Paper Ltd. *International Journal of Creative Research Thoughts (IJCRT)*

**Teachers' Tolerance and Communication Skills as Correlates of Early School Adjustment of Preschool Children in Ilorin Metropolis**

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**ABSTRACT**

The study investigated teachers' tolerance and communication skills as correlates of early school adjustment among preschool children in Ilorin Metropolis. The respondents cut across the Ilorin metropolis of Kwara State, Nigeria. Three research questions and two hypotheses were formulated to guide the conduct of the study. The study adopted a descriptive research design. A total sample of 200 respondents was randomly selected using simple random sampling technique. The instrument used for the research was a researchers-designed questionnaire consisting of two sections (A and B) with reliability value of 7.8 and was analyzed using Pearson Product Moment Correlation Coefficient. The two null hypotheses formulated for the study were rejected at 0.05 level of significance. The finding of the study revealed preschool teachers had high level of communication skills and high level of tolerance skill. It was recommended that teachers should firmly, politely and sequentially relate to preschool children very enough to embrace their wishes and individual differences. Parents in conjunction with the preschool management should always motivate children through adequate provision of short-break for the children.

**Keywords:** *Early School Adjustment*, preschool children, communication skills, tolerance skills.

**Introduction**

In every society, education is seen as the key to national development. In Nigeria, formal education begins at the preschool stage and this serves as the foundation of the Nigerian educational system. Preschool education which is usually referred to as nursery education or kindergarten is a starting point for a child's development and the bedrock upon which all other

educational levels are built. It is a stage of education that makes provision for early childhood education programme of children below the official school age mainly to prepare them for the rigors of primary education and beyond (National Policy on Education, 2017). The transition to formal schooling is one of the most significant changes in children's life. The

transition of a child from a familiar situation into a new or unfamiliar one such as transition from home to childcare/preschool centre is characterised by changes, tensions and uncertainties serving as a challenge to a child's sense of (Fabian, 2017; Dunlop, 2000). Children are faced with a new environment of buildings and classrooms, new school and teacher expectations, new academic challenges, and acceptance into a new peer group.

In preschool settings, children are trained to function independently, develop relationships with teachers and peers and to behave in ways that are appropriate for their class and school including conforming to rules (Margetts, 2013). Adjustment to school is supported by a number of skills acquisition including social competence, problem solving skills, self-reliance and determination, knowing about 'not knowing' and what to do about it, behavioural control and academic competence (Fabian, 2017; Margetts, 2012). Children's adjustment is supported when they follow directions, take responsibility for their belongings, take turns, regulate their behaviour in response to others, and respond appropriately to frustration. These adjustments will help them to successfully transit to the curriculum of formal schooling which is more goal oriented in terms of literacy,

numeracy, and socialization, in contrast with the less formally stated goals of the preschool environment. Preschool setting forms a dramatically different environment to children (Rimm-Kaufman & Pianta, 2000). Teachers play important role in the trajectory of preschool children throughout the formal schooling experience (Baker, Grant, & Morlock, 2018). Teachers who support children in the learning environment can successfully ensure a smooth adjustment among preschool children, which is important for the long-term trajectory of school (Baker, et al 2018; O'Connor, 2011; Silver, 2005). Through teachers, children learn about their academic and social surroundings with peers and other adults (Darling-Hammond, 2020).

Preschool teachers' relationship skills are usually characterized by teachers' relationship care, warmth, knowledge, experience and socio-emotional support to adjust and make a child becomes more formal and academically oriented in the school setting (Huf, 2013; Pianta, 2010). This transition imposes new demands on children to adjust both scholastically and socio-emotionally. Scholastic adjustment concerns a child's ability to meet academic demands, to be attentive, to participate in class activities, and become an independent pupil. Social and emotional adjustments

refer to a child's ability to establish meaningful and positive relationships with teachers and peers, and feel emotionally secure. Children's sense of social comfort and security in school influence their ability to concentrate on academic challenges (Buhs & Ladd, 2012; Rogoff, 2013), and vice versa. Children's academic performance affects their sense of self-worth and future social and emotional adjustment. According to Darling-Hammond (2020), teachers' relationship skills are evidenced by teachers who possessed the professional knowledge (content knowledge, pedagogical content knowledge, and general pedagogical knowledge); qualifications and experience appropriate to grade level and subject matter; creation of a classroom environment that encourage all pupils to participate in worthwhile learning activities; desire to help students achieve at high level; excellent skills in mentoring pupils and acting as stabilising forces in high turnover schools; willingness to diligently work with pupils with special needs and ability to make pupils acclimatise with the school environment and participate actively in class.

Teachers' relationship skills are key to a child's socio-emotional and cognitive skill development that facilitates the child's smooth transition and positive adjustment

in school. Teachers provide the social, cultural, and emotional supports that children need to function in school (Blömeke and Delaney, 2012). They provide the opportunities for children to engage in positive interactions with one another for their adjustment to the school setting. This makes the preschool settings appear to be home away from home.

Various child factors have been identified to support teachers' relationship skills in the early adjustment of preschool children. children characteristics such as cognitive readiness, language abilities, visual-motor coordination, temperament support teachers' relationship skills with the adjustment of preschool children (Rimm-Kaufman & Pianta, 2000); school settings such as school atmosphere, teachers-to-children ratio, number of familiar peers at school entrance, teacher-child relationship (Alexander, Entwisle, & Olson, 2021); and general background factors such as gender, ethnicity, socioeconomic status, (Meins, 2011). Among the child characteristics associated with school adjustment, visual-motor ability has been suggested as a significant predictor of child's early adjustment to school and academic adaptation (Kraft-Sayre, & Pianta, 2017). Visual-motor ability is a skill that requires good integration between fine motor accuracy and visual-spatial perception

(Cassidy, 2015). These skills are typically measured with the Developmental Test of Visual–Motor Integration (Verschueren & Koomen, 2012) which contains separate assessments of fine motor accuracy, visual–spatial perception, and their integration. Children who were retained in kindergarten scored significantly lower on the VMI than their non-retained peers.

Orderliness and learning in the classroom can be promoted where teachers possess essential teaching skills. No one can teach something to someone without doing it in some particular way, and that way of teaching has significant effects on the entire teaching and learning situation. Einarsdottir (2011) posit that: teaching is a process of continuous relationship development and professional self-discovery alongside an emerging understanding of the teaching and learning process. In this study, teachers' relationship skills refer to communication skills and tolerance skills.

Effective communication skill is considered significant in terms of teacher's professional and personal characteristics since teaching and learning are based on communication process. During this process, having meaningful exchange of messages is related to the teacher's competencies (Pehlivan, 2005). According to the Concise Oxford Dictionary the word means 'the act of imparting, especially

news', or 'the science and practice of transmitting information'. These definitions clearly show the link between 'teaching' and 'communication': teachers are constantly imparting new knowledge, or transmitting information (www.ncbi.nlm.nih.gov). The tone, volume, rhythm and emotions of the teacher play a vital role while dealing with pupils (<http://searchwarp.com>).

Early school adjustment results from the successful application of teachers' knowledge and teaching methods, using a combination of appropriate teaching skills and professional characteristics (Manugson, Duncan & Metzger, 2016). When teachers form positive bonds with children, classrooms become supportive spaces in which children can engage in academically and socially productive ways (Hughes, 2013). Positive teacher-pupil relationships are classified as having the presence of closeness, warmth, and positivity (Jennings & Diprete, 2018). This includes relationships with peers, and developing self-esteem and self-concept (Jennings & Diprete, 2018). Through this secure relationship, children learn about socially appropriate behaviours as well as academic expectations and how to achieve these expectations (Hughes, 2013).

Various research studies revealed that factors such as cognitive ability, subject

matter knowledge, knowledge of teaching and learning, licensure and teaching behaviours in the classroom are related to teacher quality and relationship skills (Blair, 2000; Darling-Hammond 2000). Preschool teachers are very significant given their relationship skills by helping children to cope and adjust to the school setting. Therefore, this study is set out to examine teachers' communication and tolerance skills as correlate of early school adjustment among preschool children in Ilorin Metropolis.

#### **Statement of the Problem**

The stress associated with a child's adjustment from a familiar situation (home) into a new or unfamiliar situation (childcare /preschool) is characterised by change, tensions and uncertainties which serve as a challenge to a child's sense of being. While children in the preschool education are faced with a challenge of adjusting to a new environment of buildings and classrooms, new school and teacher expectations, new academic challenges, and acceptance into a new peer group, teachers are faced with the challenges of using their relationship skills especially communication and tolerance in such a way to ensure a smooth acclimatisation and adjustment of children into the school settings. This is therefore a concern of the researcher to look into teachers' relationship skills specifically

communication and tolerance skills as a correlate of early adjustment among preschool children in Ilorin Metropolis.

A number of studies have been carried out on teacher relationship skill and early adjustment of children in preschool education. Margetts (2013) conducted a study on children's adjustment to the first year of schooling: indicators of hyperactivity, internalising and externalising behaviours. Burger (2014) carried out a study on early childhood care and education and equality of opportunity. Magnuson, Duncan, Lee and Metzger (2016) researched on early school adjustment and educational attainment.

However, all the above studies were silent on how teachers' communication and tolerance skills correlate early school adjustment of preschool children. Hence, this study intends to fill this gap by examining teachers' communication and tolerance skills as correlate of early school adjustment among preschool children in Ilorin Metropolis.

#### **Purpose of the Study**

The general purpose of this study was to examine teachers' relationship skills as correlate of early school adjustment among preschool children in Ilorin Metropolis. Specifically, this study intends to;

1. determine the level of preschool teachers' communication skills in Ilorin Metropolis

2. determine the level of preschool teachers' tolerance skills in Ilorin Metropolis
3. determine the extent of early school adjustment of preschool children in Ilorin Metropolis

### **Research Questions**

The following research questions were raised to guide this study

1. What is the level of teachers' communication skills and early school adjustment of preschool children in Ilorin Metropolis?
2. What is the level of preschool teachers' tolerance skills in Ilorin Metropolis?
3. What is the extent of early school adjustment of preschool children in Ilorin Metropolis?

### **Hypotheses**

The following hypothesis were postulated for this study

**H0<sub>1</sub>:** There is no significant relationship between teachers' communication skills and early school adjustment of preschool children in Ilorin Metropolis

**H0<sub>2</sub>:** There is no significant relationship between teachers' tolerance skills and early school adjustment of preschool children in Ilorin Metropolis

### **Methodology**

Descriptive survey research design was adopted for this study. The population for this study covered all preschool teachers

and children in Kwara State. The target population for this study consist of all preschool teachers and children in Ilorin Metropolis. As at the time of this present study there were 14 registered public preschools in Ilorin Metropolis with a number of 346 children (Kwara State Ministry of Education, Ilorin, 2020). 10 out of 14 schools were randomly selected and a total number of 100 preschool teachers and 100 children were randomly selected in Ilorin Metropolis to make total respondents of 200 using simple random sampling technique. A researcher's self-developed question naire was used for data collection. The instrument contains section A, B and C. Section A was used to obtain demographic data of the respondents. Section B consist of 10 items was used to elicit data on preschool teachers' relationship skill (communication and tolerance skill) while section C consist 10 items was used to obtain data on early adjustment among preschool children in Ilorin metropolis. The reliability of the instrument was determined by the use of a test-retest method with an interval of three weeks. The two set of scores obtained were correlated using Pearson Product Moment Correlation (PPMC) with reliability value of 7.8 at 0.05 significant level. Inferential statistics of Pearson Product Moment Correlation was

used to test all the hypotheses at 0.05 level of significance.

**Results and Discussion**

**Demographic Data of the Respondents**

**Table 1: Demographic data of the Preschool Teachers**

Gender	Frequency	Percentage
Male	26	26%
Female	74	74%
Total	100	100%

Table 1 shows that out of 100 preschool teachers sampled for this study, 26% of the respondents were male teachers while 74%

Frequency count and percentage was used to describe the demographic information of the preschool teachers and children

were female teachers. This shows that majority of the teachers sampled for this study were female

**Table 2: Demographic data of the Preschool Children**

Gender	Frequency	Percentage
Male	58	58%
Female	42	42%
Total	100	100%

Table 2 shows that out of 100 preschool children sampled for this study, 58% of the respondents were male children while 42% were female children. This shows that majority of the preschool children sampled for this study were male.

subjected to percentage analysis. Given that 5 items in the questionnaire were structured in a four-response-type for communication skills. The range was therefore divided by three levels (low, average and high) and the cut-off of 5 was obtained. Thus, teachers whose score fell within score range 5 – 10; 11 - 15 and 16 – 20 signified low, average and high level of communication skills respectively. The statistics of respondents’ scores are summarized and presented in Table 3.

**Answering of Research Questions**

**Research Question One:** What is the level of teachers’ communication skills and early school adjustment of preschool children in Ilorin Metropolis?

The scores of each preschool teachers on the level of communication skills were

**Table 3: Level of Pre-school Teachers’ Communication skills in Ilorin Metropolis**

Levels of Teachers’ Communication skills	Score Range	Frequency	Percentage
High	15 – 20	58	58.0%
Average	11 – 15	29	29.0%
Low	5 – 10	13	13.0%
Total		100	100.0%



Table 3 shows that out of 100 preschool teachers sampled for this study, 58% of them had high level of communication skills; 29% were of average level of communication skills while 13% of the preschool teachers had low level of communication skills. This implies majority of the preschool teachers had high level of communication skills in Ilorin Metropolis.

**Research Question Two:** What is the level of preschool teachers' tolerance in Ilorin Metropolis?

The scores of each preschool teachers on the level of tolerance skills were subjected

to percentage analysis. Given that 5 items in the questionnaire were structured in a four-response-type for tolerance skills, the minimum, maximum and range score of respondents were 5, 20 and 15 respectively. The range was therefore divided by three levels (low, average and high) with the cut-off of 5 was obtained. Thus, teachers whose score fell within score range of 5 – 10; 11 - 15 and 16 – 20 signified low, average and high level of tolerance skills respectively. The statistics of respondents' scores are summarized and presented in Table 4.

**Table 4: Level of Pre-school Teacher Tolerance Skills in Ilorin Metropolis**

Levels of Teachers' Tolerance Skills	Score Range	Frequency	Percentage
High	15 – 20	55	55.0%
Average	11 – 15	30	30.0%
Low	5 – 10	15	15.0%
Total		100	100.0%

Table 4 shows that out of 100% preschool teachers sampled for this study, 55% of them had high level of tolerance skills; 30% were of average level of tolerance skills while 15.0% of the preschool teachers had low level of tolerance skills. This implies that majority of the preschool teachers had high level of tolerance skills in Ilorin Metropolis.

**Research Question Three:** What is the extent of early school adjustment of preschool children in Ilorin Metropolis?

The scores of each child on the early school adjustment were subjected to percentage analysis. Given that 10 items in the questionnaire were structured in a four-response-type for teachers' communication and tolerance skills, the minimum, maximum and range score of respondents were 20, 80 and 60 respectively. The range was therefore divided by three levels (low, moderate and high) and the cut-off of 20 was obtained. Thus, children whose score fell within the range 20 – 40; 41 - 60 and 61 – 80 signified low, moderate and high level

of early school adjustment respectively.

