

**TEACHERS' LEVEL OF AWARENESS AND UTILISATION OF INSTRUCTIONAL STRATEGIES FOR TEACHING VALUE COMPONENT OF ISLAMIC STUDIES CURRICULUM IN UPPER BASIC SCHOOLS IN SOKOTO STATE, NIGERI**

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**ABSTRACT**

*This paper assessed the level of awareness and utilisation of instructional strategies for teaching value component of Islamic studies curriculum in upper basic schools in Sokoto state. The study, among others, sought to determine teachers' level of awareness of instructional strategies for teaching value component of Islamic studies curriculum. Descriptive survey design was adopted and the population of the study comprised of 371 Islamic studies teachers of which 80 were selected as sample for the study based on the recommendation of research Advisors (2006) by multi-stage sampling procedure comprising stratified, purposive and proportionate sampling techniques. A 20-items self- designed questionnaire was used for data collection and was validated by experts with reliability index of 0.67. Frequencies, simple percentage and cumulative percentage were used for analysis. Findings revealed that majority of the respondents (86.7%) are highly aware of instructional strategies and majority of the respondents (54%) utilised, among others, demonstration, discussion, story-telling, rote-learning, problem-solving, dramatisation, field-trip and play-way strategies for teaching value component of Islamic studies curriculum. The study concludes that teachers are highly aware of and utilised instructional strategies for teaching value component of Islamic studies curriculum. The study recommends among other things; Islamic studies teachers should be encouraged to sustain their knowledge of instructional strategies.*

**Key words:** *Instructional Strategies, Value, Islamic Studies Curriculum.*

**Introduction**

The 21<sup>st</sup> century is faced with challenges of immorality and value problems among students which retard national progress, unity and integration. Value is the standard that guides one's behaviour. According to Muhammad (2015) value is the standard that guides one's behavior to distinguish between right and wrong. It is an order that is used as a guide by individuals to weight and choose alternative decisions in certain social situations. It is the conceptions of what

is good, desirable, proper, bad, undesirable and improper (Islam, 2018). Value component (Tahadhib) places special emphasis on the field of moral and social teaching derived from the Qur'an and hadith of the prophet Muhammad (peace be upon him). The curriculum in this aspect includes personal cleanliness and clean habits, greeting, good manners, honesty and truthfulness. It also includes warning against the evils of bribery and corruption, stealing, alcoholism, adultery, fornication, gambling, fraud and so on (NERDC, 2012). Value is the moral part of Islamic studies curriculum that is designed to teach Islamic studies learners good attitudes (Sani et al., 2021).

Education is the right machinery for inculcating right attitudes and moral values in the citizens. It serves as the instrument for the social transformation of a people. It is the vehicle for transferring values, knowledge and experience that makes proper modeling and adjustment of an individual to his dynamic environment. Education achieves such laudable objectives through the instrumentality of the curriculum. The responsibility of inculcating and developing moral values rests on the nation's schools among other institutions in the society. Education is the bedrock of any nation's development and is central to all aspect of any nation's economy. It is the total process of human learning by which knowledge is imparted, faculties trained and skills developed. According to Ugwu (2019) education can be regarded as the process of imparting and acquiring general knowledge, instrument for effecting human learning, transformation and capacity development. Thus, it is a means through which man acquires learning and is molded to fit into the society. In the National Policy on Education, the Federal Republic of Nigeria (FGN, 2014) had continued to update her educational system to meet up with various educational challenges.

Teaching the value component of Islamic studies curriculum is a task that needs to be done effective pedagogy. In doing this, teachers need to be equipped with well-planned strategies for effective teaching to take place such as ; demonstration, discussion, story-telling, rote-learning, problem-solving, inquiry, dramatisation, field-trip and play-way among other instructional strategies. Ada (2006) defined Instructional strategies as the educational techniques, methods or plan of classroom actions or interactions intended to accomplish specific teaching or learning goals. Akinbobola (2015) defined instructional strategies as planned actions adopted in the

acquisition of skills, attitudes and knowledge. They are techniques that teachers use to help students become independent and strategic learners.

Researchers such as Abubakar (2020), Shehu (2020) and Muhammad (2015) posited that most Islamic studies teachers used traditional lecture method, narration of stories, demonstration and memorization method in teaching Islamic studies which shows lack of pupils' interaction in the Islamic studies lessons. Similarly, Rosnani (2004) posited that most frequent methodologies used by teachers for teaching Islamic studies in Nigeria are reading, narration of stories from Qur'an and hadith of the prophet (PBUH), lectures, dictation of notes, and memorisation which also indicates low level of pupils' participation in teaching and learning. However, Fauzia and Bismah (2013) investigated the level of teachers' awareness and utilisation of innovative strategies in public and private schools which revealed that the level of awareness of instructional strategies and utilisation was high in the private schools as compared to the public sector schools. Abdulazeez (2020) examined the impact of Islamic studies curriculum on Islamic schools students' moral behavior in junior secondary schools in Lagos state, Nigeria. Halima and Garba, (2019) investigated the effective learning of Islamic studies using demonstration method among secondary schools in Kaduna state, Nigeria.

It has been observed that over the years, Islamic studies students have continued to display low level of morality for societies still grapple with problems of stealing, dishonesty, lack of unity, bribery and corruption, adultery among other societal vices. These negative attitudes and behaviours are rampant even in our schools thereby rising serious concern for investigation and action to inculcate the right values into students. Thus, teachers of Islamic studies need to rejig the instructional strategies used for teaching the value component of Islamic studies curriculum.

### **Objectives**

The objectives for this study are to;

1. Determine the teachers' awareness level of instructional strategies for teaching value component of Islamic studies curriculum in upper basic schools in Sokoto state.
2. Find out the instructional strategies utilised by Islamic studies teachers for teaching value component of Islamic studies curriculum in upper basic schools in Sokoto state.

### **Research Questions**

The research questions for this study are:

1. What is the teachers' awareness level of instructional strategies for teaching value component of Islamic studies curriculum among teachers of upper basic schools in Sokoto state?
2. What are the instructional strategies utilised by Islamic studies teachers for teaching value component of Islamic studies curriculum in upper basic schools in Sokoto state?

### **Methodology**

This study employed descriptive survey design. The population of this study stood at 371 Islamic studies teachers in 296 upper basic schools across the six educational zones of Sokoto state. With the help of Research advisor (2006) guide, a sample of eighty (80) respondents was determined. The procedure used in the selection of the sample was a multi-stage sample selection involving stratified, purposive and proportionate sampling techniques. Stratified sampling was used to divide the population in to six educational zones. The researcher selected four (4) out of six (6) educational zones and ten (10) schools from each zone (40 schools) using purposive sampling to avoid areas facing serious security threats. Proportionate sampling was used in allocating proportion of teachers.

A self-designed 20 items questionnaire titled "Islamic Studies Instructional Strategies Assessment Questionnaire" was used for data collection. The instrument was validated (content) by experts and has a reliability index of 0.67. The researchers administered eighty (80) copies of questionnaire to the respondents with the help of four research assistants. The respondents were given the instruments in their various schools. The researchers ensured maximum return of the questionnaire and also avoid external influences on the respondents. Frequency count, simple percentage and cumulative percentage were used to analyse the data collected from the respondents. The frequency count was used to sort out the number of responses on each item of the instrument. The researchers used a bench mark 50% cumulative percentage for judging the obtained data in favour of or against the research question.

### **Results:**

This section presents analysis and results from the data collected in this study.

**Research question one:** What is the teachers' level of awareness of instructional strategies for teaching value component of Islamic studies curriculum in upper basic schools in Sokoto state?

**Table 1: Teachers' Awareness level of Instructional Strategies for Teaching Value Component of Islamic Studies Curriculum.**

S/N	Item	S A	A	D	S D	Total
1	I am aware of instructional strategy for teaching cleanliness and personal hygiene in Islamic studies curriculum.	49 (61.3%)	16 (20%)	10 (12.4%)	5 (6.3%)	80 (100%)
2	I am aware of rote learning instructional strategy for teaching hospitality in Islamic studies curriculum.	51 (63.75%)	12 (15.0%)	15 (18.75%)	2 (2.5%)	80 (100%)
3	I am aware of demonstration instructional strategy for teaching kindness to people in Islamic studies curriculum.	57 (71.3%)	8 (10.0%)	7 (8.7%)	8 (10.0%)	80 (100%)
4	I am aware of problem- solving instructional strategy for teaching equality among people in Islamic studies curriculum.	62 (77.4%)	11 (13.8%)	4 (5.0%)	3 (3.8%)	80 (100%)
5	I am aware of inquiry instruction strategy of teaching students' patience, perseverance and endurance in Islamic studies curriculum.	52 (65.0%)	18 (22.5%)	2 (2.5%)	8 (10.0%)	80 (100%)
6	I am aware of dramatisation instructional strategy for teaching brotherliness in Islamic studies curriculum.	69 (86.3%)	5 (6.3%)	5 (6.3%)	1 (1.1%)	80 (100%)
7	I am aware of discussion instructional strategy for teaching love for peace in Islamic studies curriculum.	57 (71.3%)	8 (10.0%)	9 (11.3%)	6 (7.4%)	80 (100%)
8	I am aware of story- telling instructional strategy for teaching manners from the life of prophet and his companions in Islamic studies curriculum.	50 (62.5%)	16 (20%)	4 (5.0%)	10 (12.5%)	80 (100%)
9	I am aware of field-trip instructional strategy for teaching punctuality and respect for time in Islamic studies curriculum.	59 (73.75%)	17 (21.25)	3 (3.75%)	1 (1.25%)	80 (100%)
10	I am aware of teaching strategy that involves entertainment like that of song for teaching honesty (in words and deeds) and truthfulness in Islamic studies curriculum.	61 (76.25%)	15 (18.75%)	2 (2.5%)	2 (2.5%)	80 (100%)
<b>Cumulative Percentage</b>		567 (70.9%)	126 (15.8%)	61 (7.6%)	46 (5.7%)	800 (100%)

Result of analysis from table 1 revealed that 7.6% and 5.7% of the responses on all items disagreed and strongly disagreed on level of teachers' awareness of instructional strategies for teaching value component of Islamic studies curriculum. This represents 13.3% of the total responses. 70.9% and 15.85% of the responses strongly agreed and agreed respectively on teachers' level of awareness of instructional strategies for teaching value component of Islamic studies curriculum. This represents 86.7% indicating that majority of the respondents are highly aware of instructional strategy, demonstration, discussion, story-telling, rote-learning, problem-

solving, inquiry, dramatisation, field-trip and play-way instructional strategies for teaching value component of Islamic studies curriculum.

**Research question two:** What are the instructional strategies utilised by Islamic studies teachers for teaching value component of Islamic studies curriculum in upper basic schools in Sokoto state?

**Table 2: Instructional Strategies Utilised by Islamic Studies Teachers When Teaching Value Component of Islamic Studies Curriculum:**

S/ N	Item	S A	A	D	S D	Total
1	I utilise instructional strategy when teaching cleanliness and personal hygiene in Islamic studies curriculum.	55 (68.75%)	13 (16.25%)	9 (11.25%)	3 (3.75%)	80 (100%)
2	I utilise rote learning instructional strategy when teaching hospitality in Islamic studies curriculum.	28 (35%)	17 (21.25%)	2 (2.5%)	33 (41.3%)	80 (100%)
3	I utilise demonstration instructional strategy when teaching kindness to people in Islamic studies curriculum.	57 (71.25%)	12 (15%)	8 (10.0%)	3 (3.75%)	80 (100%)
4	I give problem –solving related assignments to students when teaching equality among people in Islamic studies curriculum.	11 (13.7%)	13 (16.25)	7 (8.75%)	49 (61.3%)	80 (100%)
5	I give inquiry related questions to students when teaching patience, perseverance and tolerance in Islamic studies curriculum	8 (10.0%)	15 (18.75%)	11 (13.75%)	46 (57.5%)	80 (100%)
6	I organise drama for students when teaching brotherliness in Islamic studies curriculum.	9 (11.25%)	5 (6.25%)	2 (2.5%)	64 (80%)	80 (100%)
7	I organise discussion among students when teaching love for peace in Islamic studies curriculum.	54 (67.5%)	10 (12.5%)	5 (6.3%)	11 (13.7%)	80 (100%)
8	I narrate stories to students when teaching manners from the life of prophet and his companions in Islamic studies curriculum.	59 (73.8%)	7 (8.8%)	9 (11.25%)	5 (6.15%)	80 (100%)
9	I take students for educational trips when teaching punctuality and respect for time in Islamic studies curriculum.	21 (26.3%)	6 (7.5%)	10 (12.5%)	43 (53.7%)	80 (100%)
10	I utilise instructional strategy that involves entertainment like that of song when teaching honesty (in words and deeds) and truthfulness in Islamic studies curriculum.	20 (25%)	12 (15%)	7 (8.8%)	41 (51.2%)	80 (100%)
<b>Cumulative Percentage</b>		322 (40.25%)	110 (13.75%)	70 (8.75%)	298 (37.25%)	800 (100%)

Result of analysis from table 2 revealed that 8.75% and 37.25% of the responses on all items disagreed and strongly disagreed on instructional strategies utilised by Islamic studies teachers for teaching value component of Islamic studies curriculum. This represents 46% of the total responses. 40.25% and 13.75% of the responses strongly agreed and agreed respectively on

instructional strategies utilised by Islamic studies teachers for teaching value component of Islamic studies curriculum. This represents 54% indicating that majority of the respondents utilised instructional strategy, demonstration, discussion, story-telling, rote-learning, problem-solving, inquiry, dramatisation, field-trip and play-way instructional strategies for teaching value component of Islamic studies curriculum.

### **Discussion**

The study assessed instructional strategies for teaching value component of Islamic studies curriculum in upper basic schools in Sokoto state. The first findings revealed that teachers of Islamic studies have high level of awareness of instructional strategies for teaching value component of Islamic studies curriculum which is shown by the cumulative percentage of 86.7% for affirmative responses. The finding is in line with the study by Fauziya and Basma (2013) which revealed that teachers with high working experience and professional qualifications were aware of teaching strategies for teaching Islamic studies. However, the finding was not in conformity with that of Usman et al., (2020) which revealed that most teachers were not aware of instructional strategies for teaching the subject.

The second finding indicated that majority of teachers (54%) of Islamic studies utilised instructional strategies for teaching value component of Islamic studies curriculum. The finding was in line with that of Mohammed (2011) which revealed that most teachers of Islamic studies employed the use of traditional methods such as story-telling, demonstration etc. when teaching Islamic studies. The findings of Muhammad (2015), Maimun et al., (2011) and Shehu (2018) revealed that most teachers of Islamic studies employ traditional methods in teaching Islamic studies. However, for the discussion strategy, the finding coincided with that of Muhammad (2019) which stated that interactive group discussion would be preferred method to be used by many teachers as a teaching strategy in the class and showed positive outcomes in terms of students' participation in the classroom than the traditional lecture-based methods.

### **Conclusion**

Based on the findings of this study, it is therefore concluded that majority of the respondents (86.7%) are highly aware of instructional strategy, demonstration, discussion, story-telling, rote-

learning, problem-solving, inquiry, dramatisation, field-trip and play-way instructional strategies for teaching value component of Islamic studies curriculum. Secondly, majority of the respondents (54%) utilised instruction strategy, demonstration, discussion, story-telling, rote-learning, problem-solving, inquiry, dramatisation, field-trip and play-way instructional strategy for teaching value component of Islamic studies curriculum.

### Recommendations

The following are the recommendations made base on the findings of the study:

1. Teachers of Islamic studies in upper basic schools should be encouraged to sustain their knowledge of instructional strategies for teaching value component of Islamic studies curriculum.
2. Teachers of Islamic studies should be encouraged to utilised variety of instructional strategies to complement the already used strategies.

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## INFLUENCE OF DRUG ABUSE ON SENIOR SECONDARY SCHOOLS STUDENTS ACADEMIC ACHIEVEMENT IN ZARIA LOCAL GOVERNMENT AREA

BY

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### ABSTRACT

*This study investigated students' views on drug abuse in relation to academic achievement of senior secondary school students in Zaria Local Government Area. Three objectives, research questions and two hypotheses were formulated for this study. The research design for this study is descriptive survey. The population of the study area is 5,857 students, Simple Random Sampling Technique was used to select the sample size which resulted to 370 students in senior secondary school in Zaria. A validated researcher developed instrument was used to collect the relevant data. The data was analyzed using percentages, t-test and Analysis of Variance (ANOVA). The results from the findings revealed that drug abuse has no significant influence on students' academic achievement. On the part of gender, there is no significant difference between male and female students' view on the influence of drug abuse on their academic achievement based on class level. The research recommended among others that there is the need for government to introduce drug education in the National Curriculum of Senior Secondary Schools.*

**Keywords:** Student's View, Drug Abuse, Senior Secondary Students, Academic Achievement

### Introduction

Drug is a kind of biologically reactive chemical or substance that is purposefully or deliberately given, usually in a certain dosage, to prevent, treat, or mitigate a disease as well as to alter the physiological system or pathological state of any animal, including humans (Molta, 2004). It is also described as a substance that is not strictly a food but can have impacts on the human or animal body, including therapeutic, intoxicating, performance-enhancing, and other effects. According to the definition given by Folawiyo (2002), a drug is

any substance other than food that, by its chemical makeup, alters the structure or function of a living being. For instance, in medicine, a drug is any substance used as a medicine in the treatment of physical or mental disease. Folawiyo (2002) further stated that drug is any substance which when introduced into living organism modifies the state of equilibrium of the organism or one of the functions.

According to American Psychiatric Association (APA) (2013), drug abuse, also referred to as substance use disorder (SUD), is defined as the compulsive use of drugs or substances in a manner that is harmful, leads to physical and psychological dependency, and negatively impacts the individual's life. Eysenck (2013) sees drug abuse as a situation where individuals use drugs for non-medical purposes, often leading to addiction and behavioral issues, even if it negatively affects their physical, social, and emotional well-being. World Health Organization (WHO) (2004) elaborates that drug abuse involves the use of psychoactive substances in ways that cause harm to the individual's health, impair their functioning, and put them at risk for negative health outcomes, including mental disorders, accidents, and social problems.

According to Shinkafi (2004), the following are the categories of drugs mostly abused:

**Hallucinogens:** These are the psychedelic drugs which produce radical change in the use of mental state. They engender euphoria, depersonalization and disorientation. They include substances such as cannabis/marijuana, mescaline etc. Many of the drugs in the said three categories are available and used in Nigeria by people including secondary school students. Even drugs that were unknown before are now in use in Nigeria (Gusau, 2001).

**Stimulants:** These are drugs which increase body activity, mental alertness, sexual desire etc. they include drugs such as cocaine, kola nut, tea and so on. Kehinde and Ogunyemi (2023) conducted a study in southwestern Nigeria, revealing that a significant number of senior secondary students in urban schools misuse stimulants like amphetamines and caffeine. This is often done to stay awake for long hours of study, improve academic performance, or as a coping mechanism for stress. The study showed that 15% of the surveyed students had used amphetamines to enhance their academic performance, leading to poor health outcomes such as irregular heartbeats, mood swings, and anxiety.

Bello and Ibrahim (2022) explored the impact of stimulant abuse on cognitive functions and academic performance. They reported that students using substances like caffeine and

amphetamines to "boost" their academic output experience short-term boosts in focus, but these effects are often followed by long-term cognitive deficits, such as impaired attention span, poor memory retention, and increased susceptibility to mental health issues like anxiety and depression. The study concluded that the short-term benefits of stimulant use are not worth the long-term academic and psychological consequences.

**Depressants:** These are drugs which slow down body activity, reducing responsiveness, including sleep, lack of coordination etc. Example of these drugs includes alcohol, heroin, opium, barbiturate, tranquillizer, codeine, morphine, methadone, pathadine and so on.

A study by Udo and Okunade (2022) indicated that the misuse of prescription opioids like codeine syrup and tramadol is on the rise among Nigerian secondary school students. They noted that these substances are often abused to cope with stress, anxiety, and emotional problems. The study found that students, particularly in urban areas like Zaria, have easy access to these drugs due to poorly regulated pharmacies and street dealers. Adewale et al. (2021) also observed that high school students are increasingly using sedative-hypnotic drugs (e.g., benzodiazepines) to combat insomnia or to feel euphoric. These substances, while initially calming, can impair cognitive functions, leading to memory issues, poor concentration, and ultimately, reduced academic performance.

Despite the unrelenting effort of individuals, agencies, mass media and the government of different levels against drug abuse, the prevalent practice among secondary school students, teenagers and even adults in the community has not decrease but rather continued to increase. One would not be surprise of what may be going on even at the primary schools today. Drug abuse has gone a long way to create several health problems and dangers in our schools in particular and generally in the societies. Such health problems include mental illness, cancer of the lungs, poor academic achievement, school drop outs, juvenile delinquency and delirious behaviours, etc.

The following researchers have made researches on drug abuse but did not cover students view. It is on this note that this study focus on investigating the students' views on drug abuse in relation to academic achievement of senior secondary school students in Zaria Local Government Area. The study also aims at examining reasons for students' engagement in drug abuse as well as gender and class difference on the influence of drug abuse on their academic achievement.

**Statement of the Problem**

The academic achievement of senior secondary school students is a critical determinant of their future prospects, but recent reports and observations suggest that a growing number of students in Zaria Local Government Area are struggling with the negative effects of drug abuse. This phenomenon is alarming as it has been shown to impede cognitive functions, reduce academic motivation, and diminish classroom performance (Agboola, 2023). Drug abuse, which includes the misuse of substances such as marijuana, alcohol, and prescription drugs, is a widespread issue among adolescents globally, and Nigeria is no exception. In Zaria, there is a rising concern about the prevalence of drug abuse among secondary school students, despite various efforts to combat this issue. According to studies by Adebayo (2022) and Ibrahim & Mohammed (2021), substance abuse has been linked to increased absenteeism, poor academic performance, and disrupted classroom behavior, which ultimately hampers students' chances of academic success. In particular, drug abuse negatively affects essential cognitive processes such as memory retention, attention, and problem-solving abilities—all of which are crucial for academic achievement. Recent studies by Ojo et al. (2023) and Eze & Oladipo (2022) highlight how students' academic performance deteriorates when they are involved in drug-related activities. These effects are often compounded by social, psychological, and environmental factors that influence students' decisions to engage in substance abuse. While existing research highlights the general impact of drug abuse on students' academic outcomes, little is known about the specific effects in Zaria Local Government Area. Thus, there is a gap in localized research that addresses how drug abuse is affecting students in this region, particularly within the context of secondary education. This study seeks to fill this gap by investigating the influence of drug abuse on the academic achievement of senior secondary school students in Zaria, with the aim of providing data-driven insights to inform interventions and policies at the local level.

**Objectives of the Study**

Specifically the objectives of the study are:

1. to investigate reasons for students' engagement in drug abuse in senior secondary schools in Zaria Local Government Area;

2. to determine any gender difference in the students' view on the influence of drug abuse in relation to their academic achievement in senior secondary schools in Zaria Local Government Area; and
3. to examine the influence of class structure in causing drug abuse among students in senior secondary schools in Zaria Local Government Area.

### **Research Questions**

The following are the research questions raised to guide the conduct of the study.

1. What are the main reasons behind student's engagement in drug abuse in senior secondary schools in Zaria Local Government Area?
2. How does the drug influence students' academic achievement in senior secondary schools in Zaria Local Government Area?
3. Can the class structure influence drug abuse among students in senior secondary schools in Zaria Local Government Area?

### **Research Hypotheses**

The three null hypotheses formulated to guide this study are as follows:

**H<sub>01</sub>**: There is no significant gender difference on the influence of drugs abuse on academic achievement of secondary school students in Zaria Local Government Area.

**H<sub>02</sub>**: There is no significant difference on the influence of drug abuse among students base on class structure.

### **Methodology**

The research design used for this study is descriptive survey type. The target population for the study comprised of all public senior secondary school students in Zaria Local Government Area. The study covered a population of 5857 students which is total enrolment figure from 12 senior secondary schools within the Zaria Local Government Area. Random sampling technique was used to select 350 respondents drawn from SSS out of 12 senior secondary schools in Zaria Local Government Area. The instrument used for data collection in the study was the questionnaire. It has four point Likert rating scale ranging from SA, A, D, SD. The instrument has two sections. Section A is the Bio data of the students while section B contains items to answer by the students on their views on drug abuse in relation to their academic achievement. The instrument was validated by experts from Measurement and Evaluation Department,

Ahmadu Bello University, Zaria and Federal College of Education, Zaria for both face and content validity. A reliability coefficient of 0.670 was used. Data was collected through the administration of questionnaire and the data gotten was analyzed using simple percentage.