The statistics of respondents' scores are summarized and presented in Table 5.

**Table 5: Extent of early school adjustment of preschool children in Ilorin Metropolis**

Extent of Early Adjustment of Children	Score Range	Frequency	Percentage
High	61 – 80	63	63.0%
Moderate	41 – 60	21	21.0%
Low	20 – 40	16	16.0%
Total		100	100.0%

Table 5 shows that out of 100% preschool children sampled for this study, 63.0% of them highly adjusted to preschool; 21% of the children moderately adjusted to preschool while 16% of the children had low level of adjustment to preschools. This implies that the early adjustment of the majority of the preschool children is high in Ilorin Metropolis.

**Hypotheses Testing**

Pearson Product Moment Correlation (PPMC) was used to test the hypotheses postulated for this study at 0.05 level of significance

**Hypothesis One:** There is no significant relationship between teachers' communication skills and early school adjustment of preschool children in Ilorin Metropolis

**Table 6: Summary of Pearson Moment Correlation Coefficient between Teachers' Communication Skills and Early School Adjustment of Preschool Children in Ilorin Metropolis**

Variables	No	Mean	S. D.	df	r	Sig	Remark
Communication Skills	100	16.821	3.409	98	12.714	0.00	Rejected
Children Early Adjustment	100	17.975	3.454				

\*Significance at  $p < 0.05$

Table 6 shows that the Pearson 'r' 12.714 was obtained with a p-value of 0.00 computed at 0.05 alpha level. Since the p-value of 0.00 is less than 0.05 level of significance, the null hypothesis one was rejected. Therefore, there was a significant relationship between teachers'

communication skills and early school adjustment of preschool children in Ilorin Metropolis (Pearson  $_{98} = 12.714, p < 0.05$ ).

**Hypothesis Two:** There is no significant relationship between teachers' tolerance skills and early school adjustment of preschool children in Ilorin Metropolis

**Table 7: Pearson Product Moment Correlation between Teachers’ Tolerance Skills and Early School Adjustment of Preschool Children in Ilorin Metropolis**

Variables	N	Mean	S.D.	Df	r	Sig.	Remark
Tolerance Skills	100	17.352	1.021	98	13.22	0.01	Rejected
Children Early Adjustment	100	17.975	3.454				

\*Significance at  $p < 0.05$

As shown in table 7, the Pearson “r” is 13.22 with a p-value of 0.01 computed at 0.05 level of significance. Since the p-value of 0.01 was less than 0.05 level of significance, the null hypothesis two is rejected. This implies that there was a statistically significant relationship between teachers’ tolerance skills and early school adjustment of preschool children in Ilorin Metropolis ( $\text{Pearson}_{(98)} = 13.22, p < 0.05$ ).

### Discussion of the Findings

Findings of this study revealed that teachers have high level of relationship skills of preschool children in Ilorin Metropolis. As revealed in this study, majority of the preschool teachers have high level of communication skills and tolerance skills in Ilorin Metropolis. This finding is in line with Eggen and Kauchak (2012) whose study related teachers’ relationship skills are determinant of abilities to communicate and tolerate individual differences. Worley, et al, (2007) asserted that instructor’s communicative practices results to high

instructional communication competence and this creates high relationship skills.

Findings of this study showed that early adjustment of the preschool children is moderate in Ilorin Metropolis. Readiness for school is a key element in child preschool adjustment which signifies the act of being prepared to succeed in a structured learning setting that occurs prior to entering school and extends beyond the walls of a classroom to daily life. This result substantiates the findings of Fabian (2017); Wayne and Youngs (2013) which revealed that when teachers form positive bonds with students, classrooms become supportive spaces in which pupils become acclimatize and adjusted with the school settings. This corroborates Hamre and Pianta, (2001) who affirmed that positive teacher-student relationships are classified as having the presence of closeness, warmth, and positivity. This includes, relationships with peers, and developing self-esteem and self-concept.

### Conclusion

Based on the findings of the study, preschool teachers have high level of

communication skills and high level of tolerance skills. Based on the level of communication skills of the teachers and the level of tolerance, the preschool children level of adjustment is high as well. This by implication brings about significant relationship between teachers' communication skills and early school adjustment of preschool children in Ilorin Metropolis.

### **Recommendations**

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

1. Teachers should firmly, politely and sequentially relate to preschool children. This would not only assist in familiarising children with the school settings but also result in early

adjustment of children to the school system

2. Teachers should embrace children wishes and differences so as to make children feel equal and important. This would make children perceive the school setting as an extension of their homes and result to quick adjustment to the school system
3. Parents in conjunction with the preschool management should always motivate children through adequate provision of short-break intakes for the children. This would also assist in early adjustment of preschool children to the school settings.

## REFERENCES

- Alexander, F. O., Entwisle, A. & Olson, C. G. (2021). An assessment of science classroom learning environment. *Journal of Behaviour Resources*, 2(2): 23 - 30.
- Baker, H. J.; Grant, A. I. & Morlock, K. K. (2018). The Relevance of early Childhood Care Development and Education in Achievement of Vision 2020 Farfuru. *Journal of Multi-Disciplinary Studies*, 3, 20-27.
- Blair, J. (2000a). Certification found valid for teachers. *Education Week*, 20(8), 1. Retrieved November 16, 2003, from Academic Search Elite: [http://www.epnet.com/academic/as\\_eachelite.asp](http://www.epnet.com/academic/as_eachelite.asp)
- Blömeke, S. & Delaney, S. (2012). Assessment of teacher knowledge across countries: A review of the state of research. *ZDM Mathematics Education*, 44, 223-247.
- Bradshaw, P., Hall, J., Hill, T., Mabelis, J. & Phio, D. (2012). *Growing Up in Scotland: experiences of primary school the transition to school*. Available at [<http://www.scotland.gov.uk/Publications/2012/05/2162/downloads#res392536>] accessed February 23, 2014.
- Buhs, P. R. & Ladd, M. (2012). *School Readiness: A Conceptual Framework*. United Nations Children's Fund, New York
- Cassidy, M. (2015). "They do it anyway": a study of primary 1 teachers' perceptions of children's transition into primary education. *Early Years: Journal of International Research & Development* 25(2): 143-153.
- Darling-Hammond, L. (2020). Teacher relationship skill and student achievement: A review of state policy evidence. *Education Policy Analysis Archives*, 8(1).
- Dunlop, A-W. (2000). *Perspectives on the child as a learner: Should educators' views of preschool and primary children differ?* Paper presented at the EECERA 10th European Conference on Quality in Early Childhood Education, London, Aug 29-Sept 1, 2000.
- Eggen P, & Kauchak, D. (2012). *Strategies for teachers: Teaching content and thinking skills (4th ed.)*. Needham Heights: M.A. Allyn and Bacon.
- Einarsdottir, J. (2011). Icelandic children's early education transition experiences. *Early Education & Development* 22(5): 737-756.
- Fabian, H (2017). *Informing transitions*. In Dunlop, A. and Fabian, H. (eds) *Informing transitions in the early years: research, policy and practice*. Maidenhead: Open University Press: 3-20.
- Fabian, H. (2002). *Children starting school*. London: Fulton.
- Federal Government of Nigeria (2004). *The compulsory Free Universal Basic Education and other Related Matters Act*. Lagos: Government Printer.
- Federal Government of Nigeria and United Nations Children Cultural and Educational Fund (UNICEF) (2003). *Situation and policy analysis of Basic Education in Nigeria*. Paper present at the 2001 conference of African Curriculum Change.
- Federal Republic of Nigeria (2017). *National Policy on Education (4th Ed)*. Lagos: NERDC Press.
- Hua, R. (2010). *Early Childhood and Development: Benue State situation*. Paper Presented at the Workshop on Establishment and Strengthening Civil Society Organization (CSOs) Network for Effective Implantation of ECC/Gender Issues Programmes in Benue State at Gboko, Benue State. *Journal of Educational and Social Research Vol. 3 (5)*

- Huf, C. (2013). Children's agency during transition to formal schooling. *Ethnography and Education* 8(1): 61-76.
- Hughes, J. N. (2013). *Teacher-Student Relationships and School Adjustment: Progress and Remaining Challenges*. Department of Educational Psychology, Texas A&M University.
- Jennings, J. L. & DiPrete, T. A. (2008). *Teacher Effects on Social/Behavioral Skills in Early Elementary School*. A paper presented at the seminar series of the California Population Center and at the University of Notre Dame
- Kraft-Sayre, M.E. & Pianta, R.C. (2017). *Enhancing the transition to kindergarten: linking children, families and schools*. University of Virginia: National Center for Early Development & Learning.
- Ladd, J. & Price, J. (1987). Predicting children's social and school adjustment following the transition from preschool to kindergarten. *Child Development*, 58(5), 1168-1189.
- Magnuson, K., Duncan, G. J. & Metzger, M. W. (2016). Early School Adjustment and Educational Attainment. *American Educational Research Journal*.53(4); 1198-1228
- Mahuta, M. G (2007). *Introduction to Sociological Foundation of Education*. Sokoto: But-Bass Educational Books.
- Margetts, K. (2012). Transition to school-complexity and diversity. *European Early Childhood Research Journal* 10(2): 103-114.
- Margetts, K. (2013). Children bring more to school than their backpacks: Starting school down under. *Journal of European Early Childhood Education Research Monograph*, 1, 5-14.
- Margetts, K. (2019). Early transition and adjustment and children's adjustment after 6 years of schooling. *European Early Childhood Education Research Journal* 17(3): 309-324.
- Meins, E. (2011). *Emotional development and attachment relationships*. In Slater, A. and Bremner, G. (eds) An introduction to developmental psychology. 2nd ed. London: BPS Blackwell: 183-216.
- Obidike, I.V (2012). Towards Effective Early Childhood Care and Education Programme in Nigeria. *Journal of Teacher Perspective* 6 (3) (507-513).
- Perry, B. & Dockett, S. (2011). How 'bout we have a celebration!' Advice from children on starting school. *European Early Childhood Research Journal* 19(3): 373-386.
- Peters, S. (2010). "I didn't expect that I would get tons of friends...more each day": children's experiences of friendship during the transition to school. *Early Years: An International Research Journal* 23(1):45-53.
- Pianta, R.C. (2010). *Going to kindergarten: transition models and practices and quality of classroom settings*. Curry School of Education: University of Virginia. Available at [<http://www.gettingready.org/matriarch/d.asp?PageID=294&PageName2=NM503&p=&PageName=NM+503+Pianta%2Epdf>] Accessed 20 Feb 2014.
- Raikes, H., Abigail, V., Elita, A., Thompson, R.A. & Hatton, H. (2013). Declines in peer conflict from preschool through first grade: influences from early attachment and social information processing. *Attachment and Human Development* 15(1): 65-82.
- Rimm-Kaufman, S. & Pianta, R.C. (2000). An ecological perspective on the transition to kindergarten: a theoretical framework to guide empirical research. *Journal of Applied Developmental Psychology* ,21(5): 491-511.

Rogoff, B. (2013). *The cultural nature of human development*. Oxford: Oxford University Press.

Tor-Anyiin, S. A (2008). *Origin, Growth and Development of Pre-Primary and Primary Education in Nigeria*. Makurdi: Selter Academic Pres Ltd.

UNESCO (2007). *Nigeria Early Childhood Care and Education (ECCE) Programmes; International Bureau of Education (IBE)*. Retrieved from

efareport@unesco.or. On the 11th February 2011.

Verschueren, K. & Koomen, H.M.Y. (2012). Teacher-child relationships from an attachment perspective. *Attachment and Human Development* 14(3): 205-211.

Wayne, A. J., & Youngs, P. (2013). Teacher characteristics and student achievement gains: A review. *Review of Educational Research*, 73(1), 89–122.

FINAL DRAFT BJEAVOL9NO3

**Relationship between Social Adjustment and Academic Performance among Senior Secondary School Students in Sokoto State: Aftermath of Covid-19**

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**ABSTRACT**

The study examined the relationship between social adjustment and academic performance of senior secondary school student in Sokoto State, participant included male and female students selected from Senior Secondary School in the State. The study was descriptive correlation type, and two hypotheses were formulated to guide the study. Two instrument were used for this study i.e. Adapted version of social adjusted scaled by Basil Nwok and self- designed academic performance test. Pearson product moment correlation coefficient was used to test first hypothesis and t-test was used to test the second hypothesis. The formulated hypotheses were tested and the result showed significant relationship between students' social adjustment and their academic performance, and that there is significant gender differences between student's social adjustments. Based on these findings it was recommended that parent/teachers should not be gender biased in encouraging their children/student for pursuance of education.

**Keywords:** *Social adjustment, Covid-19, academic performance, senior secondary school.*

**Introduction**

Social adjustment refers to an individual's efforts to cope with the standards, values, and needs of society in order to be accepted. It involves psychological processes aimed at adapting to new standards and values and getting along with others in society (Mukhtar, 2014). Onyejiaku (1991) sees social adjustment as the success with which people adjust to one another in the working place, at home and at school. How one adjusts to one's group in which one belongs is a crucial and important in life. A well-adjusted individual learns some social skills such as ability to deal diplomatically with others, friends, managers, visitors, colloquies so that others attitude to them are congenial and favourable. However, evidence suggests that, social adjustment

may indeed have a significant influence on academic performance.

Academic performance is a measure of an individual's level of achievement in a particular field of study, it serves as a motivational factor driving individuals to engage in goal-directed behavior and strive for self-enhancement through the mastery of difficult tasks and the attainment of high educational standards. While researchers have often focused on factors such as socioeconomic status, motivation, and personality in relation to academic performance, the importance of social adjustment has been overlooked (Mukhtar, 2014). It's beyond doubt that, Covid-19 pandemic has affected many aspects of our life; social adjustment inclusive. Among



the various ways by which Covid-19 affected our social adjustment and which in turn may affect students' academic performance include:

1. Social Isolation and Loneliness, measures such as lockdowns, physical distancing, and quarantine have led to increased social isolation, reduced face-to-face interactions, and limited social support networks, resulting in higher levels of loneliness and decreased social adjustment (Banerjee, and Amp Rai, 2020).

2. Disrupted Social Routines. The pandemic has disrupted regular social routines, such as attending school, working in physical office spaces, and participating in social gatherings. These disruptions can impact social adjustment by altering daily social interactions and requiring individuals to adapt to new modes of communication and socialization (Loades, Chat Burn, Higson-Sweeney, Reynolds, Shafran, Brigden and Amp, 2020).

3. Mental Health Challenges: The impact of the pandemic on mental health, including increased in stress, anxiety, and depression, which no doubt can also affect the social adjustment. Pierce, Holley, Tansin, Stephain, Mathew, Ann, Evangelos, Rger, Simon, Sally and Kathryn (2020) are of with view that psychological distress can lead to difficulties in maintaining social connections, participating in social

activities, and adjusting to changing social dynamics.

The association between social adjustment and academic achievement has been demonstrated in a research conducted by Narjes (2014), in his study Assessment of social adjustment and academic achievement of boys and girls of preschool, found significant relationship between social adjustment and academic achievement. Abubakar, Wakeh, and Busari, (2022), reported a relationship between Adjustment and Academic Achievement among Adolescent Students in some selected Secondary Schools in Giwa Educational zone Kaduna State, Nigeria. Their study revealed that there is significant relationship between social adjustment and academic achievement. It also shows a significant relationship between academic adjustment and academic achievement. It was further revealed that significant relationship exists between emotional adjustment and academic achievement.