## Results

This presents discussion on the results of data collected in study. The results of the data analysis are presented as follows:

**Research Question One:** What are the main reasons behind student's engagement in drug abuse in Zaria Local Government Area?

**Table 1: Students' Responses on the Factors Responsible for their Engagement in Drug Abuse**

S/N	Questionnaire items	Responses			
		SA	A	D	SD
1	Drugs enhance students' performance	50	40	110	150
2	Students used drugs to concentrate	35	60	155	100
3	Students used drugs to get relieved	50	45	100	155
4	Students become mentally alert	30	50	120	150

From the table 1 above, the result from items 1, 2, 3 and 4 indicates that strongly agrees (SD) and disagree (D) carries the highest percentage of the responses of the students on the factors responsible for their engagement in drug abuse. While those students that strongly agree (SA) and agree (A) carries the lowest percentage. This revealed those factors are not responsible for student's engagement in drug abuse.

**Research Question Two:** How does the drug influence students' academic achievement in Zaria Local Government Area?

**Table 2: Students Responses on the Influence of Drug Abuse on their academic achievement**

S/N	Questionnaire items	Responses			
		SA	A	D	SD
1	Drug abuse have no influence on students' academic achievement	40 11%	50 14%	100 29%	160 46%
2	Drugs affects student academic achievement	190 54%	100 29%	20 6%	40 11%

Table 2 above, 46% of the students strongly disagree (SD) that the drug abuse have no influence on their academic achievement while 29% of the students disagree (D) on that. 14% agree (A) while 101% of the students strongly agree (SA) with the notion that the drug abuse have influence on their academic achievement. On the other hand, 54% of the students strongly (SA) that the drugs affect students' academic performance negatively. 29% agree (A), 11% strongly disagree (SD), while 6% Disagree with the view.

**Research Question Three:** Can the class structure influence drug abuse among students in senior secondary schools in Zaria Local Government Area?

**Table 3: Students Responses on how Class Structure Influence Drug Abuse among Students**

S/N	Questionnaire items	Responses			
		SA	A	D	SD
1	Socio-economic status of students influence their likelihood of engaging in drug abuse.	160 46%	100 29%	40 11%	50 14%
2	Peer pressure, social stratification etc within environments contribute to drug abuse among students	190 54%	100 29%	40 11%	20 6%

Table 3 above revealed that, 50 (14%) of the students strongly disagree (SD) that Socio-economic status of students influence their likelihood of engaging in drug abuse while 40(11%) of the students disagree (D) on that. 100(29%) agree (A) while 160(46%) of the students strongly agree

(SA) with the notion that socio-economic status of students influence their likelihood of engaging in drug abuse. On the other hand, 190(54%) of the students strongly (SA) that peer pressure, social stratification etc within environments contribute to drug abuse among students. 100 (29%) agree (A), 40(11%) strongly disagree (SD), while 20(6%) disagree with the statement.

### Testing Hypotheses

**Ho<sub>1</sub>:** There is no significant gender difference on the influence of drug abuse on academic achievement of secondary school students in Zaria Local Government area.

**Table 3: t-test analysis on student's information on drug abuse on academic achievement base on gender differences**

Gender	N	Mean	SD	Df	t-cal	t-crit.	Remark
Male	2.71	20.71	3.84	367	3.401	1.977	Sig
Female	99	17.98	2.95				

From table 3, it can be seen that the obtained T value (2.875) is greater than the critical t. Therefore, the hypothesis is rejected. This implies there is significant difference between male and female students' view on the influence of drug abuse in relation to their academic achievement. Therefore, the male students have the highest mean than their female counterpart.

Ho<sub>2</sub>: There is 'no significant influence on drug abuse among students base on class structure.

**Table 4; ANOVA Analysis on Drug Abuse among Students base on Class Structure**

Gender	Sum of	Df	Mean square	F-cal	P
Between	17.421	2	7.942	1.746	0.356
Within groups	1452.121	367	4.837		

The result in table 4, shows a significant outcome (F= 1.746, P= 0.356). This means that the observed difference in the mean score of students on the influence of drug abuse base on class structure is statistically significant.

## Discussion

The discussion of the findings will be based on study research questions and hypotheses that sought to examine the differences on student's views on Drug abuse among Senior Secondary Schools. The research question that sought to examine the responses of students pertaining to reason for the use of drugs. It has been found that students due to take drugs but it has no connection with academic performance. This finding correlate with that of Columbia University Study which assert that students due take drugs in order to escape frustration and ease various problems such as stress, anxiety or depression in order to enhance their academic performance revealed that majority of student's view going by their percentage strongly disagree (SD) that drug abuse have no influence on students' academic achievement. This is in line with Abiodun *et al* (1994) who reported that 12% of the sampled Secondary Schools Students in Ilorin, Kwara State currently used alcohol. It has also been reported by Novadomsky (1982) that secondary school students take caffeine to keep them awake during examination period.

The first research hypothesis also sought for the influence of drugs on academic achievement of students. This finding agrees with Raggings (2001); Gibbins (2002) and Rebury (2006) who argued that hard drug had effects on the academic performance of technology education students. This means that students with higher grades are less likely to engage in alcohol and other drug use behaviors than their classmates with lower grades, and students who do not engage in alcohol and other drug use behaviors receive higher grades than their classmates who do engage in alcohol and other drug use behaviors. Further research is needed to determine whether low grades lead to alcohol and other drug use, alcohol and other drug use leads to low grades, or some other factors lead to both of these problems.

Hypothesis two means that class status i.e. socioeconomic background influence the student's tendency to engage in drug abuse. It has been found that there is significant in the mean score between two groups which further that students from family of high socioeconomic background were much more affected by substance abuse. This agrees with the following studies: Some studies have found a greater likelihood of substance use among youth from families with higher SES. Based on a composite index of SES, young adults from families with higher SES tend to consume alcohol in greater quantities and frequencies (Bahr & Maughan, 1991). Children of more affluent families may be at greater risk, specifically, for engagement in anxiety- and depression-related substance use

(Mallick & Stein 1999) has suggested that risk may increase for children in affluent families because they experience greater achievement pressure combined with isolation from parents who have careers that are more demanding. In addition, parents in high-SES families compared with those in lower SES families may have attitudes that are more tolerant toward substance use (Goldstein, 2001).

### **Conclusion**

From the study, it is clear that drug abuse have impacted negatively in the lives, as well as academic achievement of some senior secondary school students. Their involvement in drug abuse also caused immoral acts such as stealing, burglary, insult of teachers, thuggery and riot in schools among others. Therefore, pragmatic and concerted efforts is required by all to curb this menace plaguing society as drug abuse especially among secondary school students which is a threat to education sector which incidentally engender the bright future of the nation.

### **Recommendations**

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

1. The Ministry of Education (Federal and State) must add to their curricular a Drug-Education for both the primary and post primary schools, along with lectures, seminars, rallies and film shows for the youths and adolescents on the adverse effects of drug abuse.
2. Schools should enforce strict anti-drug policies and provide safe, drug-free environments for students. Teachers should be trained to recognize early signs of drug abuse and intervene when necessary.
3. Schools should create a more inclusive environment where students from different socio-economic backgrounds feel valued and supported. This can reduce the sense of marginalization or inferiority that may drive students to engage in risky behaviors like drug abuse.

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## ASSESSMENT OF THE STATE OF FURTHER MATHEMATICS CURRICULUM IMPLEMENTATION IN JIGAWA STATE SECONDARY SCHOOLS

BY

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### **ABSTRACT**

*The purpose of this study was to assess the state of Further Mathematics curriculum implementation in Jigawa state senior secondary schools. To achieve the stated objectives, the descriptive survey research design, which adapted Dressel's second approach to curriculum evaluation was employed. This design is suitable because it sought to ascertain conditions that are prevalent within a system without manipulating variables. The population included all senior secondary school, heads, teachers and students of schools where further mathematics is taught (N=17). Out of these population, only three (N=3) met the requirements and were used a sample of this study. Instruments used are two senior secondary school mathematics curricular (General and Further Mathematics) obtained from the Federal Ministry of Education, labelled GMC (G) and FMC (F); and two sets of self-constructed Students' and Teachers' questionnaires (SQ and TQ) which were vetted by specialists in the departments of mathematics and psychology, Bayero University, Kano. After validation, both sets of questionnaires, which have high internal consistencies by item/total scores and a coefficient  $r$  of 0.78, were administered to sampled subjects. Results obtained revealed, among others, that Further Mathematics curriculum does not contain all General Mathematics topics and it is about two times wider than the General Mathematics curriculum in terms of content. Also, Further Mathematics students run separate classes for Further Mathematics and also attend the General Mathematics classes which is contrary to implementation procedure. Finally, students also write both General and Further Mathematics examinations and they count as two papers which is in line with the implementation policy. It is recommended that State Government should employ more mathematics graduates to encourage students to register for further mathematics and monitor the policy implementation of Further Mathematics curriculum in Jigawa State.*

**Key Words:** Curriculum, Further Mathematics, General Mathematics, STEM.

### **Introduction**

Mathematics is an essential tool for the advancement of science and technology in the 21<sup>st</sup> century. Suleiman & Sada (2022) noted that no nation can develop scientifically and technologically if it neglects mathematics. Furthermore, Yadav (2019) sees mathematics as a diverse discipline that deals with data, measurement and observations from science, with inference, deduction and proof; and with mathematical models of natural phenomena of human

behavior and social systems. With regards to role of mathematics on the development of science and technology, Yadav (2019) argued that without mathematics there would be no science, Technology and Engineering. Due to the importance of mathematics to national development, Hodanova & Nocar (2016) investigated the relationship of people to mathematics in different schools' settings and also examined whether students realized that they would need mathematics, science and technology in their everyday lives. The finding of the study revealed that mathematics was more popular among secondary students; most of the students have little interest in Mathematics as 59% of the students responded that they did not want to study any mathematical related field. In an attempt to improve the teaching of mathematics in secondary schools, Aduwa (2021) stated that mathematics is one of the core subjects offered by all the secondary schools in Nigeria. However, the problem associated to the teaching and learning of mathematics involve; a) negative attitudinal behavior of students, teachers and those concern in education; b) non-implementation of educational policies in Nigeria; c) examination malpractices; d) employment of unqualified staff to teach mathematics; e) poor training of teachers by the tertiary institutions concerned; f) lack of instructional materials; g) lack of classroom for students for effective mathematics teaching and learning, among other challenges. As opined by Lawan (2020), mathematics curriculum is one of the most important aspect of improving mathematics education. Additionally, Abdu (2014) observed that factors to be considered in mathematics curriculum implementation include: provision of teaching and learning facilities, teacher' participation in curriculum planning, assessment and implementation, teachers' qualification, funding, motivation and regular supervision and inspections, among others. In an attempt to improve mathematical knowledge among secondary school students, further mathematics was introduced in to secondary schools' curriculum in addition to the general mathematics. According to National Policy on Education (FRN, 2013); to achieve scientific, technological and technical development, mathematics education must be prioritized at the basic and post-basic level of education. However, Zalmon, Wonu & Ojimba (2024) noted that at the post-basic level of education in Nigeria, students are being taught the compulsory general mathematics and optional further mathematics as two separate subjects. Zalmon, et. al (2024) added that the further mathematics curriculum is designed for special students whose career prospects are in Science, Technology and Mathematics.

Further mathematics, an optional subject in Nigerian Senior Secondary School Programme, was designed to take students who require deeper knowledge of mathematics considerably further (Zalmon & George, 2020). The authors described Further Mathematics Curriculum (FMC) as a comprehensive roadmap for instructing Further Mathematics and offering a structured guide for educational purposes. This is in line with the statement of Odili & Asuru (2011) that the introduction of Further Mathematics into Nigerian school curriculum was one of the recommendations of a national workshops on policies and strategies for the improvement of the teaching and learning of Mathematics at all levels organized by the National Mathematics Centre (NMC).

However, the National Educational and Research Development Council ([NERDC], 2012) as well as the West African Examination Council ([WAEC], 2025) syllabus for Further Mathematics outlined the objectives of Further Mathematics Curriculum as follows: i) Develop conceptual and manipulative skills in Mathematics so as to prepare students for further studies in Mathematics and its application. ii) Reflect continuity with those used in universities, Polytechnics, Colleges of Education so that graduates of the curriculum have nothing to unlearn on entering any of the above-mentioned institutions. iii) Develop advanced Mathematical skills in potential Mathematicians, Engineers and Scientists. iv) Ability to analyze data and draw valid conclusions. v) logical abstract and precise reasoning skills. Bowyer & Darlington (2016) sees further mathematics is a non-compulsory subject and as such, it is mostly ignored due to its difficult nature as perceived and encountered by students. In addition to that, Charles-Ogun & George (2019) emphasized that Further Mathematics Curriculum is a relatively new curriculum in Nigerian Educational system which was aimed to fill the gap which the contents of General Mathematics could not reach. This is because it was generally observed that the contents of General Mathematics are not sufficient for the requirement of some higher course in tertiary institutions.

The components for further mathematics, according to WAEC's syllabus (2025), are Mathematics such as; sets, surds, binary operation, logical reasoning, functions, polynomial functions, rational functions, indices and logarithmic functions, permutation and combinations, binomial theorem, sequence and series, matrices and linear transformation, trigonometry, coordinate Geometry, differentiation, integration; topics under statistics include statistics and

probability and those under vectors and mechanics include; vectors, statics dynamics, units: length, area, capacity, mass and currencies among others. Topics and concepts to be taught under each of the identified areas are carefully selected to suit immediate demand of the country for technological advancement in terms of design. The spiral approach was used for the development of the curriculum, in which, each topic is taught at almost all levels of Senior Secondary School (from SSI to SSIII) but with increasing difficulty level or task.

The National Policy on Education (NPE, 2014) discussed new educational system and made provision for the implementation of many school subjects either as compulsory, core or electives. Further Mathematics is one of such and in particular, it is an elective subject. Based on the curriculum (Further Mathematics), when it was at the developmental stages, the following were assumed and recommended by the Onitsha Critique Workshop.

- a. Further Mathematics curriculum has adopted the approach that the Basic SSS and Further Mathematics curricular should be taught as one continuous curriculum for those mathematically inclined.
- b. Separate class would run for Further Mathematics students and they will not attend regular Basic Mathematics classes although they will cover everything the regular students cover.
- c. At the end of the course, the students of Further Mathematics will take two set of papers for SSS basic Mathematics in addition to those papers set on Further Mathematics curriculum. It will therefore count as two subjects.
- d. They will go as a faster rate so as to have more time to spend on the more difficult topics/concepts and it will result also in more effective utilization of both staff and students' time.
- e. If found necessary, students can transfer from the Further Mathematics course to the senior secondary Mathematics class without difficulty.

Based on the status and suggestions of different authors on the handling of further mathematics as an elective course in senior secondary schools, this study assessed the state of further mathematics curriculum implementation in Jigawa state secondary schools.

**Statement of the Problem**

Despite the fact that the importance of Further Mathematics to the national development cannot be over emphasized for the reason that no nation can develop all spheres of lives such as infrastructure, socio-economic, education, health, agriculture, among others without the knowledge of Science, Technology, Engineering and Mathematics (STEM). All these above-mentioned disciplines cannot be studied without the knowledge of Further Mathematics. For instance, Bowyer & Darlington (2016) stressed that Further Mathematics are identified by experts and researchers as the most relevant in STEM fields especially at tertiary levels of education.

Though, Further Mathematics is not a course of study at any level of tertiary institution, rather, it is a subject at Senior Secondary Schools which prepare students for STEM field (Baldwin, DePomerai & Smith, 2016). Omera (2019) suggested that Further Mathematics is among the subjects in Secondary Schools that records least students' enrolment offering it, and the few students that take the subject may covered the curriculum contents of the course.

The teaching of Further mathematics in secondary schools poses significant challenges that have impact on students' understanding, their motivation and consequently, their overall performance. Despite its importance in developing critical thinking, problem solving and analytical skills, Further Mathematics remains a subject that many students struggle to grasp. It is on the basis of this that this present study, assesses the state of Further Mathematics Curriculum implementation in Secondary Schools of Jigawa State, Nigeria.

**Objectives of the Study**

The objectives of the study are to:

- i. Determine whether secondary schools in Jigawa state run separate Further Mathematics classes from General Mathematics classes;
- ii. Find out whether number of Further Mathematics class periods differ from those allocated to General Mathematics' in Jigawa state secondary schools
- iii. Find out the similarities and differences between Further Mathematics Curriculum (FMC) and General Mathematics Curriculum (GMC) in Jigawa state secondary schools
- iv. Examine the attitudes of Further Mathematics teachers and students toward Further Mathematics in Jigawa state secondary schools.

## Research Questions

The following research questions are formulated to guide the study:

- i. How does Jigawa State Schools run Further Mathematics (FM) and General Mathematics (GM) classes?
- ii. Does the number of Further Mathematics class periods differ from those allocated to General Mathematics' in Jigawa state secondary schools?
- iii. What are the similarities and differences between Further Mathematics Curriculum (FMC) and General Mathematics Curriculum (GMC)?
- iv. What are the attitudes of teachers and students to each statement in the Further Mathematics Curriculum (FMC)?

## Methodology

The purpose of this study was to assess the state of Further Mathematics curriculum implementation in Jigawa state senior secondary schools. To achieve the stated objectives of this study, the descriptive survey research design, which adapted Dressel's second approach to curriculum evaluation (Dressel, 1963), was used. This design is suitable because it sought to ascertain conditions that are prevalent within a population without manipulating variables.

The population included all the Senior Secondary Schools (S.S.S), all Heads of Mathematics Departments, all teachers and students of Further Mathematics in schools where Further Mathematics (FM) is taught in Jigawa state. About seventeen senior secondary schools were visited in Jigawa State but only three schools that offered Further Mathematics were selected as samples of the study. The materials and instruments used for data collection in this study are:

- i. The Further Mathematics Curriculum (FMC) for Senior Secondary School.
- ii. Senior Secondary School Basic/General Mathematics Curriculum (BMC) or (GMC)
- iii. Teachers Questionnaire (TQ)
- iv. Students Questionnaire (SQ)

The two curricular used (Basic and Further Mathematics) are the same in all these schools within the population under consideration, for they are original copies from the Federal Ministry of Education (FME, 2013). An examination of the two curricular though labelling was the initial step towards carrying out the research; in which all content in FMC was tagged F while those in GMC was grouped as G. GnF referred to as collection of topics in both FMC and GMC, F/G

referred to collection of content in FMC but not in GMC while  $G \Rightarrow$  referred to collection of contents in GMC that are implied in FMC.

The two sets of questionnaires (SQ and TQ) were constructed, vetted by specialists in the departments of mathematics and psychology in tertiary institutions in Kano. After validation, both sets of questionnaires have high internal consistencies by item/total scores; and a coefficient  $r$  of 0.78 obtained on rating and after pilot study.

## Results

Data collected for this study are presented in line with the research questions and appropriately described using descriptive statistics of frequencies and percentages. Results obtained are presented in tables.

**Research Question One:** Are Further Mathematics (FM) and General Mathematics run in separate classes in Jigawa State Schools?

**Table 1: Responses on how Further Mathematics and General Mathematics classes are run in Jigawa state Schools**

S/No	Responses	F	%
1	Separate FMC and GMC	95	100
2	Students offer both FMC and GMC	0	0

Table 1 shows the responses generated from the teachers' and students' questionnaire. It was observed that General Mathematics Class is separated from Further Mathematics class and that it is a rule that students should attend the two classes. This is the situation with 100% staff participants involved in the study which is contrary to the implementation policy in the curriculum in which classes are expected to be unified.

**Research Question Two:** To what extent does number of Further Mathematics and General Mathematics Class Period differ in Jigawa state secondary schools?

**Table 2: Summary of number of classes for FMC and GMC in Jigawa State Secondary Schools**

S/No	Options	SUBJECT (Week/Term = 12)	
		GMC prd/wk	FMC prd/wk
1.	Period /week	6	3
2.	GMC Unit Topics	81	163

A close study of Table 2 reveals that there are 6 periods of General Mathematics in a week, 72 periods per term, 216 periods in a session and 648 periods throughout the Senior Secondary

School Programme when the numbers are multiplied. Therefore, for the General Mathematics syllabus to be covered fully, with 25 topics to be covered in 200 periods; that is 1 topic in 8 periods. Similarly, there are 3 periods of Further Mathematics in a week, 36 period per term, 108 period in an academic session and 324 periods for the SSS Programme. This figure is about 50% of the GMC data presented. This implies that there are more official class periods in GM compared to the FM contrary to regulations. However, a careful look at the curriculum after the summary in Table 2, it was observed that Further Mathematics Curriculum is 2.01 times wider than General Mathematics Curriculum in term of content. It was further observed that 80.25% of the topics in General Mathematics are contained in the Further Mathematics Curriculum. This explains the intent of the FMC, as described by Charles-Ogun and George (2019), as a curriculum used to fill the gap beyond the GMC content.

**Research Question Three:** What are the Similarities and Differences between the FMC and GMC?

**Table 3: Similarities and differences between Further Mathematics curriculum (FMC) and the General Mathematics Curriculum (GMC).**

Set	Coordinating Number
FMC	163
GMC	81
GnFMC	65
$G \setminus F$	13
$F \setminus G$	96
$G \Rightarrow F$	03
$F \Rightarrow G$	01

Note: All abbreviations have been defined in methodology

As presented in Table 3, it could be seen that there are 163 topics in the Further Mathematics Curriculum and 81 topics in General Mathematics Curriculum. The Table further showed that there are topics in General Mathematics Curriculum but not in the Further Mathematics Curriculum ( $G \setminus F=13$ ), common topics to both General and Further Mathematics Curriculum ( $GnFMC=65$ ); while four (4) topics could not be classified as contained in either the General Mathematics or Further Mathematics Curriculum or absent ( $G \Rightarrow F=3$ ;  $F \Rightarrow G=1$ ) respectively. Such absent topics were referred to as “implied”.

**Research Question Four:** What are the attitudes of teachers and students to each statement in the Further Mathematics Curriculum (FMC) and General Mathematics Curriculum (GMC)?

**Table 4: Responses on Attitudes Towards Further Mathematics and General Mathematics Curricular**

S/No	Items	%+ve	%Neutral	%-ve
1.	FMC contains all topics in GMC	50.0	19.2	30.8
2.	FMC students should not attend GM class	0.0	3.8	96.2
3.	In the final exams FM students should sit for FM only	19.2	11.5	69.3
4.	There are some topics in GMC that are not in FMC	34.6	11.5	53.9
5.	If classes are run separately, FM can transfer to GM class without difficulty	62.5	25	25

Table 4 clearly shows that 50% of the students support item 1 meaning that FMC contained all topics in GMC. They widely disagree with item 2 and 3. They believed that FM students should attend GM classes contrary to the implementation policy. Furthermore, they agree with the position of the FMC implementation policy in FM and GM counting as two different subjects at the final examination level. More than half of the students did not support item 4 believing that there are no topics in GMC.

### Discussion

The result from Table 1 shows that all the respondents (N=95; 100%) of both Further Mathematics teachers and students in Jigawa State agreed that Further Mathematics is run separately from General Mathematics. This is in line with the suggestion of Zalmon, et. al, (2024) who observed that at the post basic level of education in Nigeria, students are being taught the compulsory General Mathematics and optional Further Mathematics as two separate subjects. However, this is contrary to the implementation policy in the curriculum that both General Mathematic and Further Mathematics should be offered simultaneously by both students within all the secondary schools.

The result from Table 2 revealed that General Mathematic classes have more or even doubled period than Further Mathematics classes. Therefore, the Further Mathematics Syllabus can be fully exhausted because on the average there are 5 topics to 10 periods; that is, 1 topic in 2 periods. From the analysis above it was observed that the coverage of Further Mathematics content is four times faster than the rate of coverage of General Mathematics contents. This

shows further that time allotted for Further Mathematics teaching in Jigawa State should be reviewed upwards if classes are to run separately. This finding agrees with that of Etili (2010), which says majority of the schools do not teach Further Mathematics; but very few insignificant numbers attend classes for it and they are also not run parallel to General Mathematics classes.

Result presented in Table 3 indicates that there are 163 topics in the Further Mathematics Curriculum and 81 topics in General Mathematics Curriculum. This shows that Further Mathematics Curriculum is wider than General Mathematics Curriculum. This finding agreed with the finding of Charles-Ogan and George (2019) who reported that Further Mathematics Curriculum is broader and deeper than General Mathematics Curriculum. The results on one hand showed that 13 topics are in General Mathematics Curriculum but not in the Further Mathematics Curriculum; 65 topics are common to both General and Further Mathematics Curriculum; while four (4) topics could not be classified as contained either the General Mathematics Curriculum or Further Mathematics Curriculum or absent. Such topics were referred to as “implied”. This clearly indicates that both Further Mathematics Curriculum and General Mathematics Curriculum share more topics (65) in common than they differed (13) in topics. Hence, it can be averred that FMC is an extension of GMC

Results from Table 4 shows that 50% of the respondents agreed that FMC contained all topics in GMC. The finding agrees with finding of Ibrahim (2004) as cited by Etili (2010). They widely disagree with item 2 and 3. They believed that FM students should attend GM classes contrary to the implementation policy. Furthermore, they agree with the position of the FMC implementation policy in FM and GM counting as two different subjects at the final examination level. This result agrees with the findings of Etili (2010) that Further Mathematics is not additional Mathematics but a parallel curriculum to General Mathematics. The finding also revealed that more than half of the students did not support item 4 believing that there are no topics in GMC. This clearly revealed that General Mathematics has some topics on its own at the same time share some topics with Further Mathematics.

### **Conclusion**

Going by the foregoing, it was concluded that Further Mathematics Curriculum was not being implementing in Jigawa State. Only few schools are taking Further Mathematics as a subject and within the few schools, many students are not offering Further Mathematics because it is an

optional subject; whereas, General Mathematics is core or mandatory subject for every student at Senior Secondary School level in Nigeria who intends to progress on further studies.

Although teaching Further Mathematics in senior secondary schools poses significant challenges, but it is crucial to develop critical thinking, problem solving and analytical skills for the progress and development of the society. By understanding the challenges of attitudes of teachers and students towards Further Mathematics and implementing effective teaching strategies that will increase students' perception about the subject, educators and curriculum designers can improve student outcomes and prepare them for further education and careers in science, technology, engineering, and mathematics (STEM) fields.

### **Recommendations**

Based on the findings of this research, the following recommendations are made:

- i. More period should be allocated to Further Mathematics lessons so as to enhance performance of the students and facilitate easy teaching.
- ii. There is the need for the Jigawa State Ministry of Education to monitor the proper implementation of the Further Mathematics Curriculum for uniformity and quality control.
- iii. More instructional materials should be provided in schools to facilitate the teaching of both Further and General Mathematics Curriculum.
- iv. The need for the Jigawa State Government to employ more Mathematics Graduates to handle Further Mathematics so as to encourage more students to register for the subject cannot be over emphasized. This is because most of the Further Mathematics teachers are not Mathematics graduates.
- v. The General Mathematics Curriculum should be enriched. Broad topics like logic, vector analysis should be introduced at early secondary school's stage.
- vi. The Jigawa State Government as a matter of urgency, should restore the teaching of Further Mathematics in schools.

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## E-LEARNING USAGE INTENTION MODEL FOR NIGERIAN POLYTECHNICS STUDENTS

BY

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### ABSTRACT

*E-learning has involved current technological tools which made the teaching, training and learning, feasible on the internet. The success of E-learning can only be ascertained if students utilize various features available in its usage. Studies reveals that e-learning are not utilized among Nigerian Polytechnic students, as traditional method of teaching and learning is still being used. Similarly, a confirmatory study carried out shows that e-learning is not being utilized by the students. Major reasons why students are not using e-learning is because their culture is not encouraging it, anxiety toward the use of computer, and unavailability of technology and its software. Furthermore, most studies on e-learning utilization in Nigeria are conducted at the university settings, with few on e-learning utilization among Nigerian Polytechnic students. In addition, theory of motivation is rarely in use to study systems utilization among students. Therefore, this study adapted socio-educational model, technology induced anxiety model as well as causal model of technology constructs to propose a model for e-learning usage intention among Nigerian Polytechnics Students. This study employed quantitative research methods and establishes seven hypothesis to test the study factors in the e-learning utilization model. The total population for this study is 420 respondents. A sample size of two hundred (200) students from three Polytechnics in Nigeria were used for this study. Data collected were analyzed using SPSS and SmartPLS3 software. Findings from the study reveal that culture, anxiety, attitude and technology have significant effects on e-learning usage intention among Nigerian Polytechnic students. However, the study equally shows that culture is not a motivational factor for e-learning usage. The study concludes that culture does not motivate students to use e-learning and equally contributed to student's anxiety towards e-learning usage intention in Nigerian Polytechnics.*

**Key Words:** E-Learning, Usage Intention, Information Technology, Polytechnic Students, Model

## **Introduction**

Due to the present digital world and globalization, education is view as an important tool for attaining competitive advantage. To achieve this, institutions and individual are continuously searching for more knowledge, so as to have a great advantage. Introducing new technologies in higher institutions leads to efficient learning environment. The purpose of e-learning in institutions of learning is to develop the effectiveness of instruction and students education. Most benefits is derived by applying e-learning in institutions of learning. Slides usage and videos brings in visual and audio learning atmospheres. This leads to effective learning participation. Organizations interested in the introduction of e-learning have diverse cultures and enabling environments (Haron 2010).

Advanced countries have adopted the application of e-learning in their institutions of learning for quite a long time. In USA and United Kingdom for instance, PDAs, Wifi, SMS, webcams and other wireless technologies are used by lecturers with the aim of making classroom teaching simple. In addition, Australian, French and Korean government have been serious in the improvement of Information Communication Technology (ICT) and it is increasingly being introduced into all the economic and educational sectors (Salleh & Iahad 2011). According to Acosta (2016); 300,000 new users are connected to the internet daily in United States of America. In addition, Tarhini (2017) reported that at least 80% of all employments in United States of America are computer related. A report of Ambient Insights (2016) market research shows that more than 69% of institutions of higher learning globally adopt e-learning schemes and this form the cornerstone of their long-term strategy. E-learning systems market have continuously to grow progressively in the range of \$32.1 billion in 2010 rising to \$46.9 billion in 2015, showing a yearly increase of 8%. In a study conducted by Mtebe (2018) which shows that 17% Asians witnessed yearly increase rate in the adoption of e-learning in the middle of 2012 and 2016 in comparison with worldwide growth rate of 7.9%. Responses from countries like Thailand with Laos are anticipated to increase by 50% in 2020. In addition, students in American are very conversant and prefers e-learning system (Ramaiah 2015).

Studies have shown that most higher institutions in Nigeria are not utilizing e-learning facilities in their various institutions as traditional method of teaching is still be used for teaching

(Agbatogun 2010). According to Suleiman et al. (2012) the major reasons why students are not using e-learning in Nigerian higher institutions is because their culture is not encouraging it, anxiety toward the use of computer, and unavailability of technology and its software. Consequently, this study is aimed at investigating factors influencing e-learning utilization among Nigerian polytechnic students using socio-educational model.

An understanding of factors affecting the use of technology will assist in safeguarding the effective utilization of e-learning facilities in institutions of higher learning. This usage is a requirement for ensuring output efficiency from investments on technology (Bupo et al. 2015). Attitude is a determining factor in predicting people's behaviours, it brought about either positive or negative response to objects, situation, institution or person. Computer anxiety which is refers to as aversion to computer or fear towards dealing with computers, lack of access to ICT resources such as internet services and computers are impediments towards e-learning usage and implementations in institutions of learning. Similarly, person's beliefs and values as a result of cultural background, affect their perspective and thinking towards technology usage attitudes (Ahmad 2012). In the same vain, Findings from the confirmatory study carried out on 30 students of Nuhu Bamalli Polytechnic Zaria, confirms a poor usage of e-learning among the students. The results show that students feel tensed up when asked to use computer for learning purposes. Respondents accepted having interest in studying courses that uses e-learning. This shows a positive attitudes and motivation towards e-learning courses. In addition, findings reveals lack of infrastructures, computers and software as reasons for student not using e-learning for studies. Furthermore, people's negatives belief and values due to their cultural background contributed to student's poor utilization of e-learning facilities in Nigerian Higher institutions.

Based on extensive literature review, bulk of e-learning studies on adoption and utilization in Nigeria higher institutions seems to focus on students and lecturers in the University setting at the western part of Nigeria (Benjamin et al. 2018). Equally, it seems that little or no research had been conducted on utilization of E-learning among Nigerian public Polytechnic students (Adisa et al. 2018). In addition, theory of motivation is rarely in use to study e-learning utilization among students compared to other theories like Reason Action (TRA), TAM Technology acceptance Model and UTAUT. Consequently, the current study is concerned with

the investigation of factors responsible for utilization of E-learning among Nigeria Polytechnics students using socio-educational theory as the base model. And also, to adapt technology induced anxiety and causal model of technology constructs for the proposed model of study.

### **Statement of the Problem**

Higher institutions of learning in developed nations are largely known to have integrated e-learning into their learning processes because the use of technology for learning has the potential to improve the effectiveness and efficiency of students and instructors learning effort. In addition, providing learners with knowledge and skill on information technology is crucial for success in present world-wide information economy (Salleh & Iahad 2011). However, despite the benefits of the use of e-learning, most higher institution in Nigeria are not utilizing its facilities in their various institutions (Agbatogun 2010). Studies shows that fear towards dealing with computers, person's cultural beliefs and values, individual attitudes towards new technology, in adequate computers, software and internet bandwidths are factors affecting utilization of e-learning among students of Nigerian Higher institutions (Suleiman et al. 2012; Esharenana et al. 2010; Nicholas-omoregbe 2017; Adewole & Odeshi 2014). Similarly, bulk of research on e-learning utilization in Nigeria are conducted at the University system in western part of Nigeria, with little or none carried out among Nigerian Polytechnic students. Consequently, the current study is concerned with the investigation of factors responsible for utilization of E-learning among Nigeria Polytechnics students using socio-educational theory as the base model. And also, to adapt technology induced anxiety and causal model of technology constructs for the proposed model of study.

### **Research Objectives**

The objectives of this research are:

- a) To investigate those factors influencing utilization of e-learning among Nigerian polytechnics students
- b) To identify a model for utilization of e-learning among Nigerian Polytechnics students.

### **Research Questions**

The following research questions were answered.

- (a) What are the factors influencing utilization of e-learning among Nigerian polytechnics students?
- (b) What model can be adapted for effective utilization of e-learning among Nigerian Polytechnics students?

### **Literature Review**

Information and communication technology (ICT) certainly has offered unlimited prospects at various level of human endeavors such as nations, organizations, educational sectors, business enterprise, and communities and this has overwhelmingly changed the method we do business (Oyefolahan & Abdallah 2018). Changes have taken place from the industrialized period to the current information and knowledge age (Adeola et al. 2013). The ability to acquire, adapt and use the appropriate knowledge successfully will develop a fundamental expertise in this modern period. To achieve our full potential, there is need for learning. As an individual, to meet up with the challenges in this 21<sup>st</sup> century, establishments and countries will rely on the ability to acquire and apply knowledge learned to every day's activities.

Higher institution of learning worldwide are accepting new innovations through online education to reach out to students in terms of training and staff development (Salleh & Iahad 2011). In the education sectors, the application of the internet and all components of information and Communication Technology (ICT) have brought about a transformation in the process of learning instructions delivery by higher education institutions, such as online courses to aid better communication with students, in order to reduce time and location reliance related with traditional education (Oyefolahan et al. 2018). To meet up with the trends, e-learning theory need continuous modifications (Tarus & Muumbo 2015).

E-learning is defined differently by various scholars based on the context in which it is applied. These are knowledge that comprises the use of electrically controlled device for learning anytime and anywhere and to assess learners performance and to report their progress (Anene et al. 2018). According to Salloum (2019) e-learning is a technique of communicating knowledge and information through televisions, ROM, CD, internet, extranet, satellite technologies, tape recorder and course ware. Ademuyiwa (2017) sees E-Learning as an umbrella used in defining the practice of online learning, web based teaching, and technology driven instructions. For this

to happen, an enabling environment for students to interact with the education materials, in which the trainers and other learners must exist. The network tools, which feature provides a greater flexibility as to when and how learning takes place should be facilitated using collaborative approaches to learning. It is the procedures where students utilizes the emails to access course work online, while undertaking course on campus, including course programmes assessable online (Salleh & Iahad 2011). It comprises the application of digital tools for teaching and learning to assist students to learn anywhere and anytime, this involves knowledge delivery, training, as well as to motivate learners to exchange ideas with each other and in addition to respect the viewpoints of each other. Valentina & Abdallah (2014) sees electronic learning as application of computer systems and modern information and communication tools to send instructions, information and content via electronic channels such as internet and the utilization of internet based courses or programs that convey and send instructions using pedagogical tool as part of a formal education program.

The Table 1 below displays various definition of e-learning as given by different authors.

**Table 1: Definition of E-Learning**

No.	Authors	Definition
1	Salloum, 2019	Are techniques of communicating knowledge and information through televisions, ROM, CD, internet, extranet, satellite technologies, tape recorder and course wares.
2	Edemo, O. 2014; Anene et al. 2018	These are knowledge that comprises the use of electrically controlled device for learning anytime and anywhere and to assess learner's performance and to report their progress.
3	Alaba 2012; Oyefolahan et al. 2018	The application of computer systems and up to date information and communication tools to send instructions, information and content via electronic channels such as internet and the utilization of internet based courses or programs that convey and send instructions using pedagogical tool as part of a formal education program.

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- |   |                        |   |
|---|------------------------|---|
| 4 | Ademuyiwa & Longe 2017 | sees E-Learning as an umbrella used in defining the practice of online learning, web based teaching, and technology driven instructions with an enabling environment for learners to interact with educational tools, learners and trainers from different places regularly and at various periods using network tools, which features that provides a greater ease as to how and when learning takes place. and this unconventionally, enhanced collective attitudes to education. |
| 5 | Valentina 2014         | It comprises the application of digital tools for teaching and learning to assist students learn anytime anywhere and this comprises knowledge delivery, training as well as motivates learners to exchange ideas among their selves in addition to respecting each other's viewpoints.   |
| 6 | Salleh & Iahad 2011    | It is the procedures where students utilizes the emails to access course work online, while undertaking course on campus, including course programmes assessable online.  |
- 

From the various definitions given by different authors. It can be deduced that Electronic learning involves knowledge on how to use electronically controlled device including efficient utilization of digital tools and internet to interact between the teacher and the learners.

### **Methodology**

This study focus on three (3) public polytechnics in North western part of Nigeria. The polytechnics are: Nuhu Bamalli Polytechnic Zaria, Kaduna Polytechnic and Federal Polytechnic Kaura Namoda, Zamfara state. To achieve the research objective one (1), which is identifying factors influencing e-learning utilization among students. Data were collected through literature review from sources like books, internet and journals. In order to achieve the research objective two (2), which is to design and validate a model using SmartPLS software, A total of two hundred and three (203) Questionnaires were distributed among students of Office Technology and management department in the three selected public polytechnics in Nigeria, out of which two hundred (200) respondents responded accordingly to the questionnaire. While three (3) were returned unanswered. The aims and objectives of this study is to find out the influencing factors for e-learning utilization within students and to design a model for improving e-learning utilization among Nigerian Polytechnic students.

## Results

**Research Question one:** What are the factors influencing utilization of e-learning among Nigerian polytechnics students?

Findings from the following scholars: Ahmad (2012), Rosenberg et al. (1960), Eke & Eke (2011), Ajzen et al. (1980) and Esharenana et al (2012) reveals that: culture, attitude, anxiety, motivation and technology are the influencing factors for e-learning utilization among students.

**Research question two:** What model can be adapted for effective utilization of e-learning among Nigerian Polytechnics students?

To answer this question, the researchers adapted the socio educational model of motivation and all the above identified influencing factors for eLearning utilization to represent the model constructs. PLS algorithm method was used to investigate the construct reliability, validity and structural estimates, which is derived by loadings of all indicators to their respective constructs as indicated in table 2, 3 and 4 below.

**Table 2:**

SN	Construct	Cronbach's Alpha	Composite Reliability
1	Culture	0.80	0.877
2	Anxiety	0.82	0.929
3	Attitudes	0.77	0.846
4	Motivation	0.73	0.849
5	Technology	0.86	0.841
6	Intention to Use	0.80	0.857
	*Acceptable Value	>0.70	≥0.70

Table 2 shows the Internal Consistency and Construct Composite Reliability. For a construct to be supported, it must have a composite reliability above 0.07 accepted value. And also a Cronbach alpha coefficient acceptable value of 0.7. Composite Reliability of all constructs ranges between 0.800 and 0.929. This implies that all are supported as they are above 0.70 accepted value. The results equally shows small measurement errors (Fornell and Larker 1981). The Cronbach's alpha coefficient for the constructs is within the ranges of 0.70 to 0.86 which is greater than the accepted value for any confirmatory research (Barclay et al. 1995). The result indicates that all constructs used for the research models are reliable.

**Table 3: Convergent Validity of the Study Constructs**

Constructs	Indicators	Factor Loadings	Composite Reliability	Average Variance Expected
Culture	CUB1	0.731	0.877	0.706
	CUB2	0.886		
	CUB3	0.895		
Anxiety	ANX1	0.875	0.929	0.725
	ANX3	0.831		
	ANX5	0.895		
Attitudes	ATT1	0.701	0.846	0.525
	ATT2	0.753		
	ATT3	0.832		
	ATT4	0.700		
	ATT5	0.707		
Motivation	MTV1	0.827	0.849	0.655
	MTV2	0.700		
	MTV3	0.891		
Technology	TCHN1	0.794	0.841	0.639
	TCHN2	0.845		
	TCHN3	0.757		
Intention to Use	INTTUEL1	0.787	0.857	0.546
	INTTUEL2	0.788		
	INTTUEL3	0.727		
	INTTUEL4	0.732		
	INTTUEL5	0.700		
*Acceptable Value		≥ 0.5	≥ 0.8	≥ 0.5

Table 3 indicated that all the 6 constructs achieved a satisfactory validity with the Composite Reliability (CR) of more than 0.8, an indication that, the CR for the measurement model is above

the recommended minimum value of 0.8. Convergent validity assessed through investigating Average Variance Extracted (AVE) value, in cases where constructs have an Average Variance Extracted value equal or more than 0.5, convergent validity is acceptable. Result indicates that, every constructs have Average Variance Extract of 0.5 above. This exhibits that the proposed measurement model have satisfactory Convergent validity.

**Table 4: Structural estimates**

	<b>Path</b>	<b>Beta (<math>\beta</math>)</b>	<b>T Statistics</b>	<b>P Values</b>	<b>Decision</b>
H4		-			
	anxiety -> usage intention	0.213	2.42	0.016	Supported
H3	attitude -> motivation	0.305	3.091	0.002	Supported
H1		-			
	culture -> anxiety	0.446	6.331	0.000	Supported
H2		-			Not
	culture -> motivation	0.048	0.621	0.535	Supported
H5	motivation -> usage intention	0.384	4.339	0.000	Supported
H6	technology -> motivation	0.458	4.124	0.000	Supported
H7	technology -> usage intention	0.267	2.132	0.033	Supported

Notes: Critical t-values. \*1.96 (P < 0.05).

Table 4 indicates the Beta ( $\beta$ ) value, t-value and p-value for the relationship among the factors, It illustrates the relationship between Culture and students anxiety, relationship between Culture and students efforts plus desire to achieve the of usage intention of e-learning (motivation), relationship between Attitude and Motivation, relationship between Anxiety and usage Intention of e-learning, relationship between Motivation and usage Intention of e-learning, relationship between Technology and Motivation, and finally relationship between Technology and usage Intention of e-learning. All the t-values are above 1.96 except between Culture and Motivation.

Figure 1: Structural Model

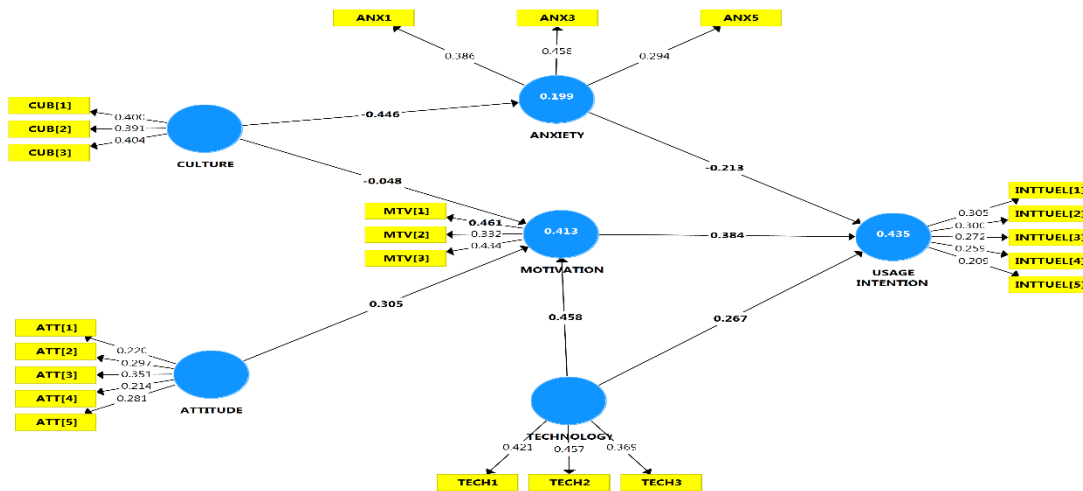


Figure 1 displays the path coefficient ( $\beta$ ) value,  $R^2$ , and t-values results. It indicates that. Culture to students’ anxiety towards usage intention of e-learning has ( $\beta= -0.446$ ,  $t=6.331$ ), Culture to students’ effort plus desire to achieve the goal of e-learning utilization(motivation) ( $\beta= -0.048$ ,  $t=0.621$ ), Attitude to students’ effort plus desire to achieve the goal of usage intention of e-learning (motivation) ( $\beta=0.305$ ,  $t=3.091$ ), Anxiety to students’ usage intention of e-learning system ( $\beta= -0.213$ ,  $t=2.42$ ), Motivation to students’ usage intention of e-learning system ( $\beta=0.384$ ,  $t=4.339$ ), Technology to students’ effort plus desire to achieve the goal of usage intention of e-learning (motivation) ( $\beta=0.458$ ,  $t=4.124$ ). The  $R^2$  value for student anxiety towards e-learning usage intention is 0.199 approximately 20% of the variance as indicated in the model, Student’s effort plus desire to achieve the goal of usage intention of e-learning (motivation) has 0.413 approximately 41% of the variance, and lastly, usage intention of e-learning by the students has 0.435 approximately 44% of the variance as described by the model.

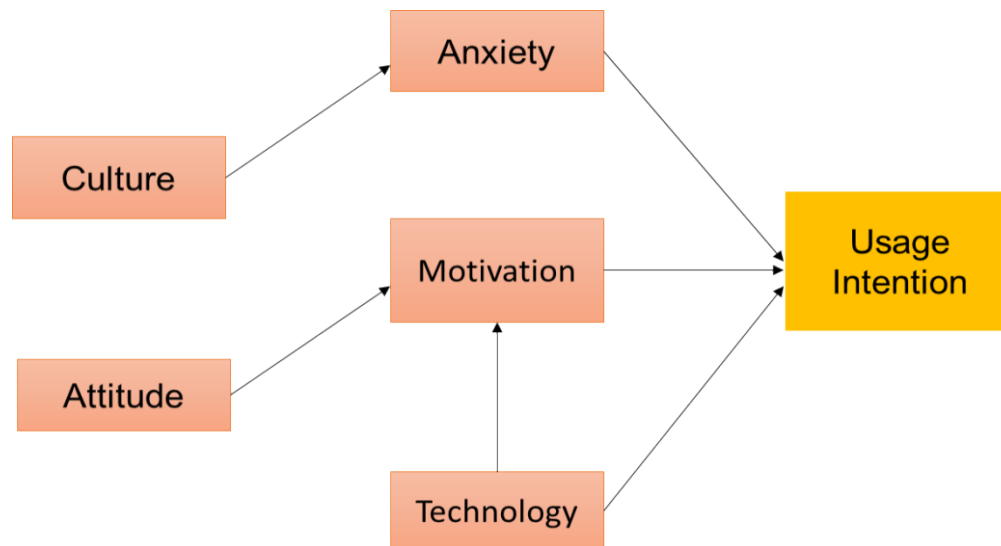
**Figure 2: Final Model**

Figure 2 shows a model for e-learning usage intention among polytechnic students in North western Nigeria which was arrived at after validating all the construct relationship. It shows that:

4. Culture has a significant effect on students' anxiety towards usage intention of e-learning among polytechnic.
5. Attitude has positive and significant effect on students' effort plus desire to achieve the goal of usage intention of e-learning (motivation) among polytechnic students in Nigeria.
6. Anxiety has a significant effect on students' usage intention of e-learning system among polytechnic students in Nigeria.
7. Motivation has positive and significant effect on students' usage intention of e-learning system among polytechnic students in Nigeria.
8. Technology has positive and significant effect on students' effort plus desire to achieve the goal of usage intention of e-learning (motivation) among polytechnic students in Nigeria.
9. Technology has positive and significant effect on students' usage intention of e-learning system among polytechnic students in Nigeria.