In a similar study conducted by Sujana, Jaya and Fiftinova, (2021) to find relationship between Social adjustment and academic achievement of EFL students at higher education, their finding revealed a very weak significant correlation between social adjustment and academic performance among the EFL students. In

another research conducted by George and Pang, (2012) used 500 students in Ugo metropolis of Akwa Ibom State. In their analysis, they found that males are highly socially adjusted than females and tend to received better grades and retain more of their self-confidence than females.

Nwoke, (2010) in her study ethnic group, age and gender differences in social adjustment to teenagers in Nigeria found that gender has no significant influences in social adjustment of teenagers. Loma (2012) study examined the adjustment of college freshmen: the importance of gender and place of resident a sample (177) freshman in Talifa Technical University showed that males are more adaptive than females on social adjustment. Aqueel, Mudassir, and Ganaie, (2012) in their study adjustment of male and female primary school teachers in district Pulmawa found that male and female primary school teachers do not differ significantly on social adjustment. Gbenga, (2019) in his work the impact of social Adjustment on Academic Performance of Learners in Secondary Schools in Ogbomoso Nigeria, found that, students with proficient behavior perform significantly better than students with undeveloped behavior competence.

### **Statement of the Problem**

The main objective of this study was examined relationship between Social

Adjustment and Academic Performance among Senior Secondary School students in Sokoto State. Social Adjustment is an effort made by an individual to cope with the standard, values and needs of a society in order to be accepted. Since the emergence of Covid-19 in China in late December 2019, the virus has spread rapidly across the globe, undoubtedly, the pandemic has affected almost all aspect of our life and social adjustment inclusive. Edem, Hellen, Fiati, and Leo (2023) reported that fear of Covid-19 negatively predicts student's academic, psychological, and social adjustment. In view of the above forgoing discussion, the present research investigates how this changes on social adjustment affected the educational performance of senior secondary students in Sokoto.

Sokoto State is one of the educationally disadvantaged States in Nigeria whereby about 85% of the population dwell in rural areas and are essentially peasant farmers. To this, education of their children may face a setback due to their social life, they considered schools as place where they can keep their children busy in the morning hours. Due to this, the current researcher examined how significant social adjustment affect educational achievement of senior secondary school students in the State.

### **Objectives of the Study**

The study specifically sought to achieve the following objectives:

1. To find the relationship between senior secondary students' social adjustment and academic performance in Sokoto State.
2. To find out if there is gender difference in social adjustment among senior secondary school students in Sokoto State.

### **Research Question**

This study was carried out based on the following research questions:

1. Is there any relationship between social adjustment and academic performance of senior secondary school student in Sokoto State?
2. Is there gender difference in social adjustment among senior secondary school student in Sokoto State?

### **Hypotheses**

The following hypothesis were formulated to guide the researcher in conducting this study

1. There is no significant relationship between social adjustment and academic performance among senior secondary student in Sokoto State
2. There is no significant gender difference in social adjustment among senior secondary school students in Sokoto State.

### **Methodology**

#### **Sample and Sampling Procedure**

The population of this study involved all the SSII students in secondary schools in Sokoto State. The total number of SSII students in the State is 14,392 from sixty-eight (68) schools, out of which twenty-one (21) are boarding schools while forty-seven (47) are day schools. The sample of the study was drawn from SSII students of State secondary schools. The selection was based on cluster sampling in which the State was divided into educational zone i.e. Yabo zone, Bodinga zone, Gwadabawa zone, Gwaranyo zone, Sokoto South zone and Sokoto North zone. Three schools were selected in each of the zone, using simple random sampling technique which makes the number of sampled schools to 18, having the total number of 5299 students.

To determine sample size, Kreycie and Morgan (1971), table was used for a size of 5299 is 357. Proportionate sampling technique was also used to pick the number of student in each of the sample school, while the subject for the study was randomly selected through the use of lucky dip approach (YES/NO) those who pick were involved.

#### **Research Design**

A correlation research design was used for the study. The design was chosen because it affords a more vital and wider scope of

fact finding and importantly, it estimates the degree of relationships between two or more variables. According to Salawu (2011) correlation research is more popular with finding degrees of relationship. In

other words, it is interested in attempting to determine whether there is relationship or not between two or more quantifiable variables.

**Sampled school each with its population and number of subject (participants)**

S/NO	Names of Schools	Number of Student in SSII	Sample Size
	HABMASS	676	46
	S.A.G.M.C.	229	15
	G.D.S.S Mabera	492	33
	G.D.S.S Kofar Marke	224	15
	G.D.S.S. Kofar Rini	214	14
	G.D.S.S. Runjin Sambo	460	31
	A.B.S D/Daji	297	20
	G.D.S.S Sanyinna	165	11
	C.D.S.S. Tambuwal	474	32
	G.D.U.S.S Bodinga	346	23
	G.D.S.S Dange	195	13
	G.D.S.S Wamakko	138	9
	G.D.S.S Gwadabawa	122	8
	S.D.S.S Illela	309	21
	G.S.S Kware	175	12
	G.G.C Rabah	125	8
	G.S.S Gwaranyo	216	15
	G.S.S S/Birni	442	30
<b>TOTAL</b>		<b>5299</b>	<b>357</b>

**Instrumentation**

The following instrument (s) was used to collect data for the study on the identified variables:

1. Adapted version of social adjustment scale (SAS), to measure social adjustment.
2. Self-designed academic performance test in English and Mathematics for senior secondary school II (AAT), to measure academic performance.

**Description of the instruments**

**Social Adjustment Scale (SAS)**

The social adjustment scale used in this study was developed by Nwoke, (2009) it consists of two sections, the first section deal with persona data of the respondents such as sex, age, school and class. The second section is 34-item of social adjustment factors structured to elicit how the respondents agree with the Statements, all item represent Statements to which the participants responded on a 3 point Likert type format of True, Not sure and False.

After serious dialogue, discussion and interview with some knowledgeable people from the ethnic group, it was discovered that, some items have no cultural background in the ethnic group (Hausa) studied. Thus, the current researcher can only adapt the scale because some items have been changed in other to suit the ethnic group studies.

#### **Validity of the Social Adjustment Scale (SAS)**

The social adjustment scales used for this study was design by the Basil Nwoke M (2010). For the purpose of this study, this instrument was adapted for use by the current researcher. Specialist in sociology of education, Educational Psychology and Guidance and Counseling in Usman Danfodiyo University Sokoto were given the adapted draft to vet. Their independent judgments were taken into consideration to have the final draft used for this study. This is an indication of its content validity.

#### **Academic Achievement Test for Senior Secondary School II (AAT)**

The academic achievement used for this study is a self –design test by the current researcher, based on senior secondary' school II syllabus, in English and Mathematics. Is a test designed to measure academic achievement of senior secondary school II. The test consists of two sections A and B, section A deals with mathematical

aspect while section B deals with English Language. The test consist of 40 items represented in multiple choice a,b,c options to which participant are expected to respond.

#### **Validity of Academic Achievement Test (AAT)**

The test was validated by specialist in Mathematics and English Department in Usman Danfodiyo University as well as some secondary school teachers in Sokoto. Their independent judgments were taken into consideration to have the final draft used in this study. This is an indication of its content validity.

#### **Reliability of the instruments**

Split half method was used for the current researcher to test the reliability of the adapted version of Social Adjustment Scale and Self-Design Academic Achievement test. The correlation co-efficient was then found to be 0.76 and 0.79 respectively, which is enough for the tests reliability.

#### **Method of Data Collection**

The researchers first sought for permission from the principals of the selected secondary schools to enable him administer instrument to be sampled students. After the permission was granted, the research established a rapport with the student before administering the inventories. It was administered during classes' hour with the help of research assistants who were

members of the academic staff of the school. The students were instructed to be sincere in their responses and also assured them of total confidentiality in the use of the information given. It was also emphasized to them that there was no right or wrong answer and that it was not a test of intelligence or ability, but simple a measure of the way behaves. This is done to motivate them to respond freely and honestly. The respondents are required to complete all the sections of the questionnaire and to give possible answer applicable to them.

**Data Analysis**

**Table 2: Relationship between Students' Social Adjustment and Academic Performance.**

Variable	N	Mean	Std Dev.	r-Cal	p-Value	Decision
Social Adjustment	1015	62.52	13.76			
Academic Performance	1015	46.24	18.55	.068	.031	H <sub>0</sub> Rejected

Table 2 revealed that, relationship between students' social adjustment and their academic performance was positive, Pearsons  $r = .668$ ,  $p = .021$ . This indicated a significantly low positive relationship between social adjustment and academic performance of the students. Therefore, H<sub>01</sub> which stated that there is no significant

Pearson product moment correlation coefficient (r) was used to test null hypothesis one and t- test was used to test null hypothesis two.

**Result and Discussion**

**Hypotheses Testing**

The questionnaires administered to the sampled students were collected, and their responses were coded and tallied, and scores were presented in relevant table, based on the hypotheses tested.

H<sub>01</sub> There is no significant relationship between social adjustment and academic performance among senior secondary student in Sokoto State.

relationship between social adjustment and academic performance among senior secondary student in Sokoto State is rejected. This means that social adjustment plays significant role on students' academic performance in the State.

H<sub>02</sub> There is no significant gender

**Table 3 Difference between Students' Social Adjustment and Gender.**

Variable	N	Mean	Std Dev.	t-Cal	p-Value	Decision
Male	499	66.08	13.78			
Female	516	59.04	12.82	8.435	.000	H <sub>0</sub> Rejected

From table 3 an independent t- test indicated that scores were significantly higher for the male (M=66.08, SD=13.78) than for the female (M=59.04, SD=12.82),  $t= 8.435, p<.010$ .

This indicates that there is significant gender difference in the social adjustment of the students.

Therefore,  $H_{02}$  which stated that there is no significant gender difference in social adjustment among senior secondary school students in Sokoto State was rejected. This revealed that there's significant gender differences in social adjustment among secondary school's students in Sokoto State.

### Summary of the Major Findings

Based on the findings of the study, the following are the summary of the major findings:

1. Significant relationship was found between students' social adjustment and their academic performance
2. Significant gender differences between students' social adjustment was also found.

### Discussion of Finding

From the findings of this study, it was shown that there is significant relationship between student social adjustment and their academic performance. This is in line with the research conducted by Narjes (2014) in his study Assessment of social adjustment

and academic performance of boys and girls of preschool, found significant relationship between social adjustment and academic performance. In another contrary to this finding was conducted by Sujana *et al.* (2021) in their work social adjustment and academic achievement of EFL students at higher education found very weak significant correlation between social adjust and academic performance among EFL students.

In a similar research conducted by Abubakar *et al.* (2022), in their work, Relationship between Adjustment and Academic Achievement among Adolescent Students in Some Selected Secondary Schools in Giwa Educational Zone Kaduna State, Nigeria. The study revealed that there is significant relationship between social adjustment and academic achievement. It is also revealed that significantly relationship between academic adjustment and academic achievement. It was further revealed that significant relationship exists between emotional adjustment and academic achievement which also agree with this finding.

There is significant difference between social adjustment and gender. This is agreed with the study of Enach and Reland (2008) studies (511) male and female university students, where they studied the nature of the environment, gender relation

with level of adjustment of social in support of the above views George (2012) used 500 students in Uyo metropolis of Akwa Ibom State. In their analysis, they found that male are highly socially adjusted than females and tend to receive better grades and retain more to their self- confidence than females. But some study goes contrary to the present study i.e Aquell *et al.* (2012) and Nwoke (2009) they both found that gender has no significant influence on social adjustment for the Hausa Girls this difference is not surprising. They are more under pressure and restrictions than boys, in addition, the decision of heterosexual relationship and marriage are some things that girls have to grapple with earlier and feel more strongly about than boys.

### **Conclusion**

Base on the findings of this study, it can be concluded that, relationship between students' social adjustment and their academic performance was positive i.e. Pearson's  $r = .668, p = .021$ . This means that social adjustment plays significant role on students' academic performance among senior secondary school students in Sokoto State.

The findings also reveal significant gender difference in social adjustment among senior secondary school students in Sokoto, as indicated by independent t- test, where mean and standard deviation scores of the male is higher than for the female i.e. male:

( $M=66.08, SD=13.78$ ) and female: ( $M=59.04, SD=12.82$ ),  $t= 8.435, p<.010$ .

### **Recommendations:**

1. From the foregoing it has been seen that, social adjustment has significant relationship with student's academic achievement. Meaning that, the level of one adjustment helps to improve his/her academic success. To this, there is need for government to introduce intervention programs that focused in the improvement of the students' social adjustment. The parent should also therefore, endeavor to develop positive traits that could enhance social adjustment of their children so as to have well-adjusted children which will in turn leads to their academic achievement.
2. The study also found significant gender difference in student academic achievement. Thus, parent and teachers should not be gender biased in encouraging their children /students for the pursuance of education.