## Discussion

Research question one revealed that culture, attitude, anxiety, motivation and technology were identified influencing factors for e-learning utilization among students. This was arrived at from an extensive literature review and findings from the following scholars: Ahmad (2012), Rosenberg et al. (1960), Eke & Eke (2011), Ajzen et al. (1980) and Esharenana et al (2012).

The adapted model construct reliability and validity were assessed. For a construct to be supported, it must have a composite reliability above 0.70 accepted value. And also a Cronbach alpha coefficient acceptable value of 0.7. Composite Reliability of all constructs ranges between 0.800 and 0.929. This implies that all are supported as they are above 0.70 accepted value. The results equally shows small measurement errors (Fornell and Larcker 1981). The Cronbach's alpha coefficient for the constructs is within the ranges of 0.70 to 0.86 which is greater than the accepted value for any confirmatory research (Barclay et al. 1995). The result indicates that all constructs used for the research models are reliable. In the same vein. All the 6 constructs achieved a satisfactory validity with the Composite Reliability (CR) of more than 0.8, an indication that, the CR for the measurement model is above the recommended minimum value of 0.8. Convergent validity assessed through investigating Average Variance Extracted (AVE) value, in cases where constructs have an Average Variance Extracted value equal or more than 0.5, convergent validity is acceptable. Result indicates that, every constructs have Average Variance Extract of 0.5 above. This exhibits that the proposed measurement model have satisfactory Convergent validity. This is in line with Chin, (1998) and Hair et al. (2010); Fornell and Larcker (1981) who suggested acceptable value of 0.5 for factor loading, 0.8 for Composite Reliability and 0.5 for Average Variance Expected respectively.

The path coefficient or  $\beta$ , indicates the relationship strength in the variables of the study model, and should be significant at least 0.05 level (Hair et al. 2013). The finding in Table 4 indicates the Beta ( $\beta$ ) value, t-value and p-value for the relationship among the factors, It illustrates the relationship between Culture and students anxiety, relationship between Culture and students efforts plus desire to achieve the of usage intention of e-learning (motivation), relationship between Attitude and Motivation, relationship between Anxiety and usage Intention of e-learning, relationship between Motivation and usage Intention of e-learning, relationship

between Technology and Motivation, and finally relationship between Technology and usage Intention of e-learning. All the t-values are above 1.96 except between Culture and Motivation.

To successfully assess the structural model, according to Hair et al. (2013) there is need to examine the coefficient of determination  $R^2$  or effect size, path coefficients or beta ( $\beta$ ) with parallel t-values through the process of bootstrapping. According to Chin (1998), the path significance can be approximated using T-test values after bootstrapping. The finding displays the path coefficient ( $\beta$ ) value,  $R^2$ , and t-values results. It indicates that. Culture to students' anxiety towards usage intention of e-learning has ( $\beta = -0.446$ ,  $t = 6.331$ ), Culture to students' effort plus desire to achieve the goal of e-learning utilization (motivation) ( $\beta = -0.048$ ,  $t = 0.621$ ), Attitude to students' effort plus desire to achieve the goal of usage intention of e-learning (motivation) ( $\beta = 0.305$ ,  $t = 3.091$ ), Anxiety to students' usage intention of e-learning system ( $\beta = -0.213$ ,  $t = 2.42$ ), Motivation to students' usage intention of e-learning system ( $\beta = 0.384$ ,  $t = 4.339$ ), Technology to students' effort plus desire to achieve the goal of usage intention of e-learning (motivation) ( $\beta = 0.458$ ,  $t = 4.124$ ). Finally, Technology to students' usage intention of e-learning system ( $\beta = 0.267$ ,  $t = 2.132$ ). The  $R^2$  value for student anxiety towards e-learning usage intention is 0.199 approximately 20% of the variance as indicated in the model, Student's effort plus desire to achieve the goal of usage intention of e-learning (motivation) has 0.413 approximately 41% of the variance, and lastly, usage intention of e-learning by the students has 0.435 approximately 44% of the variance as described by the model. This illustrated the instructive power of the entire model in assessing the predictive strength of the independent variables. The final model indicates that:

Culture has a significant effect on students' anxiety towards usage intention of e-learning among polytechnic. This result is similar to past studies ( Venkatesh & Davis 2000; Elizabeth et al. 2010; Baker 1994) which showed that cultural beliefs and the degree of technological cultururation influence the transfer of information technology significantly.

1. Attitude has positive and significant effect on students' effort plus desire to achieve the goal of usage intention of e-learning (motivation) among polytechnic students in Nigeria. This is in conformity with the study by Parayitam & Desai (2010) who identified computer attitude as an influence and moderator in computer anxiety, satisfaction and stress.

2. Anxiety has a significant effect on students' usage intention of e-learning system among polytechnic students in Nigeria. This is in consonant with the study of Parayitam et al. 2010 ; Chua et al. 1999; Bozionelos 2001 whose studies reveals that learning to use new technology is influenced by the negative reactions in terms of computer anxiety.
3. Motivation has positive and significant effect on students' usage intention of e-learning system among polytechnic students in Nigeria. This is in conformity with findings of El-seoud & Seddiek 2014 which states that the use of interactive structures of electronic learning increases the motivation of students to electronic learning usage.
4. Technology has positive and significant effect on students' effort plus desire to achieve the goal of usage intention of e-learning (motivation) among polytechnic students in Nigeria. This equally supported the findings of Abdullah & Toycan 2018; Esharenana et al. 2010 which reveals that insufficient numbers of computers and peripheral devices inhibit deployment of ICT by teachers in Nigerian schools and this is due to underfunding which depend largely on the subvention from their government.
5. Technology has positive and significant effect on students' usage intention of e-learning system among polytechnic students in Nigeria. This is consonant with the study of Atsumbe & Raymond 2012; Nwabufor et al (1010); Esharenana et al (2010) which states that the problem of Nigeria e-learning adoption is escalated by lack of power supply, virus contamination, in adequate ICT infrastructure including computer hardware and software, as well as bandwidth access.

## **Conclusion**

To achieve the research objective one (1), which is identifying factors influencing e-learning utilization among students. Data were collected through literature review from sources like books, internet and journals. Based on this, five influencing factors for e-learning utilization were identified. In addition, Socio educational model of motivation was applied to identify the factors influencing e-learning utilization. The factors identified are: culture, attitude, anxiety, motivation and technology. To achieve objective two (2), which is to develop a research model for e-learning utilization otherwise, known as conceptual model, administered questionnaires were used to test and validate the proposed research model using SmartPLS software. All the result shows that all constructs and their relationships are supported except culture as a

motivating factor for e-learning usage intention, consequently, the study proposes a final model for e-learning utilization in Figure 2 to promote e-learning utilization among students of Nigerian Polytechnics.

### Recommendations

From the analysed questionnaire and review of literature carried out by the researchers, the following recommendations are proffered with the aim of promoting awareness on e-learning utilization among students and hopefully it will assist students, school authorities and lecturers to know more about e-learning utilization in Nigerian Higher Institutions of learning especially Polytechnics. Table 5 below displays some recommendations made by this researcher.

**Table 5: List of Recommendations**

Factors	Details	Recommendations
Cultural Belief	This is the core foundations and ways of life of groups of people, and how they do things which is passed on to the next generation through learning (Antonio et al. 2015; Bada 2017)	<ul style="list-style-type: none"> <li>Lecturers should create an awareness for students, traditional/religious leaders on the need to accept the use of computer and internet for learning</li> </ul>
Attitudes towards the learning situation	This refers to learner's attitudes toward E-learning situations and environment. It could be towards the teacher, the course, classmates, the materials, extra-curricular activities associated with the course and so on. (Rhema & Miliszewska 2014)	<ul style="list-style-type: none"> <li>Lecturers should make their teaching very interesting for the students. Assuring them of their ability to know and use the computer for learning.</li> <li>Lecturers should demonstrates different features of computers as used for learning</li> </ul>
Anxiety	Anxiety is a normal feeling or reaction to a certain situation. It is a feelings of fear associated with using computer. ( Atsumbe & Duhu 2012)	<ul style="list-style-type: none"> <li>Lecturers should introduced incentives to encourage students to learn computer</li> <li>Lecturers should engage students on practical computer class, showing them different steps involves in using computer.</li> </ul>
Motivation	This is the combination of effort plus desire to achieve the goal of learning plus favourable attitudes toward learning. It involves instigating and	<ul style="list-style-type: none"> <li>Lecturers should show the students importance of e-learning and demonstrating different ways it can be used and applied.</li> </ul>

sustaining a goal direct behaviour towards e-learning acceptance and usage.

(Teresa & Willbert 2005)

Technology : availability of computers, software, internet bandwidth, electricity and necessary facilities for e-learning usage.  
(O et al 2015)

- The school authority should make available computers and its accessories for teaching and learning
- Internet services should be provided for students in the school.

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**ARTIFICIAL INTELLIGENCE TOOLS: THEIR USAGE AND RELIANCE AMONG UNDERGRADUATE STUDENTS OF EDUCATION IN KWARA STATE UNIVERSITY, MALETE**

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**ABSTRACT**

*This study examines the impact of Artificial Intelligence (AI) tools usage and reliance among education undergraduates at Kwara State University, Malete. A descriptive survey design using a mixed-method approach, integrating both qualitative and quantitative data, was adopted. The study population included 1,560 undergraduate students in the Faculty of Education, and a sample of 308 participants was selected through simple random sampling, based on the 2006 research advisor table for the quantitative phase, while convenience sampling was used to select 10 interview respondents. Data were collected using a validated questionnaire and interview guide, with the questionnaire's reliability established through a Cronbach's alpha coefficient of 0.81. Descriptive statistics (mean, Bar chart, frequency and percentages and standard deviation) and t-tests were used for analysis. Results indicated that 50.3% of students predominantly use AI tools, while 64.3% demonstrated high reliance, revealing AI's integration into academic routines. Qualitative findings highlighted diverse uses of AI, from health inquiries to facilitating everyday tasks, underscoring its perceived indispensability. However, dependency on AI often replaces independent thinking, raising ethical and educational concerns. Gender analysis showed no significant difference in AI reliance ( $p = 0.29$ ), suggesting universal adoption across demographics. The study concludes that AI tools enhance accessibility and efficiency but may undermine critical thinking and problem-solving skills if over-relied on. Recommendations include incorporating critical thinking and ethical AI use into curricula for educators, promoting balanced AI use among students, and developing institutional policies to guide ethical and effective AI applications.*

**Keywords:** Academic Laziness, Artificial Intelligence (AI), Education Students, Kwara State University, Student Initiative, Technology in Education

## **Introduction**

The integration of artificial intelligence (AI) into education has sparked significant changes in how students engage with academic material and develop work ethics. AI-driven tools, such as adaptive learning platforms, gamified educational apps, and automated feedback systems, have revolutionized traditional learning by offering personalized and interactive experiences. While these advancements have undeniably enhanced student engagement, they also raise concerns about a potential decline in perceived effort. With AI automating routine academic tasks and simplifying complex processes, students may become overly reliant on technology, potentially undermining the development of essential skills like perseverance and critical thinking. This dual impact necessitates a deeper exploration of how AI influences academic engagement and work ethics, particularly in balancing its benefits with the challenges of maintaining robust learning habits.

Artificial intelligence (AI) has become a significant area of technological advancement globally, including in Nigeria, where its applications span industries such as agriculture, healthcare, and education. For instance, in the agricultural sector, AI is employed to analyze weather patterns, improve crop yields, and combat pests through precision farming (Adegboye et al., 2022). Similarly, the developments of AI underscore the growing importance of AI in addressing practical challenges and fostering socio-economic growth in Nigeria. Nigerian healthcare facilities are beginning to adopt AI-driven diagnostic tools to enhance accuracy and efficiency in disease detection and treatment planning, particularly for chronic conditions like diabetes (Oluwafemi & Adebayo, 2021).

However, the integration of AI technologies in Nigeria faces challenges, including inadequate infrastructure, limited expertise, and ethical concerns. According to Eze et al. (2023), the lack of reliable internet and power supply significantly hampers the implementation of AI solutions, especially in rural areas. Overcoming the obstacles of AI through investments in infrastructure and training, as well as the establishment of regulatory frameworks, is essential for Nigeria to harness the full potential of AI. Additionally, ethical considerations, such as data privacy and algorithmic bias, have been highlighted as critical issues by recent studies (Ibrahim & Musa, 2023).

Artificial intelligence (AI) is transforming education by personalizing learning experiences, automating administrative tasks, and enhancing access to educational resources. AI-powered platforms in Nigerian schools, for instance, are being used to provide tailored lesson plans and assessments based on individual student needs and learning speeds (Chukwu & Adebola, 2022). The innovations in AI not only improve learning outcomes but also enable teachers to focus more on creative and interactive teaching methods. Moreover, virtual tutors and AI chatbots are supporting students in remote learning environments, a critical development in bridging educational gaps in underserved communities (Okafor & Ibrahim, 2023).

Artificial intelligence (AI) is significantly influencing student engagement and work ethics by fostering interactive learning environments and promoting accountability. AI-driven tools, such as gamified learning platforms, keep students engaged by integrating real-time feedback and adaptive challenges that cater to individual interests and proficiency levels (Ogunleye & Abiodun, 2022). Additionally, AI systems that track progress and provide performance analytics encourage students to take ownership of their learning process, thus instilling a sense of responsibility and improving work ethics (Adelakun & Nwankwo, 2023).

The knowledge of Artificial Intelligence (AI) tools among students can vary based on gender, with studies suggesting differences in how male and female students engage with and perceive AI technologies. Research has shown that male students tend to have a higher familiarity with AI tools, often due to greater exposure to technology and a stronger interest in STEM-related fields (Binns, 2020). This gender gap is often linked to societal stereotypes encouraging males to pursue technological fields.

In contrast, females are sometimes discouraged or not provided the same level of encouragement to engage with AI and related technologies (Cech, 2020). However, recent studies have pointed to shifts in these trends, as more female students are becoming actively involved in AI learning and technology use, particularly as awareness and educational opportunities improve in schools and universities (Williamson & Piattoeva, 2021).

Oloyede (2024) clinched his retirement lecture by emphasizing the ethical challenges modelled by AI technologies as he urged developers, academics, and policymakers to adopt a multidisciplinary approach that combines technical expertise with ethical frameworks, saying,

*“Technology should serve humanity ethically, responsively and creatively.”* He further remarked, highlighting the need for responsible AI development that prioritizes human values over mere efficiency as the development aligns perfectly with the broader mission discussed in Oloyede’s lecture, emphasizing the role of technology in creating inclusive and equitable access to information.

Artificial intelligence (AI) reduces students' effort by automating routine tasks and simplifying complex learning processes. AI-powered tools, such as automated essay graders and homework assistants, save time by providing instant feedback and corrections, allowing students to focus on understanding concepts rather than spending excessive time on repetitive tasks (Eze & Chibueze, 2022). Furthermore, AI-driven learning platforms present information in digestible formats and use adaptive algorithms to guide students through challenging topics efficiently, minimizing the cognitive load required for mastering difficult subjects (Oladimeji & Yusuf, 2023).

Conclusively, while the integration of artificial intelligence (AI) in education offers numerous advantages, such as personalized learning experiences, enhanced student engagement, and improved access to educational resources, it also presents challenges that must be addressed. The reliance on AI tools can potentially reduce students' effort and initiative, as these tools automate routine tasks and simplify complex processes. This may undermine the development of essential skills like critical thinking, problem-solving, and perseverance.

### **Statement of the Problem**

The study observed an increasing reliance on Artificial Intelligence (AI) tools among education students at Kwara State University, which has raised concerns about a noticeable decline in student initiative and academic effort, a concern also emphasized by Oloyede in his retirement lecture (2024). While AI tools offer convenience and efficiency in completing academic tasks, many students now depend heavily on these tools for answering questions, completing assignments, and solving problems, often without engaging in critical thinking or independent effort. This growing dependency raises questions about the long-term impact on students' intellectual development, creativity, and work ethic. Therefore, this study seeks to investigate the frequency of AI tool usage among education students, assess the extent of reliance on AI tools for academic tasks (which is perceived as academic laziness) and determine whether gender

influences AI reliance among students and its implications for their overall academic performance and self-reliance.

### **Research Questions**

The following research questions were raised to guide the study:

1. How frequently do education students at Kwara State University use AI tools for academic purposes?
2. To what extent do education students rely on AI tools for completing academic tasks?

### **Research Hypotheses**

The following research null hypotheses were formulated to guide the study:

**H<sub>01</sub>:** There is no significant impact of reliance on AI tools among education students based on gender.

### **Methodology**

This study employed a descriptive survey design to examine the impact of Artificial Intelligence (AI) tools usage and reliance among education students at Kwara State University. A mixed method, combining both qualitative and quantitative methods, was used for this study to provide a comprehensive understanding of the impact of Artificial Intelligence (AI) tools usage and reliance. The quantitative aspect allowed for the collection of numerical data through structured surveys, enabling statistical analysis of AI usage patterns and reliance among students. Meanwhile, the qualitative component facilitated an in-depth exploration of students' perceptions, experiences, and attitudes toward AI through interviews. This combination ensured triangulation, enhancing the validity and reliability of the findings by integrating statistical evidence with contextual insights from participants. The population for this study consisted of 1,560 faculty of education students at Kwara State University, Malete. A simple random sampling technique was used to select 308 respondents from the Faculty of Education using the 2006 research advisor table, while convenient sampling was used to meet students randomly within the faculty until the 308 participants were selected for the quantitative (questionnaire), while just 10 were selected for the qualitative (interview).

Two instruments were used for data collection. The first instrument was a structured questionnaire titled "AI Tools Usage and Student Initiative Questionnaire" (AITUSIQ), which was administered. The questionnaire used a five-point Likert scale (1 = Never, 5 = Always) to

measure AI tool usage and reliance, with a focus on perceived academic laziness. Unstructured questions were used to elicit information from 10 respondents different to those in the sample on AI tools reliance to perceived, specifically measuring academic laziness. The instruments were validated for content by experts in the field of measurement and evaluation, ensuring it was contextually appropriate for the study population. The reliability of the questionnaire was established using Cronbach's Alpha, which yielded a reliability coefficient of 0.81. Ethical considerations were taken into account by ensuring that informed consent was obtained from all participants, and confidentiality was maintained throughout the study. Data collected were analyzed using descriptive statistics (mean, bar chart, frequency and percentages and standard deviation) to answer the research questions, while a t-test was employed to explore the differences in reliance on AI which is perceived as academic laziness based on gender, and Narrative Analysis was used in understanding and interpreting participants' speeches.

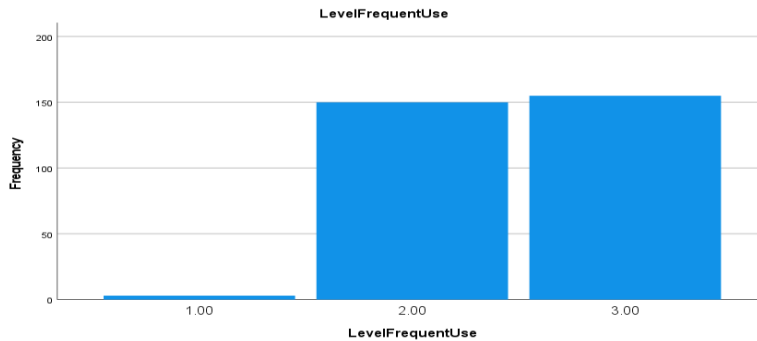
## **Results**

This section presents the findings of the study based on the data collected through both quantitative and qualitative methods. The results are systematically analyzed to highlight key trends, patterns, and relationships regarding the Artificial Intelligence (AI) tools usage and reliance to measure herein referred the reliance to laziness against initiative of the students. Quantitative data obtained from structured surveys provides statistical insights, while qualitative responses from interviews offer deeper perspectives on students' experiences and reliance on AI.

**Research question 1:** How frequently do education students at Kwara State University use AI tools for academic purposes?

To answer this research question, the data gathered from the respondents on the items on the frequency of AI tools of education students at Kwara State University, Malete were analyzed using descriptive statistics. The total responses of the respondents have a total minimum points of 7 and maximum points of 35. Hence, the range is 28 points. This was categorised into three levels. The points between 7 to 15 is Occasionally Use, 16 to 24 is Supplementary Use, and 25 to 35 is Predominantly Use. Hence, Figure 1 presents a bar chart illustrating the frequency of AI tool usage among education undergraduates at Kwara State University, Malete is revealed below.

**Chart 1: Bar chart showing usage of AI tools among faculty of education undergraduate students in Kwara State University.**



Therefore, the summary of results on the frequency use of AI tools among Education undergraduate students at Kwara State University, Malete is presented in the table below.

**Table 1: Summary of Descriptive Statistics of the Frequency Use of AI Tools among Education Undergraduate Students in Kwara State University.**

Level	Frequency	Percentage	Valid Percent
Occasionally Use	3	1.0	1.0
Supplementary Use	150	48.7	48.7
Predominantly Use	155	50.3	50.3
<b>Total</b>	<b>308</b>	<b>100</b>	<b>100.0</b>

Table 1 above revealed that most of the undergraduate students in the faculty of education had predominantly used 155 (50.3%) AI tools, 150 (48.7%) of the respondents showed a supplementary use of AI tools, while 3 (1.0) of the respondents occasionally used AI tools. This revealed that the majority of undergraduate students in the faculty of education 155, 50.3%) predominantly use AI tools for their academic pursuits.

To advance the findings of the study, an interview was conducted that revealed that several students used AI tools every single minute. The 10 respondents to the interview revealed that they used AI tools every day. Not just for school activities but also for other things which can be revealed by AI. One respondent stated that AI is used to check symptoms of health conditions and identify possible causes. Another participant explained that integrating AI with WhatsApp enhances accessibility and convenience. AI is reportedly used daily, both in class and as a digital dictionary, providing comprehensive explanations beyond basic word meanings and pronunciation. It was a surprising fact that most of the respondents revealed that they have even

asked AI machines about things it couldn't answer several times, such as quick money to enter their bank account without any work done for such.

**Research Question 2:** To what extent do education students rely on AI tools for completing academic tasks?

To answer the above research question, the data gathered from the respondents on the items on the extent of education students' reliance on AI tools at Kwara State University, Malete, were analyzed using descriptive statistics. The result of the analysis is presented in Table 1.

**Table 2: Summary of Descriptive Statistics of The Extent of Reliance on AI Tools Among Education Undergraduate Students in Kwara State University.**

S/N	Items	Mean	SD	Remarks
1.	When asked questions, I used AI tools to quickly check.	3.51	0.88	High
2.	I rely on AI applications to write or structure my academic papers and reports.	3.43	0.90	High
3.	Verifying information or clarifying concepts in my studies often involves the use of AI tools.	3.63	0.80	High
4.	Meeting academic deadlines would be challenging without the support of AI tools.	3.93	1.15	High
5.	AI tools influence my decision-making process when working on academic tasks or group projects.	3.84	1.17	High
6.	I hate disturbing my brain to answer questions since there is AI to make it quicker.	3.96	1.14	High
7.	I rely on AI tools to simplify complex academic topics and enhance my understanding.	3.78	1.20	High

**Key: Low = Mean < 2.50                      High = Mean > 2.50**

The result of Table 2 above revealed that most of the respondents indicated a high reliance on AI tools since the mean response for each item was greater than 2.50, which reveals a high reliance on AI tools.

In line with the above result, the study further investigated orally, to find out the reliance of education students on AI and found it very high. This is heard among almost all the respondents who relied a lot on AI tools in doing their assignments, homework, projects, and even asking questions in the classroom. One respondent mentioned always attending class with a smartphone, ensuring a fast network connection for immediate access to answers both in the classroom and during fieldwork. Another participant stated that assignments are never completed without the assistance of AI tools, emphasizing their ease of interaction and ability to generate information from multiple perspectives.

**Table 3: Summary of the reliance of education students on AI tools at Kwara State University**

Level of Reliance	Frequency	Percentage	Valid Percent
Low Reliance	0	0	0
Moderate Reliance	110	35.7	35.7
High Reliance	198	64.3	64.3
Total	308	100.0	100.0

Table 3 above revealed that 198 (64.3%) undergraduate students from the faculty of education at Kwara State University had a high reliance on AI tools, while 110 (35.7%) of the respondents showed moderate reliance on AI tools and 0 (0%) of the respondents have a low reliance on AI tools. This revealed that the majority, 198 (64.3%) of students in the faculty of education had high reliance on AI tools which are specifically used in measuring the academic laziness of students.

High reliance on AI tools among education students in Kwara State University via qualitative data too as most of the respondents really can't do much without the use of AI tools, they are very dependable on getting the answer and things done via AI tools. One respondent explained that even when writing manually, AI is used to simplify complex ideas into more understandable concepts. It was noted that AI-generated responses are frequently copied for assignments, with positive outcomes reported. Another participant highlighted that despite multiple users asking AI the same question, the responses vary, aligning with lecturers' expectations for originality in assignments. Additionally, AI tools were described as enhancing efficiency, much like how computers revolutionized writing by replacing manual typing with digital processes. Computers make it legible, neat and faster, and AI is faster and more concise with its responses to the questions asked.

**Hypothesis One:** There is no significant difference in reliance on AI tools among education students based on gender.

To test this research hypothesis, the responses to all the items were summed together and the data collected were subjected to t-test analysis. The result of the analysis is presented in the table 4.

**Table 4: Summary of t-test Statistics of Reliance on AI Tools among Education Students Based on Gender.**

Gender	N	Mean	SD	df	t-value	Sig.	Remark
Male	143	25.69	3.82	306	-1.591	0.29	*Not Significant
Female	165	26.40	4.02		-1.597		

$P > 0.05$

The descriptive result of the analysis above shows that the sample size (N) = 143, while the Mean = 25.69 and the Standard Deviation = 3.82 for the male. More so, the descriptive for the female depicts the Sample size (N) = 165, while the Mean = 26.40 and the Standard Deviation = 4.02. The average reliance on AI tools for female students (26.40) is slightly higher than for male students (25.69). However, both groups have comparable standard deviations, indicating a similar level of variability in their responses. Hence, an independent samples t-test ( $t = -1.591$ ,  $df = 306$ ,  $p = 0.29$ ) revealed no statistically significant difference in AI reliance between male and female students ( $p > 0.05$ ), leading to the retention of the null hypothesis. Hence, the null hypothesis, which states that there is no significant difference in reliance on AI tools among education students based on gender, is retained. This indicates that reliance on AI tools among education students in the faculty of education at Kwara State University does not depend on the gender of the respondents.

Based on the qualitative data taken for the study, both genders, male and female, submitted that they are very content with the use of AI since it is made easy to use for their purpose of usage. One of the respondents harangued that the usage of AI tools is made for usage especially for students to learn and connect to world-class knowledge, and it is the talk of the town for conferences and workshops to get updated and meet up with the 21<sup>st</sup> century in any field of study. In addition, Ibrahim opined during the interaction that when the downloading of AI tools looks costly and not easily assessed, it was made available on browsers, and when they see browsers were not too close, it was made available on WhatsApp, which means it is meant to be used all the time.

### Discussion

The findings of this study reveal a widespread and consistent use of AI tools among undergraduate education students at Kwara State University. The findings indicated that a

significant proportion of students predominantly use AI tools for academic purposes, with another larger portion reporting supplementary usage. These findings highlight the integration of AI tools into students' academic routines, suggesting that such tools have become indispensable for learning and productivity. The qualitative data from interviews further underscores the depth of reliance on AI tools. Respondents reported using AI tools not only for academic purposes but also for personal tasks. One participant mentioned using AI for health-related inquiries, while another highlighted the convenience of integrating AI with platforms like WhatsApp for instant access to information. These observations align with studies by Chukwu and Adebola (2022), which emphasize the role of AI in enhancing access to educational resources and promoting efficiency in information retrieval. Interestingly, some respondents noted unconventional uses of AI tools, such as seeking quick financial solutions or using AI responses verbatim for assignments. This raises ethical concerns and aligns with the observations of Oloyede (2024), who highlighted the need for ethical frameworks to guide AI usage, particularly in educational settings. The study thus reaffirms the potential of AI to influence academic behaviour, as noted by Ogunleye and Abiodun (2022), while also pointing to challenges such as over-dependence and ethical lapses.

The study also revealed a high reliance on AI tools as this research is reported high reliance, supporting the assertion by Adalakun and Nwankwo (2023) that AI-driven tools enhance engagement and provide tailored learning experiences. However, this dependency may undermine critical thinking and problem-solving skills, as students bypass the mental effort required for deeper learning (Oladimeji & Yusuf, 2023). The qualitative data reinforce this, with respondents admitting to frequently using AI for tasks they could perform independently, indicating potential academic laziness.

The findings also highlight gender-neutral patterns of AI reliance, as shown by the non-significant differences. This suggests that the integration of AI tools transcends traditional gender disparities in technology adoption, aligning with trends noted by Williamson and Piattoeva (2021). Both male and female students reported similar motivations and dependencies, demonstrating the widespread appeal and utility of AI tools.

## **Conclusion**

Overall, the findings suggest that while AI tools provide significant benefits in terms of efficiency and accessibility, there is a need for structured guidelines and interventions to balance their use. Encouraging critical engagement with AI tools and fostering ethical considerations will be vital in ensuring their positive impact on education.

## **Recommendations**

Educators should incorporate lessons on critical thinking and ethical AI usage into the curriculum to help students use AI tools responsibly without compromising their intellectual growth.

1. Faculties should provide workshops or seminars on balancing AI use with independent problem-solving, which can help build essential skills and encourage the use of AI as a supportive tool rather than a substitute for learning.
2. University administrators should create policies that guide appropriate AI use and provide resources for training on ethical and effective AI usage to ensure that students leverage AI tools for genuine academic progress.

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## EFFECT OF OVER-CROWDED CLASSES ON LEARNING ADDITIONAL LANGUAGE IN KOGI STATE, NIGERIA

BY

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### **ABSTRACT**

*The primary objective of this study was to investigate the effect of over-crowded classes on learning an additional language at the junior secondary school level in Kogi State. To achieve this, Solomon four group experimental design was used for 383 junior secondary school students in Kogi State. Language test and systematic observation were used as research instruments. ANOVA was used as statistical tool. Given that the F Value (77) is greater than the F critical at  $P = 0.01$  (3.782) the study rejected the hypothesis which stated that there is no significant difference in learners' linguistic progress between learners of an additional language taught via whole class approach in over-crowded classes and those taught an additional language via whole class approach or other methods in small classes. The study recommends that language teachers should be exposed to different pedagogical strategies that they can use to strengthen learner proficiency in learning an additional language in over-crowded classes.*

**Keywords:** *Over-crowded classes, additional language, effect, pedagogical*

### **Introduction**

There is a growing need for education by the Nigerian populace. This has led to an increase in school enrolment and bulge in class-size (Universal Basic Education Commission, 2015). The fact that governmental and non-governmental stakeholders are establishing schools has made education accessible to people. The establishment of schools by public and private institutions is in consonance with the provisions in the National Policy on Education (Federal Republic of Nigeria, 2013), the 1999 constitution of the Federal Republic of Nigeria (Federal Republic of Nigeria, 1999) as well as the 1989 United Nations' convention on the rights of the child.

Given that education is the fundamental right of every child and realizing that learners' population is also growing, one would fathom that these had brought a problem that needs to be contended with. This problem is that of the demand and supply of teachers that would meet normal teacher-student ratio in schools (Akindoyin & Adelokun, 2020). The normal teacher-student ratio for Junior Secondary School which is the major concern of this study is 1:40. This problem is not restricted to Nigeria. This is because there are several countries where students'

enrolment had caused classroom population glut, thence making large classes apparent while teaching and learning (Qiang, 2018).

Learning an additional language is done by millions of learners. The learning process is not only explicitly done but also carried out implicitly and incidentally. This may not be unconnected with the fact that the 20<sup>th</sup> century presented the world with changes and reforms in education (Guthrie, 2022), of which the 21<sup>st</sup> century has been trying to consolidate through making education accessible by all in the whole world. For instance, in the Nigeria context, English is not only a language in education throughout formal schooling but also a language of education from some stages of learning. As a result, the clamour for education by Nigerians and the paucity of the infrastructure and personnel that will meet the stipulated teacher-learner ratios (Federal Ministry of Education, 2016) had made some schools to enroll large number of learners. These learners are in turn accommodated in one classroom for the purpose of learning an additional language in an explicit manner. Consequently, this article was conceived to establish the effect of over-crowded classes on learning an additional language.

### **Statement of the Problem**

Learners are in principle admitted into schools to learn skills, values and cognitive substances. These could also be extracted from language learning. In consequence, formal schools serve as part of the avenues that give learners the opportunity of attaining dexterity in the use of additional language in Nigeria (Lawani, 2017). This is because, it is expected that all learners that got placement into schools in Nigeria must learn an additional language. The impact of class-size on language learning has generated a lot of arguments among applied educational linguists. But then, it would be pertinent to appraise how inimical or otherwise large classes could be to learning an additional language in Nigeria. This is because the status quo reveals the existence of overcrowded classes and evident low-level performance in communicative competence. Conscious of the existence of over-crowded classes in some Nigeria schools which in principle negate the provision of the National Policy on Education, and realizing that teacher-pupil ratios as provided in the National Policy on Education must have been conceived and enshrined in the policy based on some empirical considerations that deem such beneficial; this study was designed to establish whether over-crowded classes have any adverse impact or positive effects on learning an additional language.

### **Objective of the Study**

The primary objective of the study is to investigate the effects of over-crowded classes on learning an additional language. In line with this, the following are the secondary objectives of the study:

1. To establish the efficacy of direct teaching method in enhancing learners' linguistic progress in learning an additional language in over-crowded classes when compared with grouping or other methods; and

### **Hypothesis**

1. There is no significant difference in learners' linguistic progress between learners of additional language taught via whole class approach in over-crowded classes and those taught an additional language via whole class approach or other methods in small classes.

### **Methodology**

This study examined the effect of over-crowded classes on learning an additional language. As a result, the research design that was adopted by the study was the experimental research method. This method is effective because it enables researchers in education and applied educational linguistics to investigate problems arising from teaching and learning instead of using the usual survey method (Bartlett et al., 2021). It would be of interest to state that control is imposed by experimental researchers. Furthermore, Blatchford et al. (2017) assert that it is often assumed that the problems of survey research on class size effects are best overcome using experimental or randomized controlled trials.

Given that the experimental research method has a plethora of designs (Koul, 1997); the randomized Solomon four-group design was applied by the study. According to Koul (1997) in this design the experimental group and one of the control groups are administered a pre-test. The other two control groups are not given pre-test. However, all the four groups were given post-test after the administration of the treatment. This enabled the researcher to ascertain the performance of each group after the treatment thus making the researcher draw conclusions on the effect of overcrowded classes on learning an additional language.

The population of this study is all the junior secondary school (JSS) students in Kogi State. According to Brewer (2014) sampling is all about using resources efficiently. Because the entire

size of the population of this study is very large and given that the time and resources available for this study are limited, one can consider sampling (Hite, 2021). For this reason, this study used proportionate random sampling technique to select the two (2) schools from where the sample size of the study was derived. According to Koul (1997) purposive sampling technique is convenient in the situations where the sample to be selected is very small and the researcher wants to get some ideas of the population characteristics in a short time. However, the proportionate random sampling was used in selecting the three hundred and eighty-two (382) subjects that formed the sample size of the study. This becomes pertinent to give each of the subjects representing the population equal chance of being selected.

The researcher used language testing and observation as research instruments. This is because even though the study is experimental research, it followed a “multimethod research approach” (Blatchford et al, 2019). The research instruments were validated by experts in language education at University of Nigeria, Nsukka. The researcher used a researcher-made language test for pre-test. The experimental group and control group 1 were given pre-test. In addition, researcher-made continuous assessments were used during the treatment while a summative English language examination was used at the end of the treatment. The reliability of the summative English language examination that was administered was established by the means of administering the validated language testing instrument on twenty (20) JSS 2 students at Anyigba, Kogi State. A correlation coefficient of 0.89 was obtained. So, the instrument was accepted for application.

The statistical instruments that were used for data analysis are mean and analysis of variance (ANOVA). This is because the primary aim of the study was to establish the effect of over-crowded classes on learning an additional language in contrast with the effect of small classes on learning an additional language.

## **Results**

The researcher presented the following result based on the hypothesis formulated to guide the study.

**H<sub>01</sub>:** There is no significant difference in learners’ linguistic progress between learners of additional language taught via whole class approach in over-crowded classes and those taught an additional language via whole class approach or other methods in small classes.

To achieve this, a summative English studies test was administered to the four groups that made up this study. The groups that took the test are the experimental group and the three control groups. The following data were obtained:

**Table 1: Data Collected from Post-test**

	EG	CG1	CG2	CG3
$\Sigma$ Score	5510	2121	7426	2775
Subjects	132	39	145	40
Mean	41.74	54.38	51.21	69.37

The data collected were analyzed by the means of using Analysis of Variance (ANOVA) and the following result was obtained.

**Table 2: F-test Analysis on Class Size, Teaching Methods and Learners' Linguistic Progress in Learning an Additional Language**

Sources of Variation	SS	df	MS	F	P	F <sub>crit</sub>
Between conditions	22744	3	7581	77	0.01	3.782
Within conditions	34856	352	99			
<b>Total</b>	<b>57600</b>	<b>355</b>				

F value 77 > F<sub>crit</sub> 3.782 at  $\alpha$  0.01

Table 2 shows that the F Value (77) is greater than the F critical at P = 0.01 (3.782). As a result, this study rejects the hypothesis which assumes that there is no significant difference in learners' linguistic progress between learners of an additional language taught via whole class approach in over-crowded classes and those taught an additional language via whole class approach or other methods in small classes.

### Discussion

Additional languages like English language are learned by most learners in rural areas in Kogi State at school. For the learning of English as a second language (ESL) to be effective instructions should be dominated by English. Most of them learn it in over-crowded classes. The data presented in Table 2 revealed that there is significant difference between the linguistic achievement of learners taught in over-crowded classes and those taught in small classes when considered from using the same instructional approach and even different instructional approach.

This concurs with the position of Berns (2019) who identified an over-crowded class as one of the factors affecting the development of communicative ability among learners. This indicates that whether whole class approach (otherwise called direct approach) is used or any of pairing, grouping or self-learning is used, large classes impede learners' progress in language use.

In consonance with the position expressed by Berns in the paragraph above, Blatchford et al. (2017) provide that a group of 30 to 40 under the surveillance of one adult is often believed to be the most suitable for learning process. This is consistent with the findings of this study because learners in small groups (39 and 40) as presented in Table 2 performed better than their mates in large groups (132 and 142) when subjected to the same kind of treatment. It would be of interest to note that the experimental group and the first control group were taught by one research teacher (an adult). The researcher consulted the report of Engling et al. (2019) who realized the daunting task involved in teaching large classes conclude that many classes now have the support of a teaching assistant. For this reason, the second and third control groups were taught with the support of teaching assistants.

More empirical evidence exists on the application of approaches to class-size on learners' linguistic achievement. For instance, Bartlett et al. (2013) submit that these groups of factors were found to affect pupils' progress; a teacher's professional characteristic, teaching skill and classroom climate. The climate of a small class is different from that of a large class. The climate of a small class is less tense than that of a large class. A tensed climate affects learning negatively. This is because Davies and Pearse (2020) state that with a group, or many groups, of forty initially unmotivated learners for two hours a week, goals related to communicative competence will present a much greater challenge and the results will inevitably be modest. It should be noted that tensed climate demotivates learners. This agrees with the findings of Black et al. (2016) who report that the research on students working in small groups shows that those who help others generally benefit most. This study discovered that as learners are split into smaller groups, the high achievers in the respective groups do guide their peers in learning. By implication these students who guide group members are prompted to learn by teaching therefore consolidating their entry knowledge and enhancing the ability to retain what they learn for a long period of time. This helps in improving the linguistic achievement of those learners who learn by teaching.

Blatchford et al. (2013) report that over-crowded pose problems always, especially when they are compounded by other negative factors, such as inadequate classroom space for movement or group activities and instructional materials. Table 3 indicates that over-crowded classes have inimical effect on learners' evaluation and access to feedbacks from teachers. This concurs with Jimakorn and Singhasiri (2016) who confirm that English teachers in Nigeria who taught in classes of 100-200 students encountered a wide range of difficulties in teaching including assessment. In consonance to Jimakorn and Singhasiri's assertion, Shamin et al. (2017) provide that large classes serve as challenge in respect of assessing learning and providing feedback to learners manifested in inability to identify problems of learners, inability to know the progress learners make, inability to assess students individually, inability to provide a remedy based on the feedback from the assessment.

### **Conclusion**

Statistics reveal learners' and school leavers' lacklustre communicative ability in additional language especially English language thus making them semi-lingual. One of the causes of the situation is the condition in which learners learn the language. This study found that most junior secondary school learners in Kogi State do learn it in classes that are 40+ to 100+. Furthermore, the findings of this report indicate that such learners are taught by one teacher at a time (without the assistance of language teaching aides) in low-resourced classrooms. The empirical data collected and analyzed by this study revealed that this is inimical to learning an additional language.

Suffice it to say that this study also found that quality teacher interventions like the use of teaching assistants to help in in-class group exercises and activities in addition to provision of proportionate resources can make learners of an additional language in large classes to have advantages cognate those experienced by learners of an additional language in smaller classes. Furthermore, regular assessments and feedback in addition to prompting learners to embark on out-of-class personal, pair or group study can also make the difference between learners of an additional language in over-crowded classes and those in smaller classes, in respect of their linguistic progress and chances of individual learner's participation in classroom, to be made minimal. For this reason this study concludes that even though it is obvious that anything you can do in a over-crowded class can be done better in small classes, teacher pedagogy and

professional competence and the level of assistance they get from teaching aides and raters as well as how they use adequate resources, time, evaluation procedures and learner-centred activities could help in making learning an additional language in over-crowded classes exciting and linguistically enriching.

### **Recommendations**

The following are recommended given the findings of this study:

1. Teachers should encourage learners of an additional language to embark on constant personal individualized learning after school hours.
2. Teachers should maximize individualization and differentiation techniques by using pairing, grouping and relevant exercises that would activate learners to engage in language studies.
3. Qualified language teachers should be made to teach over-crowded classes.
4. The services of language teaching assistants should be prioritized. Retired language teachers, corps members, students on teaching practicum and volunteers could be used in this respect to guide learners of ESL divided into groups.
5. More raters should be used for over-crowded classes. This will make teachers ask high-order questions, administer and monitor language tests regularly and make learners access feedbacks promptly.
6. To reduce teacher's workload in respect of marking and grading students' written works, language test should be administered and the scripts swapped among learners for the learners to mark. However, teachers should vet the learners' grading. This could enhance regular student evaluation and constant access to results.
7. Modes of giving assignments and homework should be eclectic and varied: Individualized, paired, grouped, audited, unaudited, written, oral etc.

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**RELATIONSHIP BETWEEN QUALITY ASSURANCE INDICES AND ACADEMIC STAFF JOB PERFORMANCE IN PUBLIC SENIOR SECONDARY SCHOOLS, YOBE STATE, NIGERIA**

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**ABSTRACT**

*This study determined the relationship between quality assurance indices and academic staff job performance in public senior secondary schools, Yobe State, Nigeria. Two objectives were formulated to guide the study. Two hypotheses were tested at 0.05 level of significance. Correlational survey research design was used for this study. The population for the study comprised of 1,338 staff in Public Senior Secondary Schools, Yobe State out of which 268 were sampled using simple random sampling technique. The instrument was pilot tested and the reliability index of the questionnaire was found to be 0.84. The hypotheses were analysed using Pearson Product Moment Correlation Coefficient (at 0.05 level of significance). Findings of the study revealed that there was significant relationship between principal supervision and academic staff' job performance, also there was significant relationship between principals leadership roles and academic staff' job performance in Public Senior Secondary Schools, Yobe State, Nigeria. It was concluded that, quality assurance variables are the major determinants of academic staff' job performance in Yobe Education Zone, Yobe State, Nigeria. It was recommended that Quality assurance officers should be trained in the area of principal supervision and principal leadership roles in order to foster academic staff job performance among senior secondary school teachers in Nigeria.*

**Keywords** *Quality Assurance Indices, academic staff' job Performance, principal supervision, principal leadership roles*

**Introduction**

Education according to the National Policy on Education is an instrument ‘‘ par excellence’’ which is important for national development (FGN, 2014). Education is also the bedrock of any nations’ socio-economic, cultural, religious and political development (Ikegbusi & Iheanacho,

2016). However, all the various levels of education (early childhood, pre-primary, primary/basic, post primary /secondary and tertiary), including the educational institutions must be properly administered and managed in order to produce vibrant outputs (students) that will contribute effectively towards national development. The assertion for the establishment of Federal Inspectorate Service (FIS) in 1967 was for the aim of maintaining, monitoring/supervising and improving the educational standard in school through frequent inspection of schools.

Between 1973 and 1988, FIS was relatively autonomous and well-funded to carryout its responsibilities. However, after 1988 Civil Service Reforms, FIS was made Department in Federal Ministry Education (FME) and this situation was followed by dwindling budgetary allocations and delayed releases of funds, which led to the crippling of inspectorate activities and consequently, the degeneration of the quality of the nation's education system. To arrest the situation of poor supervision in Nigerian school systems, the minister of education recommended the adoption of quality assurance (QA) approach to inspection in Nigeria at the 54<sup>th</sup> session of the National Council on Education (NCE) in Katsina, 2007. The session approved QA approach and the restructuring and strengthening of Federal and State inspectorates and local government supervisory offices for enhanced and sustainable quality assurance in education nationwide. In response, FIS adopted the quality assurance approach to inspection.

Education Quality Assurance (EQA) is the process of collecting, collating, analysing and utilizing education information in order to ensure that the pre-determined national standards are achieved optimally. According to the National Policy on Education (2004); "education is an instrument for national development as well as a tool for the formulation of ideas". Education in Nigeria, Western or formal education started in Nigeria in 1842 only at the primary level by the Christian missionaries who managed the educational system according to their respective philosophies`.

Supervision as a field of education is as old as formal education Supervision is a management tool for secondary school principals. Instructional supervision facilitates teachers' improvement in instructional practices. With quality and relevant instruction of students, the academic achievement of students is assured. Supervision began in USA as a process of external inspection. At this period one or more local citizens were appointed to inspect what the teachers were teaching. Superintendents were later appointed to inspect schools to see that teachers were

following the prescribed curriculum and see that students were able to recite their lessons. This trend was changed as a result of multiplication of schools Starrat (2017). Wiles and Bondi (2006) identified some phrasal development of supervision in American schools. From the 20th to 21st century, their findings have been summarized by Tanner and Tanner (2007) that during the early years of 19th and 20th century the task of supervision was teaching and management of facilities as well as reviewing school curricula. Lay people were selected to form a board to supervise such activities in the schools. Supervision is as old as the school system. Supervision has undergone series of evolution since the colonial era. It is directed towards sustaining teaching and learning process in the educational system. According to Ogba and Igu (2014) supervision has been identified as one of the approaches to teacher effectiveness.

Principals are the chief instructional Supervisors. Their roles are basically carried out within the schools for the purpose of improving class instruction. An effective principal motivates encourages, praises and gives appraisal to teachers to facilitate student learning According Oyedeji (2012) the functions of school supervisors in order to carry out effective supervision include: making classroom visits, supervising heads of departments and teachers by checking their scheme of work and lesson notes, checkmating teachers' classroom attendance, checking absenteeism and rewarding hardworking teachers and punishing indolent ones by assigning administrative duties to them as means of encouraging to do the right things at the right time.