REFERENCES

- Abubakar, Y., Wakeh, I. M. and Busari, A. (2022). Relationship between Adjustment and Academic Achievement among Adolescent Students in Some Selected Secondary Schools in Giwa Educational Zone Kaduna State, Nigeria. *African Journal of Educational Foundations University of Uyo, January/March 2021. online:2672-5660, print:2672-5649*
- Aqueel, A.P., Mudassir, H.M. and Ganaie, Y.M. (2012). Adjustment of male and female primary school teachers in district pulawa. report and opinion, 4.1
- Banerjee, D., and Amp Rai, M. (2020). Social isolation in Covid-19: The impact of loneliness. International. *Journal of Social Psychiatry, 66(6), 525-527.*
- Edem, A.G., Hellen M., Fiati, H. M., and Leo, A. (2023). Student adjustment during Covid-19 pandemic: Exploring the moderating role of university support. *Heliyon 9(7798) :e13625. DOI:10.1016/j.heliyon.2023.e13625*
- Gbenga, M. A. (2019). The Impact of Social Adjustment on Academic Performance of Learners in Secondary Schools in Ogbomosho Nigeria. DOI:10.17758/ERPUB3.EA01191005
- Georg, I.N. and Ukpong, D.E. (2012). Adolescents' Sex Differential social adjustment problem and academic performance of junior secondary school student in Uyo metropolitan City *international journal of business and social science.*
- Green, K.D., Forehand, B., Beck, S.J. and Vosk, B. (1980). An assessment of the relationship among measure of children's social competence and children's academic achievement. *Child Development, 51,1149-1156.*
- Kreyice, R. and Morgan, D.W. (1971). *Determining sample size for research activities educational and psychological measurement*
- Loades, M. E., Chat burn, E., Higson-Sweeney, N., Reynolds S., Shafran, R., Brigden, A. and Amp, C. E. (2020). Rapid systematic review: The impact of social isolation and loneliness on the mental health of children and adolescents in the context of COVID-19. *Journal of the American Academy of Child & Adolescent Psychiatry, 59(11), 1218-1239.*
- Lotfi, H. (2004). Investigate relationship between controlling source and social support with social conformity. *Psychological research.* PP. 3(1) 17-51, New York: Raven Pre
- Loma, M.A. (2012). Adjustment of college freshmen: the importance of gender and the place of residence. *International journal of psychological studies* Retrieved from [www.ccsent.org/ijps](http://www.ccsent.org/ijps)
- Masten, A., Coatsworth, J.D., Neemann, J., Gest S.D. Tellagen, A. and Garmezy, N. (1995). The structure and coherence of competence from childhood through adolescence. *child Development, 66, 1635-1659.*
- Mukhtar, A.H. (2014). Relationship between Personality, Social Adjustment and Academic Performance among senior Secondary School in Sokoto State. Unpublished Dissertation.
- Narjes, S. (2014). Assessment of social adjustment and academic achievement of boys and girls of preschool during 2013-2014. International conference on art,

- economic and management. 1 (3), 23-27.
- Nwoke, M.B. (2010). Ethnic group, age and gender difference in social adjustment of teenagers in Nigeria. *International journal of psychological studies* 3,58-68
- Onyejiaku, F.O. (1991). *Psychology of adolescence*. Calabar: Rapid Educational Publishers.
- Pierce, P., Holley, H., Tansin, F., Stephain, H., Mathew, H., Ann, J., Evangelos, K., Rger, W., Simon, W., Sally, M. and Kathryn, M.B. (2020). Mental health before and during the Covid-19 pandemic: a longitudinal probability sample survey of the UK population. *Lancet psychiatry* 7:883-92
- Salawu, A.A (2011). *Edu702*. Unpublished manuscript. Usmanu Danfodiyo university Sokoto. Department of educational foundation. Sokoto State, Nigeria

FINAL DRAFT BJEA VOL 9 NO 3

**ICT Knowledge as Predictor of Career Choice among Undergraduates of Caleb University,  
Imota Lagos, Nigeria**

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**ABSTRACT**

The objectives of this study were to investigate ICT knowledge as predictor of career choice among undergraduates Caleb University, Imota Lagos, Nigeria. The data for the study was collected using simple random sampling techniques. The descriptive and inferential statistics were used in this study to analyse the data. Out of the 100 questionnaire distributed, 87 were returned and found useable. Therefore, the study response rate was 87%. It was found that the level of career choice and the level of ICT knowledge among undergraduates were high. It was however recommended that counselor should be employed at both secondary and tertiary education levels to guide students in the area of career choice, and ICT training should be periodically organized for them.

**Keywords:** *Career choice, ICT knowledge, Career, Technology, Knowledge*

**Introduction**

Information and Communication Technology (ICT) plays a vital role in the development of any nation. It has been an instrument for achieving social, economic, educational, scientific and technological development (Adedeji, 2010). Information Communication Technology has greatly influenced the educational sector especially in teaching, learning and research. The application of Information Communication Technology is not only emphasized in corporative business and the industrial sector, but it is an essential part of education at all levels (Allen, 2011). In

this age of information explosion, information is delivered in different formats, beyond the limitation of our imaginations. Hence, the potentials of electronic networks are breathtaking. The ever increasing presence of computer networks and the evolution of internet in the last decades have added value to the role of computers in higher institution of learning (Miltiadou and Savenye, 2013). Education is one of the key sectors that have been transformed by the application of the technology.

The National Policy on Information Communication Technology in Education and Framework launched in 2010 presents a holistic and broad vision for ICT integration in the education sector in Nigeria. This policy moves beyond a basic technology literacy approach to focus on leveraging technology to transform the roles of the teacher and the learner in the classroom. It has been widely acclaimed that for Nigeria's vision 20:2020 (the economic blueprint aimed at placing Nigeria among the top twenty biggest economies in the world by 2020) to be achieved, education, especially teacher development, will play a key role and information communication technology equally so. Teacher development is clearly required to prepare teachers with information communication technology skills to equip students with the kinds of critical skills needed if they, as members of the society, are to contribute meaningfully in the country's future development.

In our society today, students face a complex and rapidly changing society. It has been reported that regardless of great effort put forth by families, government agencies and non-government agencies, many young people encounter difficulties in the transition from the world of school to that of work

(Regis, 2012). Investigating and better understanding the myriad factors that contribute to career choice is a topic of recurring interest in our schools today. To guide students in their career decision making, peer influence and Information Communication Technology (ICT) play a central role in this lifelong process (Pilot & Regis, 2012).

ICT knowledge is considered a critical tool for preparing and educating students with the required skills for the global workplace. It educates students so that they can continually adapt to a work world of continuous technological innovations, and makes it easier for students to access knowledge. ICT knowledge is regarded as an engine for growth and tool for empowerment, with profound implications for educational change and socio-economic development. Thomas (2010) defined ICT knowledge as the means of support for development and economic functioning. It is described as a process of creation, exchange, evolution, and application of knowledge to produce new goods in the field of technology. It involves adapting, adopting, or using ICT knowledge to produce new goods and services in local contexts or to advance society in general. In view of this ICT knowledge refers as the understanding of hardware and software of

computer systems and how these can be used to meet activities such as word processing, data analysis, storage, scanning, learning, e-mailing, power point etc. it also involves knowledge of a variety of software package and programmes and how to choose the most appropriate programme for a specific task.

Knowledge is familiarity, awareness, or understanding of someone or something, such as facts, information, descriptions, or skills, which is acquired through experience or education by perceiving, discovering, or learning. Knowledge can refer to a theoretical or practical understanding of a subject. It can be implicit (as with practical skill or expertise) or explicit (as with the theoretical understanding of a subject); it can be more or less formal or systematic. In philosophy, the study of knowledge is called epistemology; the philosopher Plato famously defined knowledge as "justified true belief", though this definition is now thought by some analytic philosophers to be problematic because of the Gettier problems while others defend the platonic definition. However, several definitions of knowledge and theories to explain it exist. Knowledge acquisition involves complex cognitive processes: perception, communication, and reasoning; while knowledge is also said to be related to

the capacity of acknowledgment in human beings (Hattie, 2009).

Career choice, for most people, is a lifelong process of engaging the work world through choosing among employment opportunities made available to them. Each individual undertaking the process is influenced by many factors, including the context in which they live, their personal aptitudes, and educational attainment (Pastorelli, 2013). A major turning point in students' lives involves the career choice that they make while in higher institution. Frequently, it is viewed by family and community as a mere start to workplace readiness; however, this decision plays a major role in establishing youth in a career path that opens as well as closes opportunities. Given the differences in the social and economic context of college-bound versus work-bound students (Roarke, 2012).

Career can be conceptualized more broadly in terms of individual development in learning and work throughout life and this includes voluntary work and other life experiences (Fush, 2014). Palaks and Walls (2009), refers to career as a job or profession for which one undergoes regulated education and training over a period of time and which one intends to follow for the whole of one's life. It is thus a chosen pursuit, life work and

success in one's profession. A career is now broadly defined as the unfolding sequence of a person's work experience over time (Arthur, Khapover & Wilderom, 2013) or in more detail as the sequence of employment related positions, roles, activities and experiences encountered by a person (Amoid, 2011). According to Rieber (2015) define career is that it is an individual vocation or trade or how he/she makes a living. Terminologies associated with career choice include; vocation, profession, job, work, occupation, trade, career development, career planning, career guidance, career education, career decision etc.

Research internationally, has indicated that students choosing a career, and specifically with ICT knowledge are influenced by parents, teachers, career counsellors, and role models (Babin et al., 2010). The ICT knowledge shortage globally has sparked renewed interest in research into what influences students career choices with ICT knowledge. Parents are one of the most important sources of advice to students on career choice (Okebukola, 1997) and have expectations and aspirations for their children.

In a recent study, students ranked their sources of advice in decreasing order of influence in ICT. Parents were ranked first,

then friends, then teachers and lastly counsellors (Babin et al., 2010). Also, gender, socioeconomic background and access to computers and technology all have an influence on ICT knowledge and career choices. If career planning were implemented in an efficient manner, students would at the very least be following a career plan of informed decision-making, rather than one of happenstance. The study will undergraduates make realistic choices that encourage career choice has it may help their career needs.

#### **Statement of problem**

Higher institution students seem to be ignorant about the career choice to which they aspire. Most of them are ill-informed, uninformed and sometimes misinformed about careers and courses that change lives and hence cannot make realistic choices without consider that ICT knowledge can encourage career choice has it may enhance their career needs. Student knowledge of the usefulness, ease of use and reliability of ICT is however critical in determining their knowledge which act as predictor to their career choice. This study therefore investigates *ICT knowledge as predictor of career choice among undergraduates of Caleb University, Imota Lagos, Nigeria*

#### **Objective of the Study**

The objectives of the study are to:

1. identify the level of career choice among undergraduates of Caleb University Imota, Lagos;
2. find the level of ICT knowledge among undergraduates of Caleb University, Imota, Lagos;
3. identify the challenges of ICT knowledge among undergraduates of Caleb University, Imota, Lagos;

**Research Questions**

1. What is the level of career choice among undergraduates of Caleb University, Imota, Lagos?
2. What is the level of ICT knowledge among undergraduates of Caleb University, Imota, Lagos?
3. What are the challenges of ICT knowledge among undergraduates of Caleb University, Imota, Lagos?

**Hypothesis**

Ho: - There is no significance difference between career choice and ICT knowledge among undergraduate of Caleb University, Imota, Lagos.

**Methodology**

The design of this study are descriptive and inferential. The population of the study comprised 100 students of Caleb University, Imota, Lagos. Simple random sampling technique was used to select students from both 100 and 200 levels of the institution. The instrument used data collection is ICTKPCCUQ, It was validated through expert opinion, and Copies of the questionnaire were administered to 2 respondents by the researcher and research assistants. The data collected was analysed using frequency tables, percentages, mean and standard deviation, correlation using Statistical Package for Social Sciences (SPSS).

**Table 1: Distribution of the Selected Students**

Level	Number of Students	Selected Students
100	120	50
200	80	50
Total	200	100

The table 1 above shows the distribution of the selected undergraduate students and number of students in each level. The table shows that as at the time of carrying out the

research, there were 200 students of both 100 and 200 levels, and 100 of them were randomly selected.

**Table 2: Gender Distribution of Respondents**

Gender	Number	Percentage (%)
Male	31	35.64
Female	56	64.36
Total	87	100

Table 4.2 showed the gender distribution of respondents in the study. 87 out of the 100 randomly selected respondents have valid and useable response. Due to omission, cancellation and multiple response, 13 were

invalid. 31(35.64%) of the respondents were males while 56(64.36%) were females. This implies that in Caleb University Imota Lagos, Female students were more than male students.

**Table 3: Age Distribution of the Respondents**

Age Range	Frequency	PercentageV (%)
15 – 19	14	16.09
20- 24	55	63.22
25 – 29	2	2.29
30 and above	16	18.39
Total	87	100

Table 4.3 showed the age distribution of respondents in the study. 16.09% fell within the age bracket of (15 - 19) years, 63.22% fell within the age bracket of (20 – 24) years, 2.29% fell within the age bracket of (25 – 29)

years, while 18.39% fell within the age of 30 years and above. This implies that in Caleb University, Imota Lagos 20 – 24 years of age were more than 15-19 years of age, 25-29 years of age and 30 years and above.



**Table 4.7: Career Choice of Undergraduates in Caleb University, Imota Lagos.**

S/No	Items	SA	A	D	SD	X	SD
1	I have known what to engage in future	26 (29.89)	52 (59.77)	6 (6.89)	3 (3.45)	3.16	0.79
2	I can easily choose any employment opportunity	13 (14.94)	43 (49.42)	26 (29.89)	5 (5.75)	2.74	0.61
3	I believe career choice is a major opportunity	33 (37.93)	52 (59.77)	2 (2.99)	0 (0.00)	3.36	0.53
4	My choice of career is wonderful	50 (57.47)	35 (40.23)	1 (1.15)	1 (1.15)	3.54	0.58
5	I love attending seminars on career choice	38 (43.68)	42 (48.78)	5 (5.75)	2 (2.29)	3.33	0.48
6	My parent have agreed with my career choice	37 (42.53)	41 (47.13)	7 (8.05)	2 (2.29)	3.29	0.71
7	Nobody can change my career choice	38 (43.68)	31 (43.68)	13 (14.94)	5 (5.75)	3.17	0.89
8	I have career plans	41 (47.13)	40 (45.98)	4 (4.59)	2 (2.29)	3.38	0.68
9	My friends are/have been the greatest influence in my career decision	14 (16.09)	21 (24.14)	34 (39.08)	18 (20.69)	2.36	0.98
10	I made the decisions choosing my course of study	43 (49.43)	37 (42.53)	2 (2.29)	5 (5.75)	3.36	0.79
	Weighted Average					3.17	0.70

Table 4.7 revealed the level of Career Choice among undergraduate in the Department of Computer Science, Caleb University, Imota Lagos. Out of ten (10) items listed eight (8) items has a high mean scores which fell between 3.16 – 3.54 while the remaining two (2) items fell between 2.36–2.74. The weighted average of 3.17 attested to the fact that the level of career choice among undergraduate in Department of Computer Science, Caleb University, Imota Lagos was high. others indicators to this fact were respondent have known what to engage with in future( x =3.16), respondent believe that career choice is a major opportunity

(x=3.36), respondent believe that choice of career is wonderful (x=3.54), respondent love attending seminars on career choice (x=3.33), respondent parent agreed with their career choice (x=3.29), respondent known that nobody can change their career choice (x=3.17), respondent have career plans (x=3.38) and also respondent have made decision by choosing course to study (x= 3.36). All these and other indices attested to the fact that the level of career choice among undergraduates in Department of Computer Science, Caleb University, Imota Lagos was high.

**Research question 3:** What is the level of ICT Knowledge among undergraduates in the

Department the Department of Computer Science, Caleb University, Imota Lagos.

**Table 4.8: ICT knowledge among Undergraduates in Caleb University, Imota Lagos**

S/NO	Items	VHK	HK	FK	NK	X	SD
1	Word processing	38 (43.68)	24 (27.59)	18 (20.69)	7 (8.05)	3.07	0.98
2	e-mailing	30 (34.48)	33 (37.93)	20 (22.99)	4 (4.59)	3.25	13.45
3	Data analysis	13 (14.94)	28 (32.18)	28 (32.18)	18 (20.69)	2.41	0.98
4	Power point use	11 (12.64)	36 (41.38)	24 (27.59)	16 (18.39)	2.48	0.93
5	Scanning	16 (18.39)	27 (31.03)	26 (29.88)	18 (20.69)	2.47	1.01
6	Learning	49 (56.32)	27 (31.03)	8 (9.19)	3 (3.45)	3.40	0.79
7	Storage	29 (33.33)	38 (43.68)	15 (17.24)	5 (5.75)	2.93	0.92
8	Socialization	35 (40.23)	35 (40.23)	8 (9.19)	9 (10.34)	3.10	4.41
9	Graphics design	17 (19.54)	23 (26.44)	20 (22.99)	27 (31.03)	2.34	1.11
10	Search engine	26 (29.89)	20 (22.99)	21 (24.14)	20 (22.99)	2.59	1.14
	Weighted Average					2.80	2.57

Table 4.8 revealed the level of ICT knowledge among undergraduates in the Department of Computer Science, Caleb University, Imota Lagos. Out of ten (10) items listed four (4) items has a high mean scores which fell between the range of 3.0 – 3.40 while the remaining six (6) items fell between the range of 2.34 – 2.93 which is high . The weighted average of 2.80 attested to the fact that the level of ICT knowledge among undergraduates in the Department of

Computer Science, Caleb University, Imota Lagos was high. Others indicators to this fact were respondent used ICT knowledge for word processing (x=3.07), respondent used ICT knowledge for e-mailing (x=3.25), respondent used ICT knowledge for learning (x=3.40) and also respondent use ICT knowledge for socialization (x=3.10). All these and other indices attested to the fact that the level of ICT Knowledge among undergraduate in the Department of

Computer Science, Caleb University, Imota Lagos

**Hypothesis 2:** There is no significant difference between career choice and ICT

knowledge among undergraduates in the Department of Computer Science, Caleb University.