Leadership is a major success determinant in every organisation as organising without control or systematic arrangement of the several factors (human, environment, financial, etc.) under the care of proficient individual often leads to dilemma. It, therefore, follows that every organisation needs quality leaders who can inspire, motivate and act as role models in order to attain set goals. The principal is the head or leader of secondary school in Nigeria, who administers the school with other teaching and non-teaching staffs. A principal is regarded as the chief executive of the school who is responsible for all that happens in the school. Osakwe (2010) as the chief Executive, the principal assigns duties, though all responsibilities still reside in him as the accounting officer.

### **Statement of the Problem**

Following a discussion between the researchers and the academic staff union in Yobe Education Zones, Yobe State Nigeria, it was observed that, the quality of teacher education programme in Senior Secondary Schools seem not to be as expected. Some of the students in different Senior Secondary Schools today are graduating with low grades and low communication skills, thus making them weak, with little or no value among their pairs. This is perhaps might be as a result of improper leadership role and supervision.

### **Objectives of the Study**

The objectives of this study were to determine the relationship between:

1. Principal Supervision and academic staff' job performance in Senior Secondary Schools, Yobe State, Nigeria;
2. Principal leadership roles and academic staff' job performance in Senior Secondary Schools, Yobe State, Nigeria; and

### **Hypotheses**

The following null hypotheses were tested at .05 level of significance:

**H<sub>01</sub>:** There is no significant relationship between Principal Supervision and academic staff' job performance in Senior Secondary Schools, Yobe State, Nigeria;

**H<sub>02</sub>:** There is no significant relationship between Principal leadership roles and academic staff' job performance in Senior secondary Schools, Yobe State, Nigeria;

### **Methodology**

Correlational survey design was used for this study. Creswell (2012), maintained that, the design in question measures the degree of association (or relationship) between two or more variables or sets of scores. The target population for the study is 1338 academic staff and principals from Nine (9) selected secondary schools in Yobe Education Zones, Yobe State Nigeria. The sample size is 268 while, simple random sampling techniques was used for the study. The instrument used was questionnaire which was validated, pilot tested and found highly reliable for use. Pearson Product Moment Correlation Coefficient (PPMCC) was used to test the two hypotheses at 0.05 level of significance.

## Results

Pearson Product Moment Correlation Coefficient (PPMCC) was used to test the two hypotheses.

**Ho<sub>1</sub>:** There is no significant relationship between Principal Supervision and Academic staff' Job Performance in Senior Secondary Schools in Yobe Education Zone, Yobe State, Nigeria.

**Table 4.1 Correlation coefficient between Principal Supervision and Academic Staff' Job Performance in Senior Secondary Schools in Yobe Education Zone, Yobe State, Nigeria.**

Variables	N	Mean	SD	r-Value	P-Value	Remarks Decision
Principal Supervision	268	20.25	2.399	.251	.000	Sig
Academic staff' Job Performances	268	20.09	2.523			

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The result shows that r – value of 0.251 and the p – value obtained was 0.000 which was less than alpha of 0.05, hence; the hypothesis was rejected at  $p < 0.05$  and the researchers concluded that there is significant relationship between Principal Supervision and academic staff' job performance in Senior Secondary Schools in Yobe Education Zone, Yobe State, Nigeria.

**Ho<sub>2</sub>:** There is no significant relationship between principal leadership roles and academic staff' job performance senior secondary school students' academic performance in Senior Secondary Schools in Yobe State Education Zone, Yobe State, Nigeria.

**Table 4.2 Correlation coefficient between principal leadership roles and Academic Staff' Job Performance in Senior Secondary Schools in Yobe Education Zone, Yobe State, Nigeria.**

Variables	N	Mean	SD	r-Value	P-value	Remarks Decision
Principal Leadership Roles	268	20.25	2.149	0.338	0.000	Sig
Academic Staff' Job Performance	268	20.09	2.528			

Keys: S=Significant

The result shows that r – value of 0.338 and the p – value obtained was 0.000, hence; the hypothesis was rejected at  $p < 0.05$  and it was concluded that there is significant relationship

between principal leadership role and academic staff' job performance in Senior Secondary Schools in Yobe Education Zone, Yobe State, Nigeria.

### **Discussion of Findings**

Hypothesis one revealed that there is significant relationship between instructional supervision and academic staff job performance in Senior Secondary Schools in Yobe State Education Zone, Yobe State, Nigeria. Nwako (2015), study further revealed that modern type of school supervision were the type of supervision used in the area, the school supervision was properly carried out, there were a lot of problems and challenges faced the school supervision in the area, head teachers significantly differ in their supervision strategies and procedures, the school supervision influences the teachers in performing their task. Musa (2009) study also revealed that internal supervision by principals had no significant impact on secondary school quality education.

Baba (2009), study revealed that nature of school supervisory climate in secondary schools in Bida Education Zone is closed school supervisory climate. The study also revealed that there is high relationship between school supervisory climate and teachers' task performance in secondary schools and also there is high positive and negative relationship between open and closed school supervisory climate and teachers' task performance in secondary schools.

Hypothesis two revealed that there is significant relationship between principals' leadership roles and academic staff job performance in Senior Secondary Schools in Yobe State Education Zone, Yobe State, Nigeria. This finding was also in agreement with Ekpho and Eze (2015), study who revealed that a significant relationship exists between principals' supervisory techniques in terms of classroom visitation, workshop techniques and teachers job performance. It also revealed that the higher the principals' use of supervisory techniques of classroom visitation, the higher the teachers' job performance in terms of instructional ability, classroom discipline, communication effectiveness, instructional materials and use of teaching aids.

### **Conclusion**

Quality assurance indices are the major determinants of academic staff' job performance in Yobe Education Zone, Yobe State, Nigeria. This means that quality assurance is an important subject or factor in determining academic staff' job performance in Yobe Education Zone, Yobe State, Nigeria.

### **Recommendations**

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

3. Yobe State Government should encourage quality assurance officers and teachers in area of instructional supervision as it is found to be related to Academic staff job performance in Yobe Education Zone, Yobe State, Nigeria.
4. The management of the school should provide effective leadership as it is related to Academic staff job performance in Senior Secondary Schools in Yobe State Education Zone, Yobe State, Nigeria.

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**EFFECTS OF INQUIRY METHOD ON PERFORMANCE OF ISLAMIC STUDIES  
UPPER BASIC SCHOOL STUDENTS IN ZARIA QUALITY ASSURANCE ZONE,  
KADUNA STATE, NIGERIA**

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**ABSTRACT**

*This study examined the Effects of Inquiry Method on Performance of Islamic Studies Upper Basic School Students in Zaria Quality Assurance Zone, Kaduna State, Nigeria. The specific objective for the study was to: compare the performance of students taught Islamic Studies Curriculum using inquiry method and those taught using traditional method of teaching. One (1) research question and one (1) Null-hypothesis were formulated to serve as guide for this study. Quasi-experimental design involving the pre-test and post-test was employed for the purpose of this study. A sampled of 300, consisting of One hundred and sixty (160) male students and One-Hundred and forty (140) female students were purposively selected out of 7,573 population and were placed into experimental and control groups. The study made use of a standardized Islamic studies performance Test (IPT) objective type test as the instrument for data collection. The scores obtained were analysed using mean and standard deviation. The findings revealed that inquiry method has significant roles on the academic performance of Basic schools level Students. Based on the finding of the study, it was concluded that effective use of Inquiry method in teaching should be employed as-it will improve the performance of Islamic Studies Students.*

**Introduction**

Inquiry method is a departure from the traditional system of teaching Islamic Studies and is expected to be much more interesting and effective in influencing the attitude and level of understanding of students. It is in this direction that this study seek to establish the effectiveness of inquiry method in teaching Islamic studies education. Furthermore, it is obvious that no single method of learning can adequately fit all learning situations and there is no best method of teaching Islamic Studies, but a combination of other methods would definitely help in achieving the desired instructional objective. Using various teaching methods is considered by many scholars as best practice, and numerous studies reported positive result with regard to the use of various instructional methods to teach Islamic Studies. National Teachers Institute (NTI, 2019) state that, various methodological approaches should be adopted in teaching Islamic Studies with special emphasis on inquiry and fieldtrip". National Teachers' Institute (NTI) (2010) also states that, there is no single method which can be applied in the teaching of concepts and principles of

Islamic Studies. Hence, the use of multiple methods in the teaching of particular concepts and principles should be adopted.

Some methods of teaching Islamic include lecture, discussion, project, demonstration, story-telling questions and answer, discovery, dramatization and inquiry methods. It is the teacher who would select a method he deems suitable to the needs of the students. Giving the high premium placed on Islamic Studies in teacher education curriculum, the need to teach it using the most effective method cannot be over emphasized. It is now being recognized that there are better ways to learn than multi-dimensional problems which through the traditional method of instruction. Primary schools and secondary schools well as other institutions are beginning to show an increased awareness of the importance of the way's students learn. Many of the standard methods of conveying knowledge have been shown to be relatively ineffective on the students' ability to master and retrain important concepts. However, since Islamic Studies education seeks for solutions to societal problems, then it needs to be taught with solution finding methods like inquiry, problem-solving brainstorming and expository methods. However, the present-day teachers at post primary schools adopt the traditional/conventional in teaching and learning of the subject. All these methods are considered not suitable for effective teaching and learning of Islamic Studies. According to Ebene (2020) warned that Islamic Studies teachers should move away from traditional teaching styles to creative (experimental) teaching styles which make students move from traditional learning goals of subject assimilation to becoming critical and creative studies include lecture, discussion, individuals.

### **Statement of the Problem**

It has been observed by Jimoh (2022) that Islamic Studies as a subject in secondary schools in Nigeria faces severe problems in relation to its curriculum content and deliverance by the Islamic Studies teachers. Arikewuje (2024), also observed that teaching and learning of Islamic Studies Education in secondary schools was bedeviled with multi-dimensional problems which impede successful implementation of the curriculum. Such problems include complexity of the curriculum, inadequacy of instructional facilities and methods etc. In view of these, teachers mainly teach facts to enable students pass and also cover the syllabus on time, not minding whether students understand the actual concepts involved or not. Thus, the researcher prompted to compare the performance of students taught Islamic Studies Curriculum using inquiry method

and those taught using traditional method of teaching in Zaria Quality Assurance Zone, Kaduna State, Nigeria.

### **Objective of the Study**

This study the study is to:

1. compare the performance of Students taught Islamic Studies using inquiry method and those taught using traditional methods teaching of teaching in Zaria Quality Assurance Zone, Kaduna State, Nigeria.

### **Research Question**

The study provided answer following research question:

1. What is differences between the performance of Students taught Islamic Studies curriculum using Inquiry method and those taught using Traditional method of teaching in Zaria Quality Assurance Zone, Kaduna State, Nigeria?

### **Research Hypothesis**

The following null hypothesis was formulated for this study:

**H<sub>01</sub>:** There is no significant difference in the performance of students taught. Islamic Studies curriculum using Inquiry method and those taught using traditional methods of teaching in Zaria Quality Assurance Zone, Kaduna State, Nigeria.

### **Review of Related Literature**

To make this write-up interested and more useful to educators, relevant literatures were reviewed, which covered the concept of Islamic studies curriculum, inquiry method, some empirical literature among others.

### **Concept of Islamic Studies Curriculum**

The survival and welfare of a nation depends largely on the way of life of its individual members, their moral and mental orientation as well as their cohesion as a society. This fact has been recognized in Islamic Studies curriculum and that is why it addresses society and how to achieve a balanced result (NERDC, 2007). A curriculum is considered to be a course of study. In its traditional term, many authorities have defined it in similar but different ways. According to Yusuf (2012), curriculum can be defined as the totality of all planned and unplanned, guided and unguided learning experiences learners are exposed to in a school setting for the purpose of attaining its educational goals. Yunusa (2000) defined curriculum as a variety of learning

experiences that pupils engage in under the guidance of teachers. In essence, the curriculum could be viewed as a composite whole including the learner, the teacher, teaching and learning methodologies; (anticipated and unanticipated 'experiences, output and outcomes possible within a learning institution (Yusuf, 2012: 12). In summary curriculum can be seen as the process of building a programme of learning experiences calculated to result in the attainment of set goals for a particular people. Some years back, people considered the term curriculum to be synonymous to syllabus and course description. Curriculum is used in that way when it refers to specific subject, for example Arabic. language curriculum, French language curriculum, Geography curriculum and Islamic Studies curriculum.

Islamic Studies as a subject as Observed by Yunusa (2008), is a course of study in schools that has curriculum that learners are engaged with, under the guidance of a teacher. The varieties of learning experiences in Islamic Studies curriculum constitute six (6) inter connected topics to be learnt by students; these include, Arabic Alphabets, Qur'an, Hadith, Figh, Tauhid, Sirah and Tahadhib as it is contained in the 9 years curriculum published by Nigerian Educational Research Development Council Abuja (NERDC, 2007)

However, Islamic Studies curriculum has been prepared to reflect its broad concern so as to include true and balanced values in young Nigerians at an age when their mental and moral development is at a formative stage The inner stability obtained and guiding principle learned will help them or her to stand firm in the midst of the cross current of ideas and rapid social changes which are features of their age bracket. On the other hand, Islamic Studies can be defined as the totality of learning experiences centered on the relationship between man and his creator and between man and his \_ fellowmen Furthermore, Yunusa (2008), sees Islam as a religion that creates a kind of direct contact between man his creator to whom he owes his entire existence.

The concepts or topics of Islamic Studies curriculum have been broken according to aims, goals and objectives of Federal Government of Nigeria but Islamic Studies Education according to NPE (2014) therefore aimed -at the following:

- a. Recognition of Allah as the creator and sustainer of the universe and the sole source of values.
- b. Cultivation of the sense of gratitude to Allah and submission to his guidance and moral

- law, both in worship and in behavior toward other fellow-men.
- c. Attainment of a balanced development of the individual and community by giving due weight to physical, social, intellectual, moral and spiritual need of man
  - d. Encouraging the pursuit of useful knowledge in accordance with the saying of the prophet Muhammad (S.A.W) who said “Searching for knowledge is a duty for every Muslim male or female” and the application of such knowledge for the benefit of humanity in the field of science and\_ technological medicine.
  - e. Realizing of human right, equality and brotherhood with emphasis on practical means to achieving social, solidarity and ethnic harmony in place of greed and selfishness (9year Basic Education Curriculum for Islamic Studies).

### **Inquiry Method of Teaching Islamic Studies Curriculum**

Teaching is a process in which one interacts with another person with the intention of influencing the learning of that person. It is the inter play between the teacher and the learners. Teaching as a useful and practical art calls for intuition, creativity, improvisation and expressiveness, thought, there are many teaching methods and techniques associated with the Islamic studies, there is no single mode of teaching which fits all the learning situations. A teacher of Islamic Studies has to be abreast of the innovation in\_ teaching methods (Ogundare, 2004) some of the methods include:

#### **Inquiry Method**

Inquiry method encourages development of thinking, allows students to find out information by themselves, and it generates students’ enthusiasms at examining issues logically. The process of inquiry method involves identification of a problem, analysis of information in order to arrive at generalization Students can be required to find out the reasons for Situation. A very desirable aspect of inquiry method is its emphasis on the use of higher level of thinking (NTI, 2010).

#### **Forms of Inquiry Method**

Inquiry based learning method have different forms, these forms of inquiry based learning include but not limited to coupled inquiry, open or full inquiry, structured inquiry, guided inquiry among others. Hence, different forms of inquiry were discussed in this article.

**Coupled Inquiry**

Coupled inquiry combines a guided inquiry investigation with an open-inquiry investigation (Dunkhase, 2019). At the beginning and on intent to combine inquiry along with the guided inquiry, the teacher chooses the first question to specifically investigate; targeting a particular standard or bench mark (Martin, 2022). After the guided inquiry, a more student centered method is taken by implementing an open ended inquiry investigation. This method of a) guided-inquiry followed by open-inquiry results in students generating questions that are closely related to the standard or benchmark. From the first investigation specific concepts can be explored in a more didactic fashion allowing students to connect their concert experiences to abstract concepts. This is similar to a learning-cycle method. The coupled inquiry cycle is as follows: (i) an invitation to inquiry (ii) teacher-initiated “guided inquiry” (iii) student initiated “Open inquiry” (iv) inquiry resolution and (v) assessment. This cycle can then lead back to more student initiated open-inquiry (Dunkhase 2000 and Martin : 2001).

**Open or Full Inquiry**

Open or full inquiry can be defined as a student centered-method that begins with a student’s question, followed by the students (or groups of students). designing and conducting an investigation or experiment and communicating results (National Research Council 1996: Colburn, 2000). This method most closely mirrors scientists’ actual work. Open inquiry requires higher order thinking and usually has students working directly with the concept and materials, equipment and so forth. Having students to ask the questions that would guide their own investigations is the key to open inquiry.

**Structured Inquiry**

Structured inquiry, sometimes referred to as directed inquiry, is a guided inquiry mainly directed by the teacher. It is typical, of the book lesson in which students follow teacher directions to come up with a specific end point or product. Sometimes this method is appropriate for use in the classrooms. However, students’ engagement in the task is limited to following teacher’s instructions. Simply following direction in a cookbook manner does the procedure necessary for an investigation.

### **Guided Inquiry**

In guided inquiry the teacher helps students to develop inquiry investigations in the classroom. Usually, the teacher chooses the questions for investigation by students in one large group or to proceed with the investigation. The teacher would find out, that is a time when specific skills needed for future open-inquiry investigations can be taught within context. Guided inquiry is a natural lead-in to open inquiry. Where students must learn about more complex phenomena that cannot be investigated directly in a classroom, a \_ teacher (or students) can provide applicable scientific data from a variety of source to use in the investigation (Colburn, 2000).

### **Inquiry Method for Teaching Islamic Studies Curriculum**

Recent socio-political and economic changes in the world and within nations have brought changes in educational goals. Schools are therefore charged not only to equip the learners with the basic knowledge of Islamic Studies alone, but also with higher cognitive skills such as problem-solving and reflective thinking skills that allow for self-development and continuous learning for investigative information (NTI, 2019). According to Adesina (2005), a survey of literature on teaching method in Islamic Studies Education has clearly shown that, traditional conventional i.e teacher centered method to teaching which informs the use of methods like lecture and recitation have been relegated to the background. Adesina (2005) also emphasized the need to use learner centered. Some of the commonly identified methods are: discussion method, storytelling. Dramatization.

The National Teachers Institute (NTI 2007) has recommended a new method for teaching and learning of Islamic Studies in Schools. The new method is pupils or learner-centered. The learner is not treated as an empty vessel. Learners are credited with knowledge, skills and attitudes from the day they were born which requires development, through guidance, encouragement and motivation. In this setting, the teacher is not a sage on the stage' but a 'guide on the side'. His role has shifted from that of imparting knowledge to a facilitator.

Furthermore, (NTI 2019) recommended the following teaching methods for improved accomplishment of Islamic Studies goals in classroom inquiry method, guided discovery concept mapping and simulation Under the communication-skill-related method, the story-telling, discussion method role play and lecture methods of teaching were encouraged Similarly, they can be used in the area of Islamic studies.

Crookal as cited in Adesina (2005), opines that every device available to the teacher should be use to capture the interest of the child and fire his/her imagination. This could be in form of story-telling, assignment, the use of picture, chart, maps, films, film tips, friezes and model-making, dramatization and local visit. While it is true that all the teaching methods have their individual limitations and advantages, the fact still remains that, evidence show that they (Adesinah 2005)

### Methodology

The study employed quasi experimental design of pre-test, Post-test nonequivalent control and experimental groups. The population for this study consisted of Islamic Studies Students of Public Junior Secondary Schools in Kaduna State, with a total population of 38,724. The sample of this study consisted of 300 JSS Students who were divided into two experimental and two control groups. Purposive sampling techniques was employed. The scores obtained were analysed using mean and standard deviation.

### Result

The research question was answered through the use of means scores and standard deviation.

**Research Question One:** What is differences between the performance of Students taught Islamic Studies curriculum using Inquiry method and those taught using Traditional method of teaching in Zaria Quality Assurance Zone, Kaduna State, Nigeria?

**Table 1: Mean and Standard Deviation Scores on Differences between the Performances of Students Taught Islamic Studies Curriculum Using Inquiry Method and those Taught Using Traditional Method of Teaching in Zaria Quality Assurance Zone, Kaduna State, Nigeria**

Group	N	Pre-test (X)	STD	Post-test (X)	STD
Experimental Group A	75	40.8	10.6	80.7	14.4
Experimental Group B	75	41.6	11.0	82.4	15.2
Control Group A	75	41.8	11.2	50.6	12.2
Control Group B	75	40.6	10.2	51.2	11.8

From table 1, it could be seen that, there was no difference in the performance of students taught Islamic Studies at pretest between experimental and control groups. A similar trend is observed when standard deviation of the two groups are compared. However, in the post-test scores the experimental groups A and group B have a higher mean of 80 and 82.4 respectively than the control groups A and B with mean scores of 50.6 and 51.2 respectively. The result indicates a high performance in the post-test than the pre-test. This may be attributed to the treatment given to the experimental groups whom were taught with inquiry method.

### **Discussion**

From the result obtained in table one, students in the experimental and control groups performed equally well at pre-test with mean scores of 40.8 and 41.6, for the experimental and 41.8, 40.6 for the control groups. However, at post-test students in the experimental groups performed better with means score of 80.7, 82.4 which was higher than those in the control groups with mean scores of 50.6, 51.2 This high performance for experimental groups could be attributed to the treatment given to the experimental group by effectively teaching them Islamic Studies content using inquiry method of teaching. This finding significantly agrees with the finding of Joyce and Well (1978) who indicated that the use of inquiry method of teaching develop all the domains of educational behavioural objectives; its essence is the involvement of the students in the genuine problems or inquiry by confronting them with an area of investigation.

### **Conclusion**

On the basis of the finding of this research, the following conclusion was made:

Use of Inquiry method in teaching Islamic Studies concepts help students to develop skill of investigation and finding solution to problems and the method is gender friendly and takes care of students in different groups i.e high achievers and under achievers, while the exposure to inquiry better students' performance.

### **Recommendations**

In view of the finding in this study, it was recommended that:

1. Kaduna State Ministry of education should recruit more qualified professional Islamic Studies teachers to meet the present demand in junior secondary schools.
2. School Supervisors and administration should ensure that Islamic studies teachers use inquiry method of teaching as learner centered approach.

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## STUDENTS INDUSTRIAL WORK EXPERIENCE SCHEME AS PREDICTOR OF PERFORMANCE IN INDUSTRIAL CHEMISTRY AMONG UNDERGRADUATE STUDENTS IN KANO STATE, NIGERIA

BY

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### ABSTRACT

*The study investigated Students Industrial Work Experience Scheme as Predictor of Performance in Industrial Chemistry among Undergraduate Students in Kano State, Nigeria. The study had two objectives and based on these, two research questions were raised and two corresponding null hypotheses formulated for testing at  $P \leq 0.05$  level of significance. The study adopted correlational and ex- post factor research designs. The population for the study consists of the entire four hundred and fifty (450) Undergraduate Chemistry Students in level 300 in three (3) public universities in Kano state, Nigeria during the 2022/2023 academic session. The sample of the study comprised of three hundred and twenty (320) males and females students. Purposive sampling technique was used in selecting one federal university from the population, then simple random sampling technique involving balloting method in selecting the other state owned university. For the purpose of data collection, an instrument; Student Industrial Work Experience Scheme Chemistry Students Performance Test (SIWESCSPT) was used. The instrument was validated by an expert and pilot tested with the reliability coefficients of 0.84. Pearson Correlation Analysis was used to answer research questions while null hypotheses were tested using Regression analysis. Among the findings of the study revealed that: There is relationship between performance in SIWES and performance in industrial chemistry. The study concludes among other that, performance in SIWES is a predictor to performance in industrial chemistry. Based on the findings, it was therefore recommended that, SIWES coordinators or supervisors in the department of chemistry should continue to exposed students on the basic industrial chemistry concept such as chemical synthesis, heat transfer processes, industrial waste and pollution among others prior to the commencement of the SIWES programme with attendance made mandatory.*

**Keywords:** SIWES, Predictor, Performance, Industrial Chemistry.

### Introduction

The word SIWES is an acronym for “Students Industrial Work Experience Scheme”. The scheme is a skill training programme designed to expose and prepare students of higher/tertiary institutions to real life work situations. It is a planned programme involving practical outside the regular classroom environment experience. The scheme is meant to expose students to work method and experience in handling equipment and machinery that may not be available in

educational functions in other words; the scheme enables students to match theory with practical. The programme was introduced by the federal government in 1974 with the establishment of the Industrial Trust Fund (ITF) in 1971. During the formative years, ITF solely founded the scheme. As the financial burden became too heavy and unbearable to ITF, it withdraws from the scheme in 1978. The programme was then handed over to both the National Universities Commission (NUC) and the National Board for Technical Education (NBTE) in 1978 (ITF, 2016). ITF (2013) expressed that participation in SIWES has become a necessary pre-condition for the award of Diploma and Degree certificates in specific disciplines in most institutions of higher learning in the country, in accordance with the education policy of government.

SIWES aimed at exposing students to machines and equipment, professional work methods and ways of safeguarding the working areas and worker in industries and other organization. The scheme is a tripartite program involving the students, the university and the industries (Employer of labour). Programme required to be undertaken by all students of tertiary institutions in Nigeria pursuing courses in “specialized engineering, technical business, applied science and applied arts. Duration of SIWES is four months in Polytechnics at the end of ND1, four months in Colleges of Education at the end of NCE II and six months in the Universities at the end of 300 or 400 or 500 levels depending on the discipline (SIWES Guideline, 2002).

Musa (2019) defined Academic Performance as the quality of results produced by students as reflected in their examination score. Academic performance is an important factor that has been identified to be influenced by teaching methods. Ricarda (2015) defines academic performance as the outcome of educational output, the extent to which a person has accomplished specific goal that were the focus of activities specifically in school, college and university. Poor academic performance on the other hand is when the students` performance in their test score is very low (Oladejo, 2016). Aliyu (2021) described academic performance as the successful outcome of accomplished activities or tasks in educational measurement in relation to accepted standards. According to Emaikwu (2017) academic performance refers to an individual`s academic attainment after a specified course of instruction. Also Tenty and Awe (2016) defined academic achievement as the gain in knowledge of students as a result of taking part in a learning activity or program. Suleiman (2016) reported that, gender plays a significant role when it comes to evaluation of academic performance of students particularly at tertiary level.

This study is hinged on cognitive development theory of Piaget (1978) and social interaction theory of Vygotsky (1978). Piaget (1978) believed that cognitive development occurs through a sequence of successive qualitative changes in cognitive structures. SIWES students sequentially learns successive qualitative changes in cognitive structures they tend to produce in the industries. Piaget theory of cognitive development suggested that human's unable automatically understand and use information that have been given because they need to develop their prior knowledge through prior personal experiences to enable them to create mental images. Vygotsky's (1978) theories stress the fundamental role of social interaction in the development of cognition. It emphasizes cooperative learning strategy which enhances Performance contrary to the traditional classroom method.

### **Statement of Problem**

The purpose of attending educational institutions is to undergo necessary training and acquire required skills and competencies that are expected to make one function effectively and efficiently in the job the person may find himself after graduating from the school. The skills acquired could go a long way in determining how well a graduate perform in his jobs particularly in the digital era. Despite the efforts being put in place by governments at various levels of education, the required skills expected of the graduates of Chemistry in various schools of higher learning is still lacking (Salami and Kahinde 2023). Many are leaving the schools without necessary required skills. These have made many graduates to perform below expectation in their job. Sunday (2018) indicated that employers in Nigeria have continually expressed their concern over the present graduates of science, technical and vocational education for their deficiencies in skills required for employment. The deficiency according to Oduolowu (2017) is caused by teachers' attitude of concentrating on low levels of cognitive domain (knowledge) in their instruction thereby neglecting psychomotor and affective domains, skipping topics that are practically based and lack of instructional materials among others. Therefore the study intends to investigate the performance of students in Industrial Chemistry and how such could predict effective job performance of Chemistry graduates more importantly in this period of digital era.

### **Objectives of the Study**

The objectives of the study are to;

1. determine the relationship between performance in SIWES and performance in industrial chemistry among undergraduate students in Kano State, Nigeria.
2. ascertain the relationship between performance in SIWES and performance in industrial chemistry among male and female undergraduate students in Kano State, Nigeria.

### **Research Questions**

The study provide answers to the following research questions.

1. What is the relationship between performance in SIWES and performance in industrial chemistry among undergraduate students in Kano State, Nigeria?
2. What is the relationship between performance in SIWES and performance in industrial chemistry among male and female undergraduate students in Kano State, Nigeria?

### **Hypotheses**

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

**H<sub>01</sub>** There is no significant relationship between performance in SIWES and performance in industrial chemistry among undergraduate students in Kano State, Nigeria.

**H<sub>02</sub>** There is no significant relationship between performance in SIWES and performance in industrial chemistry among male and female undergraduate students in Kano State, Nigeria.

### **Methodology**

The study was conducted using two designs that is, correlational and ex post factor research designs. Correlational design is a research strategy that enables the researcher to correlate the relationship between or among variables. Ex post factor research focuses on how action that have already occurred can predict certain causes. The study is non-experimental and therefore variables are not manipulated. After a period of SIWES programme, the performance in SIWES of all the students were collected from the Chemistry Departmental SIWES coordinators of the universities. SIWESCSPT was administered to the students to determine their performances. The scores in the test formed part of the data for answering research questions and testing null hypotheses. The population for the study consists of the entire four hundred and fifty (450) Undergraduate Chemistry Students in level 300 in three (3) public universities in Kano state, Nigeria during the 2022/2023 academic session. A total of Three hundred and twenty (320) students were sampled from the population. One federal university was purposively selected from a total population of three universities. Then, random sampling technique involving

balloting method was used to select the other university from the remaining state universities. This was done by assigning two alphabets to the two state universities on a piece of papers, shuffled and asked neutral body to randomly select one paper. At the end of the exercise, two universities were selected.

SIWESCSPT was adapted as an instrument for data collection by the researcher from 2016 to 2020 past questions of Industrial Chemistry concept. SIWESCSPT is centered mainly on the cognitive test to measure students' performance. SIWESCSPT was given to two (2) senior lecturers with the minimum rank of PhD for validation. A pilot test of the instrument was carried out using students from one of the university which was part of the population but not in the sample. The reliability coefficient,  $r$  for SIWESCSPT was determined using (PPMCC) and was found to be 0.88. The data generated for the study through the test instrument was collected and analyzed using the Statistical Package for Social Sciences (SPSS) Version 20 and STATA (version 17) 2021 software. Pearson Product Moment Correlation Coefficients was used in responding to research questions, while at the inferential level, regression analysis is used in testing formulated null-hypotheses, at 0.05 level of significance. The inferential level forms the basis to permit decision making on whether to reject or retain the null-hypotheses after being tested.

## Results

The research questions were answered with the use of correlation analysis to determine the extents of relationship of independent variable (Performance in SIWES) with the dependent variable (Performance in Industrial Chemistry). Regression analysis was used to test the null hypotheses of the study with the significance level fixed at 0.05.

**Research Question One:** What is the relationship between performance in SIWES and performance in industrial chemistry among undergraduate students in Kano State, Nigeria?

**Table 1: Pearson Correlation Analysis between Performance in SIWES and Performance in Industrial Chemistry.**

Model	$r$	$R^2$	Adjusted $R^2$	Std. Error of the Estimate
1	0.653	0.426	0.425	7.4777

Table 1 presents Pearson Correlation analysis between performance in SIWES and performance in industrial chemistry among undergraduate students in Kano State, Nigeria. The analysis revealed that the correlation coefficient (r) obtained was 0.653 equivalent to 65.3% indicating a strong positive relationship between the students' performance in SIWES and performance in industrial chemistry among undergraduate students in Kano State, Nigeria. The test model revealed a coefficient of determination of the variation in performance in industrial chemistry ( $R^2$ ) of 0.426; which implies that the selected performance in SIWES could account for 42.6% of the variation in undergraduate students' performance in industrial chemistry. Thus, null hypothesis one ( $H_{O1}$ ) was analyzed.

**Hypothesis One:** There is no significant relationship between performance in SIWES and performance in industrial chemistry among undergraduate students in Kano State, Nigeria.

**Table 2: Linear Regression Analysis between Performance in SIWES and Performance in Industrial Chemistry**

Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig.	Remark
	B	Std. Error	Beta			
1 (Constant)	39.153	2.581		15.169	0.000	
Chemistry Performance	0.065	0.042	0.653	15.381	0.000	S

Prediction Significant at  $P \leq 0.05$

Table 2 presents the summary of linear regression of the relationship between performance in SIWES and performance in industrial chemistry among undergraduate students in Kano State, Nigeria. The analysis revealed that the P-value obtained was 0.000 which is less than the alpha value of 0.05 level of significance. This indicated that, the null hypothesis one is therefore rejected.

**Research Question Two:** What is the relationship between performance in SIWES and performance in industrial chemistry among the male and female undergraduate students in Kano State, Nigeria?

**Table 3: Pearson Product Moment Correlation Coefficient (PPMCC) on the Relationship between Performance in SIWES and Performance in Industrial Chemistry among Male and Female Students**

Variables	Gender	SIWES Performance		Chemistry Performance	
		Male	Female	Male	Female
SIWES Performance	Male	1.000	0.173	0.707	0.017
	Female	0.173	1.000	0.174	0.602
Chemistry Performance	Male	0.707	0.174	1.000	-0.010
	Female	0.017	0.602	-0.010	1.000

Table 3 present the summary of Pearson Product Moment Correlation Coefficients (PPMCC) on the relationship between performance in SIWES and performance in industrial chemistry among male and female undergraduate students. The results show that the matrix of relationship among all variables depicts a good fit. The relationships between male Performance in SIWES with male and female Performance in industrial chemistry are 0.707 and 0.017, indicating a strong and weak positive relationships respectively; while male Performance in SIWES with female Performance in SIWES is 0.173 indicating a weak positive relationship. However, female Performance in SIWES with male and female Performance in industrial chemistry are 0.174 and 0.602, indicating a weak and strong positive relationships respectively; while male performance in industrial chemistry with female Performance in industrial chemistry is -0.010 indicating a weak negative relationship. Thus, null hypothesis two ( $H_{02}$ ) was analyzed.

**Hypothesis Two:** There is no significant relationship between performance in SIWES and performance in industrial chemistry among male and female undergraduate students in Kano State, Nigeria.

**Table 4: Multiple Regression Analysis between performance in SIWES and Performance in Industrial Chemistry among Male and Female Students**

SIWES Performance	Model	Gender	Unstandardized Coefficient		Standardized Coefficient		P	Remark
			B	Std. Error	Beta	t		
Male	Chemistry Performance	Male	0.688	0.055	0.707	12.55	0.000	S
		Female	0.024	0.053	0.017	0.45	0.655	NS
	Constant		33.840	4.638		7.30	0.000	
Female	Chemistry Performance	Male	0.183	0.063	0.174	2.90	0.004	S
		Female	0.596	0.061	0.602	9.71	0.000	S
	Constant		33.341	5.345		6.24	0.000	

**Prediction Significant at  $P \leq 0.05$** 

Table 4 presents the summary of multiple regressions between the performance in SIWES and performance in industrial chemistry among male and female undergraduate students. The analysis revealed that, male performance in SIWES predicts male performance in industrial chemistry with P-value of 0.000 which is less than 0.05 level of significance; similarly, female performance in SIWES predicts male and female performance in industrial chemistry with P-values of 0.004 and 0.000 respectively which are less than 0.05 level of significance. Thus, the null hypothesis two which states that, there is no significant relationship between performance in SIWES and performance in industrial chemistry among male and female undergraduate students in Kano State, Nigeria is therefore rejected. However, male performance in SIWES do not predicts female performance in industrial chemistry with P-value of 0.655 which is greater than 0.05 level of significance. Thus, the null hypothesis two is therefore retained.

**Discussion**

The results from the study revealed that there is significant relationship between performance in SIWES and performance in industrial chemistry. This shows that undergraduate students SIWES performance results predict performance in industrial chemistry they acquired during SIWES

program. This is so surprising because, students nowadays showed poor study habit due to increase in time playing with their phones in the workshops or laboratories and so on instead of spending more time on the work assigned to them by their respective supervisors in the industry. However, this depends on the type of peers (good or bad) students they interact with. Students who come across or interact with bad peers; such as those who engage in bad habits in the workshops like chatting on their phones while on duty among others are likely to have low academic performance. Finding of the study is in line with the findings of Olumoko (2017) which revealed that greater influence of SIWES on students' acquisition of practical knowledge and performance paved way for individual choice of career. And also the findings of Otunola, Olanipekun and Alabi (2020) the study rejects the null hypothesis and accepts the alternative hypothesis that there is significant difference between the departmental and yearly SIWES scores of students.

Also the results from the study revealed that, there is significant relationship between male performance in SIWES and male performance in industrial chemistry; similarly, there is significant relationship between female performance in SIWES with male and female performance in industrial chemistry respectively. However, there is no significant relationship between male performance in SIWES and female performance in industrial chemistry. Hence, male performance in SIWES is a predictor to male performance in industrial chemistry, similarly, female performance in SIWES is predictor to male and female performance in industrial chemistry respectively. In the same vein, male performance in SIWES is not a predictor to female performance in industrial chemistry. Various studies have been carried out in science education to ascertain the influence of gender with regards to academic performance. Suleiman (2016) discovered no gender disparity in the academic performance of students exposed to demonstration teaching method in science. Sunday (2018) reported that boys performed better than girls in science, technology and mathematics. Findings of this study contradicts the finding of Auru and Wakili (2020) who found that, Students Industrial Experience Scheme (SIWES) as presently implemented in Nigeria cannot achieve any meaningful result with regards to preparing students adequately to function properly in the workplace; the programme therefore needs to be completely overhauled, reevaluated and appropriate changes made. But in line to this study, Musa (2019) showed that the mean (GPA) of

3.5846 for the students after the scheme is significantly greater than the mean (GPA) of 2.9214 for the students before the scheme at 95%. Hence, there is significant improvement in the academic performance of the students after the exercise. The result further revealed that there is high positive correlation ( $R= 0.770$ ) between the performances of the students in the exercise and their academic performances. The study concluded that the scheme is desirable. This contradiction could be as a result of the location and or the type of industry students performed their SIWES programme.

### **Conclusion**

From the findings and discussion, the following conclusions were drawn;

1. Performance in SIWES predicts performance in industrial chemistry of undergraduate Students; hence there is relationship between performance in SIWES and performance in industrial chemistry of undergraduate Students.
2. Male performance in SIWES predicts male performance in industrial chemistry; similarly, female performance in SIWES predicts male and female performance in industrial chemistry respectively. However, male performance in SIWES does not predicts female performance in industrial chemistry; hence there is relationship between male performance in SIWES and male performance in industrial chemistry; similarly, there is relationship between female performance in SIWES with male and female performance in industrial chemistry respectively. However, there is no relationship between male performance in SIWES and female performance in industrial chemistry.

### **Recommendations**

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

1. SIWES coordinators or supervisors in the department of chemistry should continue to exposed students on the basic industrial chemistry concept such as chemical synthesis, heat transfer processes, industrial waste and pollution among others before the programme commences. These should be done before their departure for SIWES.
2. SIWES supervisors in the departments should also evaluate both male and female students after returning to school. They should be evaluated on their performances in industrial chemistry concept of the programme.

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**ASSESSMENT OF ACCESSIBILITY AND UTILIZATION OF ICT EQUIPMENT BY  
AGRICULTURAL SCIENCE TEACHERS IN SENIOR SECONDARY SCHOOLS IN  
YOBE STATE, NIGERIA**

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**ABSTRACT**

*This study examined the accessibility and utilization of information and communication technology equipment among teachers of agricultural science in senior secondary schools in Yobe state, Nigeria. Two research questions were formulated in accordance with the objectives of the study. Descriptive survey research design was used for the study to collect data using adapted constructed questionnaire which was prepared and validated by the experts in educational technology and statistics. The population of the study was 264 agricultural science teachers in senior secondary schools in Yobe State. Fraction sample size of 132 teachers which was 50% of the total population was used due to the similar demographic homogeneity across the three educational zones. Mean and standard deviation were used to answer the stated research questions. It is concluded therefore that, the accessibility and utilization of ICT equipment had positive effects on agricultural science subject in senior secondary schools in Yobe state. Based on the findings, two recommendations are given, that: in order to make teaching and learning of agricultural science effective, state government should provide more relevant ICT equipment in the state owned secondary schools in Yobe State. The provided ICT*

*equipment be it old and/or new should be made accessible to the teachers so as to generate more effective teaching of agricultural science in secondary schools in Yobe State.*

**Keywords:** *Accessibility, utilization, ICT, agriculture*

## **Introduction**

The rapid growth in information and communication technology (ICT) have brought remarkable changes in the 21<sup>st</sup> century as well as affected the demands of modern societies. ICT is becoming increasingly important in daily lives and in educational system. Therefore, there is a growing demand on educational institutions to use ICT in teaching the skills and knowledge, because of realizing effect of ICT on the workplace and everyday life, the educational institutions have to try to restructure their educational curricular and classroom facilities in order to bridge the existing technology gap in teaching and learning. This restructuring process requires effective adoption of technologies into existing environment in order to bring learners with knowledge of specific subject areas, to promote meaningful learning and to enhance professional productivity (Charles, 2012).

ICT has brought into the system new and emerging technologies that have come to replace or challenges the traditional methods involved in the teaching and learning process. There is need therefore, for proper integration of ICT instructional delivery for purposeful and experimental learning to take place. This involves being able to seek out and use information stored in computers and other Electronic materials in order to be up – to- date. According to Dabesaki (2005) ICT tools have been proved to be very useful support materials in teaching and learning. That is why different governments globally made investment in ICT it improves teaching and learning in schools. For example, in United Kingdom (UK), the government spending on ICT in educational sector in 2008 – 2009 was 2.5 billion US dollars, in United States the expenditure on k – 12 schools and higher education institutions was 6 billion and 4.7 billion dollars respectively and in New Zealand, the government spent over 410 million dollars every year on schools' ICT infrastructures (Charles, 2012). Nigeria government on her effort towards the development of information technology, the National Policy for information technology was formulated in 2001 with a vision 'to make Nigeria IT capable country in Africa and a key player in the information, using IT as the engine for sustainable development, and global competitiveness' (Federal ministry for science and technology, 2001). The mission statement recognized the need to use IT

for education. In addition, the general objectives (3 out of 31) focused on integrating ICT into the mainstream education and training, with a strategy to restructure educational systems at all levels to respond effectively to challenges and imagined impact of the information. Also, the Nigerian government has been in the lead in the integration of ICT tools with the number of initiatives through collaborations with development partners to initiate programme like School Net Nigeria, Computers – in – Schools projects, One – Laptop – per-Child etc.

ICT has been defined by Adeosun (2010) as the emergence of tools of microelectronic and telecommunications that are used in the automatic acquisition, analysis, storage, retrieval, manipulation, management, control, movement, display, transmission, reception and interchange of quantitative and qualitative data. Information and Communication Technologies (ICTs) are information handling tools that are used to produce, store, process, distribute and exchange information. These different tools are now able to work together, and combine to form networked world wide which reaches into every corner of the globe (UNDP Evaluation Office, 2001). It is an increasingly powerful and for participating in global markets. Promoting political accountability; improving the delivery of basic services; and enhancing local development opportunities (UNDP, 2006). Ogunsola (2005) defines ICT as 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. 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).

ICT equipment refers to all digital tools and machines used in teaching and learning which includes computer hardware and software, radio, data projector, overhead projector, digital camera and internet facilities, smart board, videos, filmstrips, fax machine, scanning machine and telephone etc. Accessibility, in the opinion of Zubairu (2014) refers to the level at which teacher have close contact with an ICT equipment for optimal utilization. Accessibility going by this study, refers to ICTs equipment per number or population of teachers that uses an ICT at a disposable time. Accessibility of ICT equipment in teaching agricultural sciences important because at times the equipment may be available but not accessed by teachers.

Utilization according to Mahmud (2016) is the situation where teachers and students have knowledge of the skills to operate the computer system and navigate information on the internet with ease in content delivery. Utilization, going by this work refers, to the rate or how often ICT equipment in teaching agricultural science is put into use or services by agricultural science teachers in senior secondary schools. Utilization of ICT equipment depends on their availability in the schools, and at the same time availability creates accessibility.

E – Learning is becoming one of the most common means of using ICT to provide education to students either on or off campus by means of teaching online offered via web-based systems. Although ICT equipment have been looked upon as tools for uplifting the standard of education in any nation, the level of compliance in implementing the ICT equipment in the instructional development process leaves much to be desired in Nigerian educational system. All the described variables constitute the background in which this study will be conducted on the assessment of availability, accessibility and utilization of ICT equipment by agricultural science teachers in senior secondary schools, Yobe state.

### **Statement of Problem**

With the estimated population around 229.5 million, Nigeria has set for herself a wide array of ambitious goals of several global and national frameworks that seeks to promote the fundamental right of her citizens to qualify education. Despite this, at the E9 meeting held in Indonesia in April 2008, it was revealed that Nigeria is one of the only two countries that were at the risk of not meeting the targets of education for all (EFA), because the quality of teaching and learning due to improper adoption of ICT resources in our schools remained a significant challenge (Adesun, 2009). However, the 21<sup>st</sup> century has currently coiled everything into ICT in which education is inclusive. The use of ICT has made teaching and learning process very impressive. The use of these equipment by agricultural science teachers is expected to be such that contents of curriculum should be in accordance with the utilization of equipment in the most effective way.

The researchers went on to interact with people within the state and heard that, there is argument on the availability of ICT equipment in the state. Some argued that government furnished the schools with available ICT equipment that are available, accessible and utilized by teachers. Some stressed that there was no available ICT equipment in the schools. Others stated that the

available ICT equipment were not accessible and not properly utilized by agricultural science teachers. In the same vein, some previously conducted research works on the use of ICT equipment in Nigerian secondary schools affirmed this statement. For example, the findings of Muhammad, Hamza and Suleiman (2014) affirmed that some secondary schools in Nigeria were yet to embrace ICT. Another problem identified by Mahmud (2016) is that, the Joint Admission and Matriculation Board (JAMB) has made their examination patterns with computer. But yet, about 80% of public secondary schools students were unable to operate and or use other ICT equipment. These may lead them to lack of understanding of some agricultural science areas particularly related to ICT operation. Hence, leading them to have mass failure in the JAMB which at the long run affects their zeal to further education and blocked their chance of being admitted into tertiary institutions. To what extent does ICT equipment are accessible and properly utilized in senior secondary schools in Yobe State is yet to be ascertained.

It was also observed by Mahmud (2016) that there are complex or difficult topics when it comes to explain in agricultural science subject in secondary school such as soil profile how to determine Chemical weathering of rocks, description of farm animals which don't have a breed around, how to restrain different animals. These complex areas may not be handled well by teachers and understood by students by mere explanation. However, different computer programs and web pages can be used to animate these content areas to make them more concrete and easier to understand. Micro – media flash and cinema 4D are good computer packages that are used in developing animation in some complex areas. Also, Microsoft power point can be used in the presentations. Based on these problems therefore, we felt it deem to conduct a research on assessment of accessibility and utilization of ICT equipment by agricultural science teachers in senior secondary schools in Yobe state, Nigeria.

### **Objectives of the Study**

The objectives of the study are to:

1. Ascertain the level to which ICT equipment are accessible for the teaching of agricultural science in senior secondary schools in Yobe state - Nigeria
2. Assess the extent of utilization of ICT equipment for the teaching of Agricultural science in senior secondary schools in Yobe state - Nigeria.

## Research Questions

Based on the objectives, the study answers the following questions:

1. What is the level of accessibility of ICT equipment in teaching of agricultural science in senior secondary schools in Yobe State?
2. To what extent do teachers utilize the ICT equipment in teaching of agricultural science in senior secondary schools in Yobe State?

## Methodology

This study adopted a descriptive survey research design. The population of 264 teachers of agricultural science subject in senior secondary schools of Yobe State were used. Fractional sample of 132 respondents from Damaturu, Gashua and Potiskum educational zones were proportionally selected to enable the researchers to come up with reliable and acceptable findings through the use of structured questionnaire, named “accessibility and utilization of ICT equipment questionnaire (AU - ICTEQ)” developed by the researchers and validated by education technology experts in curriculum and instruction department, federal college of education technical, Potiskum Yobe State. Mean and standard deviation were used to answer the research questions.

## Results

**Research Question one:** What is the level of accessibility of ICT equipment in teaching of agricultural science in senior secondary schools in Yobe state?