**Table 4.11**

Variable	Number	Mean	SD	DF	R	Significance	Remarks
Career Choice	87	3.17	0.70	85	0.57	0.005	Significance
ICT Knowledge	87	2.8	2.57	85			

Table 4.11 showed that the correlation, coefficient between career choice and ICT knowledge among undergraduate in the Department of Computer Science is positive ( $r = 0.57$ ). Since  $p = 0.005 < 0.05$ , it is indicated that there was positive significant correlation between career choice and ICT Knowledge among the respondent. Therefore, the null hypothesis is rejected.

**Discussion of Findings**

**Career Choice among Undergraduates in Caleb University, Imota Lagos.**

It was found in this study, that knowledge of ICT as well as career choice was high among undergraduates in Caleb University, Imota Lagos. The high level of the career choice among the students could not be disconnected from the provisional benefit of Information Communication Technologies (ICT). ICT knowledge provides students with access to more information and experiences

than they would get in a closed environment alone with their career choice (Chen and Bryer, 2012). Its provision on the students has a positive effect on their decision as regards their career choice. The students' knowledge of ICT have influence on their career choice. This is also in line with Abe and Chikoko (2020) who found that basic skills of ICT encourages the career choice of students. Redecker M.A. (2010), based on the research conducted by the Institute for Prospective Technological Studies (IPST), summarised the positive effect of ICT knowledge in career choice under 4 C's: (1) Content – ICT knowledge facilitates access to a wide variety of freely available content, (2) Creation – ICT allows users the freedom to create their own digital content, (3) Connection- ICT connects learners to one another as well as to experts and teachers and (4) Collaboration-ICT supports collaboration amongst learners and teachers in a particular

project of subject areas. Hence, the knowledge, opportunity and support that the ICT provides necessitate the high level of students' career choice.

**ICT Knowledge among Undergraduates in the Department of Computer Science, Caleb University, Imota Lagos**

The result of findings in this study shows that ICT knowledge among undergraduates in the Department of Computer Science, Caleb University, Imota Lagos was high. According to Redecker (2009), ICT knowledge provides new opportunities for innovating and modernising Education and Training institutions and for preparing learners for the 21st century. Furthermore, he asserted that ICT knowledge have the potential to support and enhance teaching and learning contrarily, Over the past few decades graduate employment has dominated global education and economic policy (Tomlinson, 2007). Globally, the ICT industry is accustomed to experiencing skill shortages (Fincham, 2006). The demand for ICT skills in Australia is expected to grow during 2013-2018, with an additional 28,100 jobs likely to be required in 2017 (ACS, 2013), outstripping the supply of skilled workers.

Despite the demand for ICT workers it is reported that in 2011, 51 percent of ICT

graduates aged 20-29 years were not employed in ICT professional occupations (AWPA, 2013). In 2014 ICT graduate employment was the lowest in five years (Clicks IT Recruitment, 2015). The AWPA (2013) suggests such wastage is a result of a soft market for new ICT graduates, uncompetitive working conditions and employers who faced difficulties with attracting appropriately qualified and experienced candidates for job openings also ICT knowledge is somewhat dynamic and unstable as a result of the rapidly changing nature and volatility of the industry, and the high failure rate of small to medium sized companies which characterise it (Adams, 2013). Also, Adetola and Ikatule (2022) in their research found that the future of any society is determines by the ICT skill of the younger generation; and knowledge of ICT provides room for opportunities in life. It could be deduced from these findings that ICT knowledge professionals perform their identities differently compared with their counterparts who doesn't have the knowledge of ICT, therefore ICT knowledge required to be flexible and able to re-adjust and reskill to support and create new technologies and to constantly re-invent themselves.

### **Conclusion**

In conclusion this study investigated the ICT knowledge as a predictor of career choice among undergraduates in the Department of Computer Science, Caleb University, Imota Lagos. It was found among undergraduates was low, career choice among undergraduates was high, ICT knowledge among undergraduates was high, ICT challenges among undergraduate was very low, there was a positive significant correlation between peer influences and ICT knowledge and also there is a positive significant correlation between career choice and ICT knowledge.

### **Recommendations**

Based on the findings of the study, the following recommendations were made:

1. School authorities should engage the service professional career counselors to provide proper orientation and career guidance for students;
2. ICT training should be periodically organized for students to enlighten and update about the emerging technologies;
3. Students should be encouraged and given freedom to express their interest in making career decisions; and
4. Students should be encouraged and prepared by parents and guardians for career awareness at an early age.

FINAL DRAFT

BJEA VOL 9 NO 3

REFERENCES

- Abe E. N., and Chikoko V. (2020). Exploring the factors that influence the career decision of STEM students at the University of South Africa. *International Journal of STEM education*, 7(60)
- Adams, Y. (2013). *Factors influencing students' career choice and aspirations in South Africa*, JSocSci, 33(2):169-178
- Adams, (2013) R.Billett, B.(2010); Kelan, G.(2008). "How schools short change girls: a study of major findings on girls and education." The AAUW Report. Wellesley College, M.A. Center for research on women.
- Adedeji, T.S (2010). Gender difference and career interest among undergraduates: Implications for Career Choices. *European Journal of Scientific Research* ISSN 1450-216X Vol.26 No.3, 465- 469.
- Adetola L.B. and Ohwofasa, O., and Ikatule I.A (2022). Factors influencing career choice among colleges of education students in Lagos state. *AJOPASE* 20(1).
- Allen, F.A (2011).Factors influencing traditional or non-traditional career-related aspirations among female students enrolled in science courses. Summary of a graduate Thesis, SSTA
- Amoid, (2011). The relationships of self-efficacy for the Holland themes to gender, occupational group membership, and vocational interests' *journal of counseling psychology*,4(3) 90-98
- Arthur, Khapover and Wilderom (2013). Friends' influence on adolescents' academic achievement motivation: *experimental study. Journal of educational psychology*,82(4): 664-670.
- Babin O.O (2010)A theory-building investigation of the school-to-work transition. *The counseling psychologist*, 25,364-401.
- Fincham, F.O (2006). Factors affecting the career choice of undergraduates in Nigerian library and Information Science Schools.*African Journal of Library, Archives and Information Science*, 18(1): 23-31.
- Fuchs, E.W (2014).Factors that influence career choice of hospitality students in MoiUniversity, Kenya, School of Tourism and Hospitality, Moi University, Eldoret, Kenya. *Journal of Education and practice* Vol 3, No 14, 2012
- Hattie, (2009).Factors influencing the career planning and development of university students in Jordan, *Australian Journal of Career Development, Australian Council for Educational Research Audience*
- Miltiadou C. and Savenye T. (2013).*Socio-demographic Factors influencing career decision-making among undergraduate psychology students in South Africa, Department of psychology University of Venda, South Africa, University of South Africa,*
- Okebukola, F.A(1997).Role models and student attitudes toward non-traditional careers. *Educational technology research & development*, 38, 5-13.
- Palak and Walls (2009).*Assessing perception of career Role-model performance. Perceptual and Motor Skills*, 72, 555-560
- Pastorelli, T.I(2013).. Factors impacting on the choice of entrepreneurship as career by Barbadian youth: preliminary assessment. *Journal of Eastern Caribbean Studies*, 27(4): 30-54

- Pilot G. & Regis, (2012). Women in Canada: *A gender-based statistical report* (5th ed.), Ottawa: Ministry of Industry, Canada.
- RedeckerM.A (2009), *What women want: in finance the operative worlds are opportunity, Flexibility and balance.* From <http://www.cfo.com/printable/article:cfm/6970016>  
Retrieved on 12th April 2013
- Regis, S.A (2012). Influence of role models and mentors on female graduate students' Choice of Science as a Career, Mount Saint Vincent University, *Journal of education research*, 55(4):482-496
- Rieber (2015). Relationship of parental involvement in teen's career development to teens attitudes, perceptions and behaviour. *Journal of research and development in education*. 30: 65-69
- Roarke, E. (2012).The influences of the family of origin on career development: A review and analysis. *The Counseling Psychologist* 32 (4), 493-568.
- Siddiky R. and Akter S. (2021). The student's career choice and job preparedness strategies: A social environmental perspective. *International journal of Evaluation and Research in Education*, 10(2)
- Sujana, A. S., Jaya H. P., and Fiftinova (2021). Social adjustment and academic achievement of EFL students at higher education. *Journal of English literacy and academic achievement of EFL students at higher education. Journal of English Literacy Education*, 8(2), 138-149. <https://doi.org/10.36706/jele.v8i2.14328>.
- Wentzel, K.R. and Asher, S.R. (1995). The academic lives of neglected, rejected, popular, and controversial children. *Child Development*, 66,754,763

**An Investigation on the Level of Knowledge of the Causes of Diabetes among Residents in Ovia North East LGA of Edo State**

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**ABSTRACT**

Diabetes Mellitus (DM) is a major public health problem and a threat to both the young and old. This study examined the knowledge of the causes of diabetes among residents in Ovia North East LGA of Edo State. A descriptive research design of survey type was used and the population for this study was 138,344, multi-stage sampling technique was used and 138 respondents were drawn as a sample for this study. The instrument used for this study was a researcher-structured questionnaire made up of two sections. The questionnaire was validated by three experts in the field of Health, Safety and Environmental Education. Test re-test method was used to check the reliability of the instruments. Pearson correlation coefficient value of 0.73 was obtained. The data collected were analyzed using frequency count, simple percentage and Chi-square. From the findings, it was revealed that majority of the respondents had poor knowledge of DM, and level of education does not significantly influence knowledge of diabetes. In line with the findings of the study, it was therefore recommended that there should be an enlightenment campaign on residents to educate them on the dangers of DM so as to improve their knowledge of the health condition.

**Keywords:** *Diabetes Mellitus*, residents, Ovia North East, Edo State

**Background to the Study**

Diabetes Mellitus is one of the major non communicable disease that has significant impact on morbidity and mortality. Nigeria is one of the countries in sub-Saharan Africa (SSA) that is currently groaning under a rising prevalence of diabetes mellitus (DM). An analysis reported that approximately 5.8% (about 6 million) of adult Nigerians are

living with DM (Uloko, Musa, Ramalan, Gezawa, Puepet and Uloko, 2018). This figure has been likened to the tip of an iceberg as it is estimated that two-thirds of diabetes cases in Nigeria are yet undiagnosed (International Diabetes Federation, 2018). This scenario which applies to most low and middle income countries of SSA has not only



resulted to an increase in the burden of diabetes complications and deaths, but has also put a significant strain on the already weak health systems in this sub-region.

Diabetes is a condition that happens when blood sugar (glucose) is too high. It develops when the pancreas doesn't make enough insulin or any at all, or when the body is not responding to the effects of insulin properly. Diabetes affects people of all ages. Most forms of diabetes are chronic (lifelong), and all forms are manageable with medications and/or lifestyle changes. In diabetes, the pancreas does not make enough insulin (Type 1 diabetes) or the body cannot respond normally to the insulin that is made (Type 2 diabetes). A classical group of individuals categorized as pre-diabetes are characterized with a condition defined as blood sugar higher than normal but not high enough to be diagnosed as type 2 diabetes. This causes glucose levels in the blood to rise, leading to symptoms such as increased urination, extreme thirst and unexplained weight loss. Serious long term complications include cardiovascular disease stroke, chronic kidney disease, foot ulcers, damage to the nerves, eyes and cognitive impairment.

Several studies have reported that knowledge, attitude, and practices at the population level that make significant

differences largely depend on socioeconomic status, residing area, level of education, and other socio-demographic attributes (Kaniz et al., 2017; Chawla, et al., 2019). A study by Deepa (2014) revealed poor knowledge of diabetes among rural dwellers as against urban dwellers. Another study by Farhana et al., (2022) revealed that a large proportion of respondents have overall poor knowledge and low awareness about diabetes, which is a major health issue of our time. In the same study, respondents exhibited poor knowledge of the signs and symptoms of diabetes, for example, only half of the respondents knew excessive thirst and increased urination are signs of diabetes. But young respondents in Kuwait were found quite aware of the diabetes symptoms (Al-Hussaini & Mustafa, 2016). In the same study by Farhana et al., (2022), nearly three-fourths of participants were not aware that diabetes can be controlled through physical exercise, regulated diet intake and recommended medication including insulin when needed. Another study by Evert (2013) revealed that lifestyle changes can reduce the risk of developing type 2 diabetes. The findings of the study indicated that obesity and overweight, were the most significant predictors of developing diabetes. However, after adjusting for body mass index, other

factors such as poor diet, sedentary lifestyle, smoking and the levels of alcohol were all linked with a considerably higher possibility of developing diabetes (Evert, 2013).

### **Statement of the Problem**

Diabetes Mellitus (DM) is a metabolic disorder of chronic hyperglycemia characterized by disturbances to carbohydrate, protein, and fat metabolism which results from absolute or relative insulin deficiency with dysfunction in organ systems (WHO, 1999). This disease has shown a tremendous increase in recent years. Populations previously unaffected or minimally affected by DM are now reporting soaring prevalence figures, which poses a real challenge to governments and nongovernmental organizations. The latest prevalence figure published by the International Diabetes Federation (IDF) is 425 million persons living with DM worldwide, with nearly 50% of these undiagnosed (IDF, 2017). This figure is alarming and more alarming is the fact that developing economies of Africa (Nigeria inclusive) contribute a significant fraction of this figure. There is also a rising burden from the complications of DM alongside the ever-increasing incidence of the disease (Uloko, Ofoegbu, Chinenye, Fasanmade, Fasanmade, Ogbera, 2012). There are high rates of DM-

related amputations, cerebrovascular disease, heart-related problems, and kidney disease in populations that were not previously known for these challenging health problems. This calls for intervention and prompted the researcher to carry out this study on knowledge of the causes of diabetes among residents in Ovia North East LGA in Edo State.

### **Research Questions**

The following research questions have been raised to guide the study;

1. What is the level of knowledge of the causes of diabetes among residents in Ovia North East LGA of Edo State?
2. Does level of education influence knowledge of the causes of diabetes among residents in Ovia North East LGA of Edo State?

### **Hypothesis**

The hypothesis was formulated and tested at .05 level of significance

1. Level of education does not significantly influence knowledge of the causes of diabetes among residents in Ovia North East LGA of Edo State.

### **Methodology**

This study employed the descriptive survey design. The population of this study comprised residents of Ovia North East LGA of Edo State with the total population of one

hundred and thirty-eight thousand, three hundred and forty-four (138,344). The researchers adopted the multi-stage sampling technique. Firstly, simple random sampling technique of balloting with replacement was used to select five communities out of the fifteen communities in the LGA. Secondly, simple random sampling was again used to select ten (10) streets from each of the selected communities. Thirdly, using systematic sampling, the first and every other house on the street was selected for the study. In each of the household selected, the head of the household was included for the study. The sample size for the study was therefore, one hundred and thirty-eight (138) respondents representing one percent of the population. A self-structured questionnaire with eighteen items was the instrument used for the collection of data. In order to establish the content and face validity of the instrument for the study, the researcher presented the instrument to three experts in the Department of Health, Safety and Environmental Education, after which their suggestions,

corrections and contributions were effected in the final draft of the instrument so as to ensure that the instrument measure what it set to measure. To test the reliability, the researcher used the test re-test method. The test was administered to twenty (20) respondents outside the real population but similar to the real population and after two weeks the instrument was again administered to the same respondents. The responses were computed using Pearson Product Moment correlation Coefficient and the reliability coefficient was 0.73. The instrument was administered by the researcher and the research assistant, and data was collected at the spot to ensure high return rate. The descriptive statistic of frequency count, simple percentage and Chi- square was used to analyze the data.

### **Results**

**Research Question 1:** What is the level of knowledge of the causes of diabetes among residents in Ovia North East LGA of Edo State?

**Table one: Level of knowledge of the causes of diabetes**

<b>Knowledge level</b>	<b>Frequency</b>	<b>Percent</b>
Low	89	64.5
High	49	35.5
Total	138	100.0

\*score of 0-9: low knowledge; score of 10-18: High knowledge

Table one show the percentage on the level of knowledge of the causes of diabetes among residents in Ovia North East LGA of Edo State. The table, reveals that, 64.5% have low knowledge of the causes of diabetes and

35.8% have high knowledge of the causes of diabetes. Hence majority of the respondents have low knowledge of the causes of diabetes.

**Hypothesis One:** level of education does not significantly influence knowledge of the causes of diabetes among residents in Ovia North East LGA of Edo State.

Level of education	Level of involvement		X <sup>2</sup>	Df	Sig.	Decision
	High O(E)	Low O(E)				
Primary	6(9.8)	15(12.2)	4.49	2	0.10	HO Accepted
Secondary	47(41.5)	46(51.5)				
Tertiary	9(10.7)	15(13.3)				

Table two show the independent sample chi-square on the relationship between respondents' level of education and knowledge of the causes of diabetes. It can be seen that the chi-square value is 4.49, the degree of freedom is 2 and level of significance is 0.10 which is greater than the set alpha level of 0.05. Thus the null hypothesis which states that there is no significant relationship between respondents' level of education and knowledge of the causes of diabetes is accepted. This shows that level of education does not significantly influence knowledge of the causes of diabetes among residents in Ovia North East LGA of Edo State.

had low level of knowledge of the causes of diabetes. This was corroborated by Deepa (2014) whose study revealed poor knowledge of diabetes among rural dwellers as against urban dwellers. Another study by Farhana et al., (2022) revealed that, a large proportion of respondents have overall poor knowledge and low awareness about diabetes, which is a major health issue of our time. Findings from a study by Evert (2013) indicated that, obesity and overweight, were the most significant predictors of developing diabetes. However, after adjusting for body mass index, other factors such as poor diet, sedentary lifestyle, smoking and the levels of alcohol were all linked to a considerably higher possibility of developing diabetes (Evert, 2013).

**Discussion**

On knowledge of the causes of diabetes, the study revealed that majority of respondents

Level of education did not significantly influence respondent's knowledge of the causes of diabetes. This is in contrast with studies that have reported that knowledge of diabetes at the population level that make significant differences largely depend on socioeconomic status, residing area, level of education, and other socio-demographic attributes (Kaniz et al., 2017; Chawla, et al., 2019). Also, level of education not influencing respondent's knowledge of the causes of diabetes could be because, the topic is not what is generally taught as a subject in secondary school or as a course in the university unless the individual is in a health related course.

### **Conclusion**

Residents of Ovia North East LGA have poor level of knowledge on the causes of diabetes and level of education did not significantly influence respondents' knowledge of the causes of diabetes.

### **Recommendations**

The following recommendations have been made:

1. More enlightenment need to be carried out on residents on the dangers of diabetes so as to improve their knowledge on the health condition
2. Knowledge of the causes of diabetes should be inculcated in the school curriculum at secondary and university levels.
3. The need for preventive practices of diabetes should be emphasized through radio programmes and other media platforms.

REFERENCES

- Al-Hussaini M, Mustafa S. Adolescents' knowledge and awareness of diabetes mellitus in Kuwait. *Alexandria J Med.* (2016) 52:61–6. 10.1016/j.ajme.2015.04.001
- Chawla SPS, Kaur S, Bharti A, Garg R, Kaur M & Soin D (2019). Impact of health education on knowledge, attitude, practices and glycemic control in type 2 diabetes mellitus. *Journal of Family Medicine and Primary Care.* 8:261. 10.4103/jfmpc.jfmpc\_228\_18
- Farhana, A. Mahbubur Rashid, S.M. Nazmul A. Nasrin, L. Omar Q. Mehejabin N. & Adnan M. (2022). Knowledge, attitude and practice of diabetes among secondary school-going children in Bangladesh. *Frontiers in Public Health.* 10: 1047617.
- International Diabetes Federation (IDF) (2017). Diabetes atlas 8th Edition. *International Diabetes Federation.* <http://www.diabetesatlas.org>. Accessed 10 Aug 2023.
- Kaniz, F. Sharmin, H. Khurshid, N. Hasina Akhter, C. Akter, J. Tahmina, K. & Liaquat, A. (2017). Knowledge attitude and practice regarding diabetes mellitus among nondiabetic and diabetic study participants in Bangladesh. *BMC Public Health.* (2017) 17:1–10. 10.1186/s12889-017-4285-9
- Uloko, A.E. Musa, B.M. Ramalan, M.A. Gezawa, I.D. Puepet, F.H. Uloko, A.T. (2018). Prevalence and risk factors for diabetes mellitus in Nigeria: a systematic review and meta-analysis. *Diabetes Therapy* 9(3):1307–16.
- Uloko, A.E. Ofoegbu, E.N. Chinenye, S. Fasanmade, O.A. Fasanmade, A.A. Ogbera, A.O. (2012). Profile of Nigerians with diabetes mellitus—Diabcare Nigeria study group (2008): results of a multicenter study. *Indian J Endocrinol Metab.* 2012;16(4):558–564. (ERRATUM IN: *Indian Journal of Endocrinology and Metabolism.* 16(6):981-90.
- WHO. Definition, diagnosis and classification of diabetes mellitus and its complications, part 1. sGeneva: WHO; 1999.

**Qualitative Research Method in Libraray and Information Science**

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**ABSTRACT**

Qualitative research method is paramount in education system of modern day research. The aim of this article is to identify the existing methodological approach for the conduct of Qualitative research in Library and Information Science. Others are to ascertain the challenges and recommend measures where necessary in the conduct of qualitative research in Library and Information Sciences. However, this tip is not limited to scholars in the field of library and information science only, others, especially from education, social sciences, arts, management, humanities, etc., can equally explore it. The methodological approach adopted for this paper is a systematic literature review. This paper defines qualitative research design, the features of qualitative research designs such as Ontology, Epistemology, Axiology, Rhetorical, Methodological, Research Paradigm, Social Constructivism etc. The paper also entails the Methodological approaches, Population of Study, Sample size and sampling techniques, Instrumentations, Interviews, Focus Groups, observations, Participants of a Study, Data Collection Techniques, and Data Analysis etc. It further dwells on thematic analysis (TA) which includes: Conventional Appraisal of Data, Open Coding, Axial Coding, Selective Coding, Data Interpretations. Finally, the article provides the Characteristics of a Qualitative Researcher which includes Observer, Controller, Engager, Listener, Enquirer, Mediator, Motivator, Safety, Confidentiality, Composure, In-depth Knowledge of study, Calmness, to mention a few.

**Keywords:** Qualitative research; social constructivism; thematic analysis; library; information science.

**Introduction**

Generally, the rationale behind research method in any study is to lay down outline procedures to be followed in carrying out an investigation. It is a pattern designed for a field of study. It is noteworthy to differentiate between research method and methodology. Research methods are techniques used in conducting a research while methodology is a means of systematically solving a research

problem (Kothari, 2004). Method constitutes the steps to follow in carrying out a research while methodology is the logical reasoning behind selecting a method. In other words, method involves the processes undergone in conducting a research while methodology clusters around the reason ('what', 'why', 'how') for choosing a method in a field of study. Qualitative research is not alien to library and information science scholars.

However, its step-by-step procedures and rudiments have not been fully juxtaposed. Therefore, the essence of this tip is to lay down guidelines to be followed when conducting a qualitative study. However, this tip is not limited to scholars in the field of library and information science, others, especially from education, social sciences, arts, management, humanities, etc., can equally explore it as guidelines for conducting a research via qualitative techniques.

#### **Who is a Qualitative Researcher?**

A qualitative researcher is an investigator who dwells in data collection, analysis and interpretation of findings by means of gathering data through interview, focus group and observation while presentation of finding is based on human phenomenon not on numerical or statistical data interpretation or percentage presentation of findings. Qualitative researcher gathers, analyses, interprets and presents interactions and actions based on result of findings.

#### **Characteristics/qualities of a Qualitative Researcher**

Qualitative researcher is associated with the following unique features. These include but not limited to:

**Humbleness:** This is a watchword of a qualitative researcher. S/he has to be very

humble. He should respect the opinions of the participants. This a number one quality of a qualitative researcher. He needs to guide against pride, arrogance and superiority over others.

**Observer:** A qualitative researcher observes the natural phenomena in a quiet and conducive environment. As a qualitative researcher, s/he should be able observe/detect phenomenon in a conducive, natural and non-threatening environment without a cause for alarm.

**Controller:** It is a duty bond on him/her to manage the interaction session. The control should not be only the intercession of a participant's opinions upon another but also the time management. The qualitative researcher decides to plead for adjournment of either interview or focus group depending on the time spent.

**Engager:** As a qualitative researcher, he needs to make the session lively, non-boring, interesting and ongoing.

**Listener:** This is one of the qualities/features of a qualitative researcher. He gives a listening ear to his/her audience with rapt attention and holistically without deviation.

**Enquirer:** A qualitative researcher unravels or discovers some hidden phenomena. Naturally, an enquiry may lead to unfold and



give birth to questions yet uncaptured in the early semi-structured interviews depending on the existing phenomenon.

**Mediator:** He acts as an intermediary between the participant and research study. He doesn't need to digress from the research study.

**Motivator:** As a qualitative researcher, there is need to make the interaction meaningful, interesting and captivating.

**Safety:** It is the responsibility of a qualitative researcher to guarantee the safety of lives of the participants.

**Confidentiality:** A qualitative researcher by nature should abide by oath of secrecy. No need of revealing the identity of the participants and their verbatim statements, which is the essence of coding in qualitative research method.

**Composure:** A qualitative researcher should display high level of confidence.

**In-depth Knowledge of study:** As a qualitative researcher, he needs to be versatile in his field of study or has a flair for reading.

**Calmness:** He should be a cool headed person. He should not be arrogant or aggressive. He should acknowledge and treat an individual participant with respect.

**Outspoken:** A qualitative researcher must be frank and honest. He should be able to

express himself and ask questions where necessary for further clarification.

**Honesty:** He needs to display high sense of integrity by not changing the verbatim statement of his participant. He should make the opinions of his interviewee prevail and not jettisoned. Even, in the interpretation of findings, he should not be biased.

### **Objectives of the Study**

**The objectives are** to identify the existing methodological approach for the conduct of Qualitative research in Library and Information Science. To identify the methodological approach required with respect to qualitative research in Library and Information Science. To ascertain the challenges associated with the conduct of qualitative research in library and information science. To recommend measures associated with the conduct of qualitative research in Library and Information Science

### **Literature Review**

#### **Concept and Significance of Qualitative Research Methodology**

Research is conducted to find solutions pertinent to something that is uncertainty (Chua, 2016). Research is a procedure applied for gathering and analysing data to increase our knowledge of a phenomenon (Creswell, 2012). It is a process of identifying

a problem and attempting to proffer a solution through scientific information gathering and analysis. There are some benefits derived from conducting a research such as:

- ❖ Broadens our horizon of understanding phenomena.
- ❖ Informs and shapes policy decision-making.
- ❖ Adds value to the prevailing knowledge of a field or related study.
- ❖ Improves the research practice
- ❖ Paves way for more discoveries
- ❖ Enhances research outputs.

The logic underpinning qualitative research is to give detail coverage needed to survey a field of study (Chua, 2016; Robson & McCartan, 2016). Qualitative Research design is defined as an enquiry that involves ethical, metaphorical, beneficial, social interaction, persistent interruptions and divergent opinions which acknowledge the humanistic and social equity with high level of commitment (Denzin & Lincoln, 2011). The authors stated that it consists a set of interpretive, material practice that makes the world visible which numerical data gathered via quantitative study cannot explain in details, the different phenomena in the real-world situation. It is a technique in which researcher based his data on difference of

opinions, pictures, involvements and reflections that are not measured quantitatively (O'Leary, 2017).

Qualitative research method is an approach that focuses on identification of certain phenomenon in which data collections are through interviews, observations, use of images, pictures while analysis and presentation of findings are by means of coding, thematic and holistic explanations or use of relevant software. It is characterised by few participants, non-numerical while data collection is by means of triangulation (interviews, focus groups and observations), prolong engagement on the field, social interaction between the researcher and participants, etc. It is a type of investigation that is realistic and deals with non-numerical data. It seeks to understand and explore rather than explain and manipulate variables (Nassaji, 2020). Various scholars highlighted the features of qualitative research as:

- ❖ Investigating a problem and establishing a detailed understanding of phenomenon.
- ❖ Justification of problem through literature review.
- ❖ Data collection is through inductive judgement from theoretical frameworks and emergence of concepts.

- ❖ Generalisation of findings is not a priority.
- ❖ Research objectives and questions are geared toward the participants' experience.
- ❖ Data collections are based on verbal communication
- ❖ Requires manageable number of participants for data collections in order to obtain the correct perspectives from each participant.
- ❖ Data analyses are done through coding, text analysis, emergence of themes and interpretation with little or no numerical data.
- ❖ Report writing is by using flexible, emerging structures and evaluative criteria together with researcher's personal consideration.
- ❖ Circumstances are defined from participants' perceptions.
- ❖ Sincerity and approachability of the researcher is appreciated.
- ❖ Takes place in natural surroundings.
- ❖ Appreciation of the uniqueness, natural variation, diversity, and ambiguity in the findings.
- ❖ Giving due consideration of iterative nature of process and knowledge as well as the positions of both participants and researcher (Creswell,

2012; Jason & Glenwick, 2016; McCartan, 2016) while Padgett (2016) lists characteristics of qualitative research as:

- ❖ Focuses on the principle of accomplice rather than peculiar viewpoints.
- ❖ Based on human feelings rather than information on variables.
- ❖ Wholesomeness rather than fractional.
- ❖ Circumstantial rather than generic.
- ❖ Narrower and in-depth rather than wider scope.
- ❖ Logical reasoning rather than hypothetical (at least from the preamble phase)

### **Research Design**

Research design is a summary of stages required for conducting a study. Research design is defined as a blueprint for conducting the study that maximises control over factors which could interfere with the validity of findings (Burns & Grove, 2001). There are five philosophical expectations underlining the selection of research paradigms in qualitative research. These comprise the ontology (the nature of reality), epistemology (how the researcher knows what he or she knows), axiology (the role of values in the research), rhetorical (the

language of research), and methodological (the methods used in the process) (Creswell, 1994 & 2003).

Philosophy of knowledge encompasses cognisant and incognisant assumptions and considerations pertaining the nature of certainty (ontology); the formation of knowledge and understanding (epistemology); as well as the functions of values and their impacts on the knowledge creation procedure (axiology) (Biedenbach & Jacobsson, 2016). In a practical sense, these philosophical considerations are very significant to research method and influences all scientific investigation, since quality of research lies on the insightful relationship between the researchers' philosophical point of view and the methodological process adopted in research (Alvesson & Skoldberg, 2009).

**Ontology:** The study of not only the existence of entities and their nature but also God (PAGE, 2017). In another dimension, the study of what exists, how things are understood and categorised the way they are. Individual ontology focuses on what one thinks is factual, in existence, for example the nature of our soul, God, passion and ethics (O'Leary, 2017). Having background knowledge of ones' subject is an example of ontology.

**Epistemology.** This refers to the question of "How can we know? Epistemological positions also can be placed on a range, influenced by the researcher's ontological viewpoint (Wright, O'Brien, Nimmon, Law, & Mylopoulos, 2016). How an individual comes to have authentic acquaintance with the universe and its understanding. The author stresses that our personal epistemology has to do with how we come to comprehend the world; for instance, 'how I came to believe in God, how I came to understand love or how I adopted the morals I have' (O'Leary, 2017:5). In view of this, epistemology has to do with inbuilt features in a field of study.

**Axiology:** The study of value. Axiology addresses questions related to what is valued and considered to be desirable for humans and society (Biedenbach & Jacobsson, 2016). The theory of value is categorised into three dimensions (intrinsic, extrinsic and systemic) or divided into eight taxonomies (material and physical; economic; moral; social; political; aesthetic; religious; and intellectual). This is concerned with significance of the study or its contributions to the target audience and society at large.

**Rhetorical:** The logical principle guiding the art of scribbling excellently, expressively and convincingly. It is the human use of

symbols to communicate (Foss, 2017). In qualitative research, writing report in a concise or precise and convincing manner with illustration is a prerequisite to rhetoric.

**Methodological:** Refers to the description and analysis of principles shared by a family of research methods. Qualitative research methods, developed from an interpretive paradigm, constitute reflexivity. The methodology in different contexts while methods refer to the specific procedures intended to operationalise (Malterud, 2016). The methodological approach needs to be itemised for clarity.

### **Research Paradigm**

Research paradigms are interchangeably referred to as world views, schools of thought, philosophies, theories, etc. Generally, there are schools of thought concerning a choice of research paradigms and these include positivism, social constructivism, advocacy and participatory, pragmatic and post-positivism (McCartan, 2016). Positivism paradigm is a school of thought that believes in observation first before supporting it with empirical evidence using deductive measurement to arrive at hypothetical testing. Contrarily, social constructivism, also known as interpretive, humanistic and naturalistic paradigm, is of the opinion that the basic generation of

denotation is always social, arising from communication with human community established on qualitative research (Greener, 2011).

The third world view is advocacy and preparatory which centralised its notion that there are marginalised and unrepresented people in the fabric of social realm and its research enquiry should be intermingled with political agenda, action for reform that positively affect the lives of participant while their lives and that of researcher are protected (Creswell, 2009). Pragmatic approach, also regarded as action research, based its philosophical view on practical experience rather than theory while the pragmatists do not view the world as an absolute entity instead they feel research occurs in various contexts and thereby using mixed technique (Guba, 1990). Lastly, is Post-positivism, also known as post-modernism or scientific method of investigation, is the contemporary world view established as a result of critiques of positivism and is based on the existence of single reality (Guba, 1994). However, the authors acknowledged that the realism can never be completely understood and attempts to study it are restricted due to human beings' sensual and intelligent confinements. It is worthy to say that each paradigm has its own shortcomings/criticisms. In other words,

there are counter-attacks and opposing opinions regarding each paradigm. No single world view perfectly fits for all types of research, meaning that each philosophy has its good and bad side.

### **Social Constructivism**

The history of social constructivism could be linked to the time of Socrates and Plato who felt there should be interaction between teacher and learner so as to unravel the hidden treasure of knowledge through questions and answers session in the classroom (Amineh & Asl, 2015) in (Hilav, 1990, cited in Erdem, 2001). Constructivism is a theory of education which is centralised on the three domains of learning capability, such as cognitive, affective and psychomotor. Social constructivism is associated to qualitative research method. Social constructivism is a philosophy of learning in social science disciplines that studies the knowledge and understandings of the world that are mutually established by individuals and this theory presupposes that comprehension, importance, and meaning are created in harmonisation with other human beings (Amineh & Asl, 2015). Any action that is repeated frequently becomes cast into a pattern, which can then be reproduced with an economy of effort and which, *ipso facto* is apprehended by its performer as that pattern'.

It is a philosophical idea that holds on to the fact that reality is not static but dynamic and flexible as human beings interact and share their experiences either consciously and unconsciously.

### **Characteristics of Social Constructivism**

- ❖ The primary development of meaning usually comes from social interaction between and among people.
- ❖ Dealt on qualitative research.
- ❖ Social subjects and problems can be researched via positivism.
- ❖ Constructivists believe that the world is multifaceted with multiple realities which are constructed, experienced and interpreted in different dimensions by people.
- ❖ Constructivists are also called interpretivists because they focus on how social world is interpreted by the affected.
- ❖ People attribute meaning to their experiences based on interaction with others.
- ❖ Provides room for the investigator to cross-examine the interpretive aspect of social world, his interpretation vis-à-vis the phenomenon being studied.

- ❖ Realism is not a fix object but rather individuals construct their own perceptions based on experiences.
- ❖ Social interaction with the participants so as to explore their experiences in real life situation.
- ❖ It is based on theory formulated by previous researchers.

### **Methodological Approach**

Basically, there are three approaches in conducting a research. These are qualitative, quantitative and mixed method (combination of both qualitative and quantitative). The type of research questions determines the methodological pattern applied. Qualitative approach is a technique in which the researcher uses non-numerical data such as words, photographs and observations, to enquire, investigate and describe the experiences, denotations, procedures and determinations of a certain phenomenon (Jason & Glenwick, 2016). Quantitative technique, on the other hand, is associated with the use of figures and accuracy in which experimental studies are conducted by means of numerical data collection and statistical analysis (Chua, 2016b). The author stressed that this method is based on positivist experimental research. However, mixed method as the name implies, is a combination of qualitative and quantitative techniques

which is characterised by the numerical figures or statistics, interviews and observations in data collection and analysis.

### **Population of Study**

One of the factors considered in qualitative research design is the selection of place and respondents that would represent the study. Population is defined as a whole set of components (persons or objects) that acquire some communal features distinguishable by sampling standards developed by the researcher

(<https://www.umsl.edu/~lindquists/sample.html>). Target population is the total group of individuals or substances to which the researcher intends to generalise the findings (<https://www.umsl.edu/~lindquists/sample.html>). Here, the researcher needs to categorically state the target population and expatiate the logical reasons behind the chosen population. Intricacies

### **Sample Size and Sampling Technique**

Sample is a group of subjects or objects earmarked to participate in a study. It is a subset of a population designated to partake in research project, while sampling technique is a process of selecting a portion of population to represent an entire population. There are various types of sampling techniques. These include purposive, stratified, random, snowball, etc.

Purposive sampling technique is a procedure whereby a researcher uses personal judgement to select subjects that are considered to be representative of a population (Kowalczyk, 2016). Purposive sampling technique, also known as judgmental sampling, is the thoughtful selection of a subject due to the characteristics he possesses (Etikan, Musa, & Alkassim, 2016). In addition, Hajimia (2014) defines purposive sampling as a procedure in which the investigator chooses sample built on skill or acquaintance of the group to be sampled. It is a non-probabilistic because there is no guarantee as to number of participants selected or who the participants are, since it based on the researcher's judgement. There should be criteria for any sampling technique and size. Purposive sampling technique is usually associated with a qualitative research method.

### **Instrumentations**

Qualitative research methods are employed for two obvious circumstances: when the researcher wants to know why people behave in a particular way and what are the reasons behind their actions; secondly when he is interested in the in-depth understanding of a particular contemporary phenomenon from perspectives of the participants (Rosenthal, 2016). Qualitative methods usually go along

with interviews, focus groups and observations. In other words, the research is based on triangulations of interview, focus group discussion and observations. Triangulation is the process of corroborating evidence from different individuals, (e.g., students and staff), types of data (e.g., interviews, FGD and observations) as well as method of data collections (Creswell, 2012). Similarly, triangulation is a means in which the researcher collects data from different perspectives in order to have better understanding of phenomenon. It is an effort to ensure that the right information and interpretation have been obtained (Stake, 2013). The essence of triangulation is to ensure qualitative research is given high level of validity and reliability (Chua, 2016b). Yazan (2015) categorises its technique into four types. These are data source, investigator, theory and methodological triangulation.

### **Interviews**

Interview is an inter personal conversation between a researcher and a participant which resulted to information gathering through a careful, logical and guided questions that would not obstruct the ethical principle of the latter. An interview is defined as a two-way conversation between the interviewees (participants) and the interviewer



(researcher) with the aim of gathering information (Piaw, 2016b). There are three types of interview (structured, semi-structured and unstructured). It can be conducted through face-to-face, by telephone, or by electronic means using a platform such as Skype, WhatsApp, Zoom, Google meet, while benefit of one-on-one interview is to enable the interviewer to perceive facial expressions and body language. This goes with the popular saying that 'action speaks louder than voice'.

### **Focus Groups**

Bray, Johns, and Kilburn (2011) define focus group (FG) as a cautiously intentional series of discussions premeditated to obtain perceptions on a defined area of interest in a permissive and non-threatening environment. The rationale behind employing FG is to gather quality and comprehensive information for a study (Carey & Asbury, 2016). The authors asserted that FG gives intuition into the mind-set and notions that holistically govern the conduct and experiences of members. FG is seen as a group of interacting individuals having some common interests or characteristics, brought together by a moderator, who uses the group and its interaction as a way to obtain information about a concerned issue. It gives an opportunity for collection of more detailed

information in which the moderator can clarify questions and answers immediately.

### **Observations**

Observational research (or field research) is a type of correlational (i.e., non-experimental) research in which a researcher observes an on-going behaviour (<http://atlasti.com/observational-research/>).

Direct observation, also known as observational study, is a method of collecting evaluative information in which the evaluator watches the subject in his usual environment without altering that environment. Direct observation is used when other data collection procedures, such as surveys, questionnaires, etc., are not effective; when the goal is to evaluate an on-going behaviour process, event, or situation; or when there are physical outcomes that can be readily seen (Holmes, 2013).

Observation simply means watching people in act of doing something either knowingly or unknowingly to the group. Observation is categorised into three: controlled (structured), natural (unstructured), and participatory (the researcher joins and become part of the group). Furthermore, Merriam and Tisdell (2015) point out two parameters that distinguish observation from other instruments in conducting a research: it takes place in a setting where the

circumstance of curiosity naturally occurs; secondly it gives first-hand reality with the situation under investigation. However, there are forms of observation in research known as overt (disclosed, meaning that the participants know they are being studied) and covert (undisclosed, that is, the researcher do not reveal his identity to the subjects) (McCleod, 2015).

### **Participants of a Study**

Participants are the group of persons the researcher selects to partake in the research process. They are also called respondents or subjects. Association of Qualitative Research defines respondents as individual who participate in a research projects (<https://www.aqr.org.uk/glossary/responden>). These individuals are either called respondents, participants or subjects (<https://quizlet.com/72883412/research-participants-respondents-subjects-what-is-the-difference-flash-cards>). However, in qualitative research technique, they usually referred to as participants.

### **Data Collection Techniques**

Nowadays, with the advancement of ICT, WWW and analytics apparatuses, individuals and organisations are able to collect data from mobile devices, website traffic, server activity and other relevant sources, depending on the project (Rouse, 2016). The

author also emphasised that correct data collection is crucial to sustaining the integrity of research, shaping informed corporate decisions and guaranteeing quality assurance. Audio record, WhatsApp, Skype, video and other relevant platform can be sued for data collection.

### **A Preliminary Study**

This is carried out prior to the actual investigation. It is known as pilot study. The aims of the preliminary study are to:

- ❖ Establish the feasibility of conducting a study in the chosen area/s;
- ❖ Serves as basis for familiarisation with the selected institutions and the prospective participants for a research;
- ❖ Ascertain if the selected institutions are in conformity with study.

### **Data Analysis**

Data is a fresh information collected through various means. Data analysis is the process of elucidating the data collected during investigation. In other words, it is a technique of clarifying the data collected for meaningful presentation by means of condensing, consolidating, justifying and interpreting the experiences of the subjects in an unbiased manner. Data analysis encompasses investigating, classifying, tabularising, evaluating, or otherwise reincorporating both quantitative and

qualitative prove to report the original proposition of a study (Yazan, 2015). In the same vein, qualitative data analysis is described as an evolving procedure as the investigator earns insights in the development of research when s/he correlates, blends the data and scrutinise (Chun, 2013) in Merriam, 2009. The author emphasised that data analysis is also an inductive procedure and as well enumerates the steps taken in analysing qualitative data:

- ❖ Gathering of data;
- ❖ Data clarification: setting up data for breakdown e.g. verbatim transcription of interview;
- ❖ Open coding: identify useful portions from the resources
- ❖ Axial coding (analytical coding): analysing and categorisation of group into portions;
- ❖ Replicate the above procedure, acquire more categories from more data sets;
- ❖ Concurrently join groups into themes.

### **Ethical Considerations**

Ethical consideration is a means of giving assurance to the participants all they need to know prior to the actual conduct of the study. These include purpose of the study, their privacy, consent, confidentiality, safety of their lives in relation to the information they will provide. Ethical consideration

consists of confidentiality, explanation of purpose, informed consent, mental health of the interviewer, to mention a few (Merriam & Tisdell, 2015). Equally, Siegle (2017) provides insight into the factors worthy of notice prior to investigation. These are:

- ❖ The participants are to be protected against physical and emotional attack;
- ❖ Protecting their privacy and confidentiality;
- ❖ Guard against indefensible trick
- ❖ They must indicate interest to partake in the enquiry.

### **Trustworthiness of Study**

Trustworthiness establishes the extent of prove of evidence to the findings. Cope (2014) attests that Lincoln and Guba (1985) originally presented four criteria of trustworthiness in qualitative research such as credibility, dependability, confirmability and transferability. However, the same Guba and Lincoln, according to the author added authenticity as the fifth criterion in 1994.

**Credibility:** This establishes an extent of reliability and truthfulness of the research findings. Cope (2014) asserts that qualitative study is considered to be credible if the data and participants views are interpreted and represented in such a way that those participants' experiences are acknowledged by individuals who share the same

circumstances (Cope, 2014). Similarly, DeVault (2016) sheds more light on credibility of qualitative study, that it can be ascertained through the following means: a prolonged engagement, member checks and triangulation. Credibility is a procedure whereby the researcher justifies the accuracy and truthfulness of findings in various techniques and consistently generates the same results Cope (2014) in Koch (2006). As a researcher, credibility is ascertained via the above mentioned clues.

**Dependability** can be attained when another investigator coincides with the result at stage of the research processes by means of reproducing the study with the same participants and in similar situations. Dependability is a way of re-investigating the same phenomenon with the same groups by a different researcher and congruently come out with the same findings.

**Transferability:** This is a process in which a researcher has to demonstrate that research findings can be extended to other settings or groups (Cope, 2014) in Houghton, Casey, Shaw, and Murphy, 2013; Polit & Beck, 2012. It can be applied and established if the results have meaning to individuals not in the study and researchers can associate the result with their own experiences. Olivia (2016) expresses that transferability is the

demonstration of extending the research findings to other contexts with similar phenomenon.

**Confirmability:** Literally, confirmability means verifiability. In other words, it ascertains the degree of neutrality and non-adulteration of the study by interpreting the experiences and views of the participants without bias on the part of investigator. Olivia (2016) opines that confirmability refers to level of confidence that the research study's findings are based on the participants' narratives and words rather than potential researcher biases. The author further stated that the role of confirmability is to verify that the findings are shaped by participants rather than researcher via audit trails and reflexivity. Researcher should not impose his/her personal opinions to influence or change the findings.

**Authenticity:** An ability of the qualitative researcher to portray the moods and reactions of the participants' experiences in an unalloyed state by means of their verbatim quotations in such a way that the readers can comprehend the degree of their circumstances (Cope, 2014). Authenticity is the process of reporting the findings of a study and backing it with verbal expressions (quotations) of the participants in order to

carry readers/audience along through the participants' situations.

### **Reliability**

Reliability in research focuses on trustworthiness of the result of the findings. It shows an extent of how unbiased, error-free and dependent on the result of the findings (Sekaran & Bougie, 2009). Furthermore, Seale (1999) opines that reliability and replicability are pointers which confirm that various spectators make similar clarifications of specific substances or circumstances. In other words, the observers have the same views or consensus of the world while qualitative researcher plays the responsibility of expediting the interpretation of these views.

### **Validity**

Validity is defined as the capability of a measurement or research instrument to measure the true value of a concept in a hypothesis. In qualitative research, the number of subjects used is usually small and the data collected through procedures such as observation, interview, and focus group should have characteristics of all the types of validity (face, criterion, construct, internal and external (Chua, 2016). It focuses on the degree to which fundamental results tend to exhibit evidence of truth in

other situation, as part of generalisability of findings (Seale, 1999). The extent to which research instrument is accurate to the research findings the better.

### **Thematic Analysis (TA)**

TA is a method that focuses on identifying, analysing and interpreting patterns of meaning of a dataset (Braun & Clarke, 2019; Maguire & Delahunt, 2017). The authors stressed that TA is a popular method for analysing qualitative data in several fields of study. This type of analysis goes beyond imagination of counting explicit terms or phrases but rather concentrates on categorising and elucidating both implicit and explicit ideas within the data collected via coding. Data coding is a procedure of converting and abstracting the information gathered or observed to provide a set of expressive, consistent and orderly interpretation of manifestation (Sun, 2017). TA of data involved the following stages:

### **Conventional Appraisal of Data**

A researcher needs to listen with rapt attention to an audio recording of the interviews; transcribe into a PC, replay several times to make sure nothing is missing. The transcribed data would be comprehensively read severally to grasp and determine their meanings as well as the

themes. This is a stage where researcher engrosses deeply through reading the transcribed data repeatedly for familiarity. The researcher edits, checks and re-reads manually, line-by-line and paragraph-by-paragraph, page-by-page for accuracy and consistency. This comes with assessment, identifies some basic themes based on the research questions, many are expressive in nature.

### **Open Coding**

A researcher reads through the transcribed data several times in order to justify the research objectives/questions vis-à-vis the participants' verbatim statements. After transcription, the researcher listens and reads to see if there is any omission. The recording needs to capture both audio and video, the video recording is normally very brief compared to audio recording which is usually throughout the whole session. The verbatim statements would be open-coded in order to generate a lot of nodes based on the responses of the participants through interviews. This usually results into numerous emerging themes.

Coding is linked to the research objectives and questions (Merriam & Elizabeth, 2015). Thoughtful notes during the interview exercise would also be utilised because they are helpful in recognising the possible coding

categories. Thus, leads to generating statements that ran into hundreds for a distinct interview. Codes with hierarchical structures are the primary subjects to be produced, guided by units of breakdown. The researcher persistently reads several times to make tentative labels for the data, based on meaning, springing out of the data collected. Sentences showing the same meaning and idea are coded with a node while comparisons are constantly made to cross-check duplications and overlapping sentences. The emerging themes are classified into categories for meaningful general concepts while analyses are made to explore the interrelatedness of the themes, link and gather them into significant and wider taxonomies.

### **Axial Coding**

Axial coding is a process of selecting an open coding classification, places it at the middle of the course being explored (as the main phenomenon), and then matches other groups to it (Creswell, 2012; Merriam, 2009). It is a means of detecting relationship among open coding (second step of coding). Here, the connection is established between statements to reduce a range of data sets into conceptual categories (Saldaña, 2015). Logically, the minor themes are absorbed into major

themes, to extract themes that reflect the research objectives and questions (Creswell, 2012). Axial coding is usually tasks challenging in the sense that this is where the generated nodes from open coding are grouped while the researcher tries to comprehend thoroughly the texts vis-à-vis the research objectives and questions.

### **Selective Coding**

The researcher develops core grouping, plans on how and where it matches the research objectives, questions and overall aim of the study (Merriam, 2009). The variables are identified from the data and coded accordingly while the emerging themes are identified and extracted (Saldaña, 2015). It is a systematic way of relating the core groups to other categories and filling in variables that need further clarification and refinement.

### **Data Interpretations**

Data interpretation is a process which the chunk of data is reviewed with the sole aim of arriving at meaningful conclusion of study. As the name implies, this is where the researcher construes his in-depth understanding of the study to the target audience. Qualitative research envisages comprehensive emphasis on detailed interpretation of data by the researcher. It aims at establishing linkages amongst the all-encompassing conceptual classifications and

select from the subjects that developed from the previous analyses. According to Creswell (2012), qualitative research revolves around data interpretation, i.e., the precise meaning of findings.

### **Challenges in Qualitative Research**

There are challenges encountered in the conduct of qualitative research. In view of this, Ciuk and Latusek (2018) highlighted that getting the consent of the participants, controlling and handling the relationship as well as presentation of data. Aside the aforementioned, numerous visits seeking for audience to interview principal officer is usually frustrating, difficulty in mediating between and among the focus group as well as prolong engagement leading to exhaustion.

### **Recommendations**

The paper recommends that a qualitative researcher requires perseverance in handling the interactive session. This is an era characterised with interconnectivity, setting aside a date for interviewing a Principal Officer via contact, text or WhatsApp messages are paramount. There should always a time frame for the interactive session in order to avoid deviation

### **Conclusion**

Qualitative research design is elucidated on the threshold of providing guidelines for

intending researchers who will conduct investigations from the qualitative research method perspectives. Various qualitative

terms were expatiated most especially from the conventional point of view. This is with hope that it will benefit the target audience.

FINAL DRAFT BJEA VOL 9 No3



References

- Alvesson, M., & Skoldberg, K. (2009). positivism, social constructionism, critical realism: Three reference points in the philosophy of science. *Reflexive methodology: New vistas for qualitative research*, 15-52. SAGE. Retrieved from [https://www.sagepub.com/sites/default/files/upm-binaries/28039\\_02\\_Alvesson\\_2e\\_Ch\\_02.pdf](https://www.sagepub.com/sites/default/files/upm-binaries/28039_02_Alvesson_2e_Ch_02.pdf)
- Amineh, R. J., & Asl, H. D. (2015). Review of constructivism and social constructivism. *Journal of Social Sciences, Literature and Languages*, 1(1), 9-16.
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The qualitative report*, 13(4), 544-559. .
- Biedenbach, T., & Jacobsson, M. (2016). The Open Secret of Values: The Roles of Values and Axiology in Project Research. *Project Management Journal*, 47(3), 139-155.
- Bray, J., Johns, N., & Kilburn, D. (2011). An exploratory study into the factors impeding ethical consumption. *Journal of business ethics*, 98(4), 597-608.
- Braun, V. and Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4): 589-597.
- Burns, N., & Grove, S. (2001). Introduction to qualitative research. *The practice of nursing research. Conduct, critique and utilization* (67-68).
- Carey, M. A., & Asbury, J.-E. (2016). *Focus group research*: Routledge.
- Chua, Y. P. (2016). *Mastering Research Methods*. McGraw-Hill Education. Retrieved from <http://eprints.um.edu.my/id/eprint/10241>
- Chun, H. (2013). Data Analysis in Qualitative Research: Educational Issues for Female Baby Boomers (Blog).
- Ciuk, S., Latusek, D. (2018). Ethics in Qualitative Research. In: Ciesielska, M., Jemielniak, D. (eds) *Qualitative Methodologies in Organization Studies*. Palgrave Macmillan, Cham. [https://doi.org/10.1007/978-3-319-65217-7\\_11](https://doi.org/10.1007/978-3-319-65217-7_11)
- Cope, D. G. (2014). *Methods and meanings: credibility and trustworthiness of qualitative research*. Paper presented at the Oncology nursing forum.
- Creswell, J. W. (1994). *Research design: Qualitative & quantitative approaches*: Sage Publications, Inc.
- Creswell, J. W. (2003). Qualitative, quantitative, and mixed methods approach. In: London: SAGE publisher.
- Creswell, J. W. (2009). *Research Design: qualitative, quantitative and mixed methods approach*, 3rd edition, Los Angeles, Sage.
- Creswell, J. W. (2012). *Educational Research: planning, conducting, and evaluating quantitative and qualitative research*, 4th edition.
- Denzin, N. K., & Lincoln, Y. S. (2011). *The Sage handbook of qualitative research*: Sage.
- DeVault, G. (2016). Establishing trustworthiness in qualitative research. Retrieved March, 7, 2017.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4.
- Foss, S. K. (2017). *Rhetorical criticism: Exploration and practice*: Waveland Press.

- Greener, I. (2011). *Designing Social Research: a guide for the bewildered*, London, sage
- Guba, E. G. (1990). *The Alternative Paradigm Dialogue*, Newbury Park, CA: Sage
- Guba, E. G. a. L., Y. S (1994). *Competing Paradigms in qualitative Research* In: N. K. Denzin & Y. S. Lincoln (eds.), *Handbook of Qualitative Research* , Thousand Oak: Sage.
- Hajimia, H. (2014). *Research Method-Sample* - SlideShare @ <https://www.slideshare.net/hafizahhajimia/research-method-sampling>.
- Hay, C. (2016). Good in a crisis: The ontological institutionalism of social constructivism. *New Political Economy*, 21(6), 520-535.
- Jason, L., & Glenwick, D. S. (2016). *Handbook of methodological approaches to community-based research: Qualitative, quantitative, and mixed methods*: Oxford university press.
- Koga, T. (2005). NISO Framework Advisory Group. A Framework of Guidance for Building Good Digital Collections. Bethesda, National Information Standards Organization, Nov. 2004. *Journal of Information Processing and Management*, 48, 48-49.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques*: New Age International.
- Kowalczyk, D. (2016). *Correlational Research Purpose and Examples*. Retrieved from <https://study/avcademy/.../correlational-research-definition-purpose-example.html>.
- Maguire, M. and Delahunt, B. (2017). Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. *All Ireland Journal of Teaching and Learning in Higher Education*, 9(3). Retrieved from <http://ojs.aishe.org/index.php/aishe-j/article/view/3>
- Malterud, K. (2016). Theory and interpretation in qualitative studies from general practice: why and how? *Scandinavian journal of public health*, 44(2), 120-129.
- McCartan, C. R. a. K. (2016). *Real World Research*.
- McCleod, S. A. (2015). *Observation Methods*. Retrieved from [www.simplypsychology.org/observation.html](http://www.simplypsychology.org/observation.html).
- Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative research: A guide to design and implementation*: John Wiley & Sons.
- Nassaji, H. (2020). Good qualitative research. *Language Teaching Research*, 24(4), 427-431. <https://doi.org/10.1177/1362168820941288>
- Nok, G. (2006). The challenges of computerizing a university library in Nigeria: the case of Kashim Ibrahim Library, Ahmadu Bello University, Zaria. *Library Philosophy and Practice (e-journal)*, 78.
- Observational Research (2016) available online at <http://atlasti.com/observational-research/>.
- O'Leary, Z. (2017). *The essential guide to doing your research project*: Sage.
- Olivia. (2016). What is trustworthiness in Qualitative Research available online at [www.statisticssolutions.com/](http://www.statisticssolutions.com/).
- Padgett, D. K. (2016). *Qualitative methods in social work research* (Vol. 36): Sage Publications.
- PAGE, D. (2017). Cosmological Ontology and Epistemology. *The Philosophy of Cosmology*, 317.
- Robson, C., & McCartan, K. (2016). *Real world research*: John Wiley & Sons.

- Rosenthal, M. (2016). Qualitative research methods: Why, when, and how to conduct interviews and focus groups in pharmacy research. *Currents in Pharmacy Teaching and Learning*, 8(4), 509-516.
- Rouse, M. (2016). Data Collection, available @ <https://searchcio.techtarget.com/definition/data-collections>.
- Seale, C. (1999). *The Quality of Qualitative Research*, London, Sage Publications Ltd. .
- Sekaran, U., & Bougie, R. (2009). *Research Method for Business*. 5. In: United Kingdom: John Wiley & Sons.
- Siegle, D. (2017). Educational research basics. *Retrieved from*.
- Stake, R. E. (2013). *Multiple case study analysis*: Guilford Press.
- Sun, Y. (2017). Coding of Data in: The Encyclopedia of Communication in Research Methods In M. Allen (Ed.), *The Encyclopedia of Communication in Research Methods* (pp. 149-151 ). Thousand Oaks SAGE Publications.
- Wilson, V. (2016). Research methods: interviews. *Evidence Based Library and Information Practice*, 11(1 (S)), 47-49.
- Wright, S., O'Brien, B. C., Nimmon, L., Law, M., & Mylopoulos, M. (2016). Research design considerations. *Journal of graduate medical education*, 8(1), 97-98.
- Yazan, B. (2015). Three Approaches to Case Study Methods in Education: Yin, Merriam, and Stake, *The Qualitative Report*, Vol. 20, No. 2.
- Yin, R. K. (2017). *Case study research and applications: Design and methods*: Sage publications.

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