**Table 1 mean and standard deviations of accessibility of ICT equipment for teaching agricultural science in senior secondary schools in Yobe state**

variable	N	X	SD
Highly accessible	132	7.24	2.31
Moderately accessible	132	3.40	3.00
Not accessible	132	4.63	3.03

**Source: field work 2024**

Table one showed the mean and standard deviations of the level to which ICT equipment are accessible for teaching agricultural science in senior secondary schools in Yobe state. The results revealed that, “highly accessible” had a mean score of 7.24 with standard deviation of 2.31. “moderately accessible” had a mean score of 3.40 with a standard deviation of 3.00. Whereas “not accessible” had a mean score of 4.63 with a standard deviation of 3.03. This implies that

ICT equipment are at highly accessibility level ( $m = 7.24$ ) for teaching agricultural science in senior secondary schools in Yobe State.

**Research Question Two:** To what extent do teachers utilize the ICT equipment in teaching of agricultural science in senior secondary schools in Yobe state?

**Table 2 Mean and Standard Deviations of Utilizing ICT Equipment for Teaching Agricultural Science in Senior Secondary Schools in Yobe State**

variable	N	X	SD
Always used	132	8.28	3.64
Occasionally used	132	6.34	1.93
Not used	132	5.01	3.32

**Source: field work 2024**

Table 2 showed the mean and standard deviations of extent to which ICT equipment are utilized for teaching agricultural science in secondary schools in Yobe state. The results revealed that, “always used ” had a mean score of 8.28 with a standard deviation of 3.64. “Occasionally used” had a mean score of 6.37 with a standard deviation of 1.93, whereas “not used ” had a mean score of 5.01 with a standard deviation of 3.32. This implies that ICT equipment are always used ( $m=8.28$ ) for teaching agricultural science in Yobe state.

## Discussion

The findings from table one revealed that, there is highly accessible ( $m = 7.24$ ) of ICT equipment when teaching agricultural science subject in senior secondary schools in Yobe state . Toure (2008) found that, majority of the teachers had access to a computer and the internet in their schools. He further accessed that, 98% of the teachers had access to the internet at the schools. The findings is also in line with that of CCK (2010) who mention that, 78.6% of the teachers had access to cyber cafes and 36.7%through ICT training centers that offer a short term courses during the school recess. The similar findings of TNS research international (2010) mentioned that, majority of the teachers, about 40% had more than ten hours in a week of access to the school computers, However, Kenya schoolnet (2003) found that the level of access to locally relavant content by the teachers was high as 82.4% said they had access to local web-based training programmes. Moreso, Safaricom, Zain, Orange and Yu (2009) stated that, it is

seen that teachers' levels of access to the schools' computers is positively linked to their basic ICT literacy skills as reported by the school heads.

Contrarily, Wisdom and Terumber (2012) found that, teacher educators in COE Katsina-ala could not access ICT resources for instructional development purposes. This finding is the same with that of Dogara, Ahmadu, and Lawal (2003) who found that, ICT resources were inaccessible to STM teachers and students in some secondary schools in Kano metropolis. Also Madu and Raula (2011) found that, the e-learning facilities were for teaching agriculture in Minna University was inadequate and students' accesses was negligible.

The findings from table two revealed that, the extent of utilizing ICT equipment in senior secondary schools of Yobe state when teaching agricultural science is always utilized ( $m = 8.28$ ). This finding is the same with that of Kiptalam and Rodrigues (n.d) who found that, in general, teachers broadly agreed that with the use of internet and technology, their lesson plans are richer to 55%. BEE and Chia (2008) found that teachers were receptive to ICT and reported a high extent of ICT use in teaching and professional job. Also, Totolo (2009) found that it was reported that the use of ICT in schools has influenced some changes in the digital scholarship which is a modern technology applied in teaching, learning and research activities. The same findings with that of Setzer (2010) found that majority of the means of teachers using ICT were highly above the average mean of 2.5 in a scale of 1 to 5 used for rating the use of computers by teachers and children. Moreover, Bose (2009) found that, students teachers used computers in teaching agricultural science in schools with relatively high mean score ( $m=3.97$ ,  $SD=0.73$ ). Also, Sam, Othman, and Nordin (2005) found that majority (76%) of the surveyed students teachers respondents indicated that ICT was usable in schools. They also mentioned that more than 70% agreed to use computers for typing agricultural science notes and spreadsheet for data analysis.

In summary, Boakye and Banini (2008) measured the teachers' readiness for use of ICT from schools in Benin, Cameroon, Ghana and Mali with the objective of determining if the teachers were involved in the process of integrating ICT in to education in these countries. Teachers were asked about their skills with regard to ICT and use of ICT in their pedagogical practices of the teachers questioned, 71% had never used the computer in class, while 10% used it for classroom activities. About 44% had never used the computer in preparing lesson notes while 49% did.

Also, Ezeoba (2007) found out that, the degree of utilization in instructional delivery was that teachers mostly used textbooks resources. Also, Atsumbe, Raymond, Enoch and Duhu (2012) find out the adequacy of e-learning infrastructure for effective teaching and learning in federal university of technology, Minna. They also found that, the proficiency of the use of e-learning infrastructure to facilitate teaching by the lecturers and learning by the students are not appreciable.

### **Conclusion**

Based on the outcomes of this research work, the researchers concluded that there is highly accessibility and frequent usability of ICT equipment by the teachers when teaching agricultural science subject in senior secondary schools in Yobe state.

### **Recommendations**

Based on the outcomes of the study, the following recommendations were made:

1. The researcher, recommends that, the provided ICT equipment be it old and or new should be made accessible to the teachers so as to generate more effective teaching of agricultural science in senior secondary schools in Yobe state
2. In order to promote teaching and learning agricultural science in senior secondary schools in Yobe state, the state government in collaboration with schools principals and other educational stakeholders should ensure the properly utilization of the ICT equipment not to be dumped by the teachers in schools.

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**REDEFINING HUMAN RIGHTS EDUCATION FOR THE CHALLENGES AND  
ASPIRATIONS OF FUTURE GENERATION  
BY**

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**ABSTRACT**

*The necessity to redefine Human Rights Education (HRE) arises from the evolving challenges and aspirations of future generations. Despite advancements in integrating HRE into formal education, significant gaps persist in policy implementation and impact. The dynamic nature of human rights issues, global interconnectedness, technological disruptions, and demographic shifts require a thorough re-evaluation of HRE. Redefining HRE should focus on equipping learners with the necessary knowledge, skills, and values to navigate complex human rights challenges, promote social justice, and foster peace. This involves introducing innovative teaching methods, inclusive curricula, leveraging technology and community engagement. Successful models worldwide demonstrate HRE's integration into various educational settings, including national initiatives and community programs. Collaborative action among governments, academic institutions, civil society and communities is therefore crucial for successful redefinition and implementation of HRE. Investing in this redefinition is a strategic investment in the future, for empowering young people to advocate for Human Rights Education in Africa – and globally – needs thorough examination to determine its role in equipping individuals with the knowledge required for understanding and advocating for their rights. Concerned stakeholders are therefore expected to give priority to HRE through policy formulation, grassroots advocacy, cultural sensitivity, funding initiatives and teacher support to strengthen HRE implementation and monitoring.*

**Key words:** Human Rights Education, Redefining, Challenges, Aspirations, Future Generations.

**Introduction**

In recent decades, many countries have made significant strides toward incorporating human rights education into their national curricula. The goal is to instil a culture where respect for human rights is ingrained from a young age. Subjects like Civic Education and Social Studies have integrated lessons on topics such as civil liberties, democratic values, conflict resolution, and diversity. Some nations have even gone a step further by making human rights education a mandatory standalone course. This demonstrates a commitment to cultivating well-informed citizens who understand their rights and responsibilities in society. However, the level of implementation of this policy has varied widely across countries. For instance, some nations

have struggled to keep pace with the implementation of Human Rights Education due to various factors such as lack of resources or qualified teachers.

This has led to a situation where Human Rights Education receives less attention compared to core subjects like Mathematics and English. Monitoring and evaluation of curriculum implementation are often weak. This risks the new guidelines existing more on paper than in reality within certain school systems. Civil society groups play an important role in advocating for adequate funding, training, and oversight, to ensure that policy matches implementation on the ground. Outside of schools, many African Union member states have worked to strengthen national human rights institutions. They have established Ombudsman offices, national human rights commissions, and other protective bodies aimed at promoting and protecting rights through activities like public education, policy advice, and investigation of complaints.

However, the independence and effectiveness of these institutions vary between countries. Ensuring they have sufficient non-partisan leadership, funding, and legal authority remains a work in progress for building strong democratic systems of accountability. At the community level, traditional practices in some areas often come into tension with internationally recognized rights. For example, certain customs relating to inheritance or land ownership may conflict with modern human rights standards. Striking a balance between cultural sensitivity and universal rights requires open dialogue among stakeholders. Numerous reports indicate that human rights violations continue to be widespread across many regions globally. According to the US Department of State's annual country reports (2022), numerous countries, e.g. Nigeria, Angola and Rwanda have been involved in violations of human rights. Notable examples include Russia's actions against civilians during conflicts and Iran's repression of peaceful protests. In Africa, countries like Nigeria face severe challenges related to human rights abuses including torture in correctional facilities, arbitrary arrests, enforced disappearances, and violent insurgency. These persistent violations underscore the urgent need for effective Human Rights Education that not only informs individuals about their rights but also empowers them to advocate for themselves and others within their communities.

## Current State of Human Rights Education

Human Rights Education can be described as varied across different regions depending on specific initiatives in place. In Africa specifically (Council of Europe, 2024), it involves:

1. **Integration into Formal Education:** Efforts to integrate human rights education into formal education systems have been increasing over recent years. Some countries have successfully incorporated human rights principles into their curricula at various educational levels.
2. **Community-Based Programmes:** Community-based programmes have emerged as essential vehicles for raising awareness about human rights issues among marginalized populations. These initiatives often focus on empowering individuals through education about their rights.
3. **Role of Non-Governmental Organizations (NGOs):** Non-Governmental Organizations play a critical role in promoting Human Rights Education through workshops, campaigns, advocacy efforts, and community engagement activities.

Globally, it involves:

1. **International Support:** Human Rights Education is endorsed by international organizations such as the United Nations (UN) and UNESCO which provide resources and guidelines for HRE into both formal and educational settings as well as non-formal opportunities (UNESCO, 2021).
2. **Universal Framework:** the adoption of international instruments like the Universal Declaration of Human Rights has set a global framework that supports educational initiatives aimed at promoting awareness around human rights.

UNESCO (2021) reported that while there has been progress made in advancing Human Rights Education globally over recent decades – particularly within formal educational settings – numerous remain:

1. **Resource Limitations:** Many schools lack adequate resources or trained personnel capable of effectively delivering human rights education.
2. **Cultural Barriers:** In some regions cultural norms may conflict with universal human rights principles leading to resistance against certain teachings.

3. **Evaluation Challenges:** There is often insufficient monitoring or evaluation mechanisms in place that assess how well Human Rights Education programs are being implemented or their impact on students' understanding
4. **Political Will:** in some cases, political instability or lack of commitment from governments hampers efforts toward meaningful integration of HRE into national curricula.

Despite these obstacles there are promising models emerging from various parts around the world that showcase effective practices which could be replicated elsewhere.

### **Redefining Human Rights Education (HRE) for Future Generation**

Redefining the landscape Human Rights Education for future generations is paramount to ensuring that young individuals are equipped with indispensable knowledge needed to confront intricate challenges facing modern societies today. The germane question that needed to be raised at this juncture is what is the rationale for redefinition?

Several compelling reasons necessitate this redefinition:

1. **Dynamic Nature of Violations:** As new forms emerge due to technological progress, globalization etc.; traditional approaches may not effectively address these challenges.
2. **Interconnected Global Issues:** Many contemporary issues such as climate change, poverty, inequality etc.; transcend borders requiring collaborative approaches rooted in solidarity.
3. **Technological Challenges:** Emerging technologies pose ethical dilemmas warranting an updated curriculum that prepares students adequately navigate these complexities.
4. **Comprehensive Approach Needed:** Traditional HRE primarily focuses on awareness; however empowering individuals requires critical thinking, problem – solving, advocacy skills etc.
5. **Evolving Demographics and Values:** New generations possess diverse perspectives necessitating an adaptable curriculum relevant across cultural contexts.

### **Strategies for Human Rights Education (HRE)**

To effectively redefine HRE, council of Europe (2024) identified several strategies that can be adopted:

1. **Curriculum Integration:** Ending human rights principles across all subjects rather than treating them as standalone courses ensures holistic understanding among students.
2. **Experiential Learning:** Incorporating role-playing case studies simulations allows learners practical engagement with real-world scenarios related to human rights.
3. **Technology Integration:** Utilizing digital social media platforms enhances accessibility while fostering interactive learning experiences.
4. **Focus on Critical Thinking:** Developing analytical skills enables students navigate complex societal issues critically rather than passively accepting information presented to them.
5. **Emphasis on Advocacy Skills:** Equipping learners practical tools become effective advocates promotes active citizenship within communities.
6. **Global Perspective:** Fostering understanding transnational challenges encourages solidarity among youth across borders leading collective action promote justice and equality

### **Best Practices in Human Rights Education**

Examining successful models around the world provides valuable insights into effective practices that can inform future approaches toward HRE. Some of the models that can be considered include:

1. **Whole-School Programmes:** This demands the integration of human rights throughout school life fostering environments where respect dignity are prioritized. The Malaysia's SUHAKAM (Human Rights Commission of Malaysia) programme initiative as presented in the Human Rights Commission of Malaysia (Amendment) Bill 2023 (2024), aims to enhance the protection and promotion of human rights in the country can be explored. The Bill aims to improve the mechanisms for addressing children's rights and complaints. It involves establishment of Children Commissioners who will have the power and access to visit places of detention and institutions. The programme is equally aimed at empowering SUHAKAM to inquire into human rights infringements and to conduct mediation and conciliation.
2. **Early Integration:** Introduction of age-appropriate topics early childhood education to ensure foundational understanding develops over time as practiced in countries like

Finland can be introduced. Finland's curriculum is adaptable, allowing teachers to modify subjects according to the interests and developmental stages of their kids as one way of guaranteeing that education is interesting and pertinent. This integration assists kids to understand difficult subjects in an approachable and developmentally appropriate way with emphasis placed on social skills to promote interaction among them.

3. **Culturally Sensitive Approaches:** Adaptation of materials to local contexts while maintaining universal principles to promote indigenous rights education.
4. **Community Partnership:** Collaborating with local organisations to provide practical experiences can enhance learners' engagement advocacy efforts.
5. **Youth Empowerment Initiatives:** Encouraging youth-led projects will foster leadership skills among young people and enable them take active roles addressing issues affecting their communities.
6. **Continuous Professional Development for Educators:** Investing in teacher training will enhance capacity delivery effective for HRE while promoting cultures and respect for equality within classrooms.

## **Conclusion**

This paper has discussed the rapidly evolving global landscape which presents unprecedented challenges to the effective promotion and protection of human rights. It took a position that as these challenges mutate and intertwine, the limitations of traditional Human Rights Education (HRE) become increasingly apparent. Hence, it could be concluded that a redefined and comprehensive approach to HRE is therefore germane to equip future generations with the knowledge, skills, and values needed to navigate this complex world and champion human rights for all. It observed that while progress has been made in advancing HRE over the past decades, significant challenges remain that demand collaborative action from all stakeholders.

Some of the key points discussed include the dynamic nature of human rights issues, the interconnectedness of global challenges, and the need for HRE to adopt holistic and transformative approaches that empower individuals as advocates and change-makers. Reimagining HRE pedagogies, curriculum and teaching strategies is therefore, imperative to ensure relevance and impact. Best practices from around the world provide guidance on effective integration of HRE into formal, non-formal and informal settings.

## Recommendations

A call to action is made to all relevant stakeholders – governments, educational institutions, civil society organisations, communities and individuals. Governments must prioritise HRE through policy, funding and teacher support. Educational systems must strengthen HRE implementation, monitoring and collaboration. Civil society has a role in grassroots advocacy, awareness-raising and ensuring cultural sensitivity. Communities should engage youth as leaders and promote interactive learning approaches.

Global solidarity and sharing of best practices is also encouraged for progress. By redefining HRE through comprehensive and collaborative efforts, we can cultivate in future generations the requisite knowledge, skills and values for championing human rights and building a more just, sustainable and peaceful world for all. Investing in HRE is an investment we want in the future.

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**ASSESSMENT OF EFFECTIVENESS OF ALMAJIRI INTERVENTION PROGRAM IN  
YOBE STATE, NIGERIA  
BY**

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**ABSTRACT**

*The study assessed the effectiveness of Almajiri intervention program in Yobe state, Nigeria. The study was guided by two objectives and two research questions. The objectives are to determine the effectiveness of Almajiri intervention program in Yobe state and to determine the challenges facing the effectiveness of Almajiri intervention program in Yobe state. The study used exploratory research design. The population of the study comprised of 3090 Almajiri students from Gashua, Nguru and Geidam of Yobe state. The sample size was 346 Almajiri from the three locations of Gashua, Nguru and Geidam. Interview was used as the method of data collection and purposive sampling technique and snowball were used to reach the target beneficiaries. The study explored the effectiveness of five interventions; Uniform, Feeding, Toilet construction, learning materials and Introduction of literacy and numeracy. Themes were generated from the interview responses of the participants as well as the challenges facing the effectiveness of the interventions were also stated. Recommendations were drawn based on the findings as, Government should join hand with non-government organizations to have an accurate statistic of the tsangaya Almajiri population.*

**Introduction**

Provision of formal education to Almajiri's has become a subject of national discourse in Nigeria today. Nigeria has a population of 168.8 Million, nearly equally divided between Muslims (mainly in the north) and Christians. The country has the potential to build a prosperous economy, significantly reduce poverty. And provide health, education and infrastructure services to meet its population needs. Unfortunately, decades of military rule, coupled with a patronage-based political system has undermined Nigerian government structures, resulting in flawed democratic process marked by a lack of accountability and limited capacity at all level of government (Solomon 2015). Aged children (UNESCO reports there were 8,709,243 out of school children primary school age in Nigeria in 2010. Consequently, many parents have lost

confidence in the formal school system. In northern Nigerian, Muslim parents look to the traditional Qur'anic schools as a viable alternative to public schools (Solomon, 2015).

The Almajiri (Itinerant Qur'anic school pupils) constitute the largest group out of school children in Nigerian numbering over a million (ministerial committee on madrasah 2010); this segment of Nigerian population poses tremendous challenges to attainment of education for all (EFA) and millennium development goals (MGDS) as well as the notable international convention and protocols. To neglect this group does not only deny them their fundamental rights but also their innate potentials, which would remain large untapped and this may eventually jeopardize the country's pursuit of her home-grown technological development and economic transformation (universal basic education 2015) in Nigeria, Almajiri system started in the 11<sup>th</sup> century, as a result of the involvement of Borno rulers in Qur'anic literacy. Seven hundred years later, the Sokoto caliphate was founded principally through an Islamic revolution based on the teaching of Qur'anic. These experiences run similar Qur'anic learning also overtime came to be known as the Almajiri system of education (Ifijeh and James 2012). The Almajiri education system was made under mallam (teachers) and Almajiri (pupils) where teaching and learning process are taking place. The Mallam have privilege of taking children that brought for the nooks and corners of state by parents for Islamic education with a little stipend for accommodate and feeding of the child (Almajiri) with increase in the number of Almajiri, it became a burden in the neck of Mallam who have taken more than what they can cater for; consequently, made him impose the Almajiri (s) were made to brought for alms for their sustenance. That is why Almajiri are being found everywhere street to street and among other singing, begging and praying, appealing to the mercy for alms (money) (Sule, 2002 and Adefore 2012 in Jajudeen 2015).

Yobe state is a state that is located in the north eastern part of Nigerian and a state that is young compare to other northern state. In April 2020 the governors of northern state make a decision of banning the Almajiri system within their state and evacuate the children to their state of origin because of the Pandemic of corona (Covid 19). The decision to ban Almajiranchi, as is practice in this part of the country, has been on card for quite some time, now but regime after regime have been slow-foot in taking a firm decision on the matter. Nevertheless, the national security adviser (NSA) had been on the road loudly drawing the nation's attention to the dangers posed

by the Almajiri to the security of the nation. In December 2009 at lunch of the reverse national security strategy (NSA). NSA says that government couldn't continue to paper over the security of the nation he said: 'we cannot continue to push it under the carpet because eventually it will come back to bite us'. NSA, in the same mouth, had briefed the federal executive council on the same vexation matter, and had made the same plea. But the official position of the government was that the Almajiri ban could only be attained after wide consultations with all stake holders (Dori, 2020).

Also about the same time in November 2009 professor Ahmad Moddibo of Nassarawa state university, in a well attended lecture in Kaduna, organised by the center of historical research and documentation of Ahmadu Bello university, titled, before the ban on the Almajiri system of education in Nigeria he had lamented that the custom built schools for Almajiri by Jonathan administration were late on occupy, abundant and vandalized. Professor Moddibo, himself a former executive secretary of UBEC, posited that for the ban to be effective, we must address the challenges plaguing the Islamic system of education in Nigeria, and that is only possible by strict implementation of the UBE act, introduction of school the Marshal and catering for the welfare of the children. It was therefore, cheering news to hear that the northern governors have at least banned Almajiranci, as if it is praised here. However, what galls me and many people (said by the daily trust editor) I have spoken to on the matter, was the rider to the pronouncement to evacuate the children to their states of origin. Besides many other reasons forced evacuation smacks of tyranny. Uprooting citizens who have lived anywhere in the country and forcibly transporting them to their state of origin goes against the grain of many provisions of the constitution that allow freedom to live in any part of the country despite protest for many quarters, some governors went ahead. The evacuation exercise was carelessly done, putting hapless children in great distress and jeopardy as some were already infected with the dreaded coronavirus. Certain states such as Taraba refused to receive their share of indigenous Almajiri, thus putting them in Limbo (daily trust 2020). But it came as a surprise that Yobe state did not think much of the decision and would unilaterally act contrary to it. The report for Yobe State was blunt: the state would not ban Almajiri, would not evaluate children that were not state indigene, and would happily receive its indigene sent for other states. Honestly, I thought Yobe was just an ego trip to create an Almajiri sanctuary in the state. Along with Borno, its sister state,

Yobe falls smack within the epicenter of the Boko Haram insurgency, and I know that its educational infrastructure had been mercilessly buffeted by the ramping terrorists. Whole schools have been burnt down in many parts of the state tragically along with many teachers and students. You could say without any fear of contradiction that for many years now, Yobe schools have practically been under siege. To worsen matters the state had not been doing well in competitive examinations nationwide. I therefore, wondered how the state would cope with the additional number of students if would take in these times of lean resources. But I was struck by utterance of Dr. Muhamad Sani Adam, Yobe state commissioner of basic and secondary education, in the BBC Hausa programme *Taba kidi taba karatu* which was aired the penultimate Saturday and Sunday. I listened to the program intently and came away much better educated. Throughout the program Sani Adam came off as self-assured and confident in the course of action Yobe is taking in confronting the Almajiri issue. He was appointed last year (2019) from the job that he had held for some years now, as a director of Elkanemi College of Islamic theology. It is an old private institution ubiquitous on airport road, Maiduguri a college that over the last fifty (50 years) or so, had successfully combined offering Islamic studies along with modern curriculum the college which runs nursery, primary and secondary school sections had continuously uploaded students fluent in both Arabic and English that have gone to universities within the country and abroad. There are now quite a number of medical doctors, vets, engineers and other professionals in the country that had their roots in the iconic college. Probably it is the success of the college that had informed the governors to appoint him to this particular office. In that case he came well equipped for the daunting assignment (Dori, 2020).

In the course of the program Sani Adam explained that Yobe and Borno had historically been the centers of Islamic learning in the West Africa region students have been coming from far and wide to imbibe Islamic education for many of the schools spread in every nook and cranny of the state. The state had decided that it was now time to nurture and build on that heritage and age-old relationship not to jeopardise it, despite the obvious deficiencies (Dori, 2020).

Therefore, this paper will look at the challenges facing the effectiveness of Almajiri intervention program in Yobe state.

**Statement of the Problem**

Among the many complex challenges facing Nigeria society is the issue of Almajiri, which literally means “begging” in the Hausa language. Yobe state is a small state that is located in the north eastern part of Nigeria, and one of the states that was faced by the activities of insurgency. And it is backward in terms of education, and has so many populations of refugees and Almajiris. Many school of the state were burn down by the insurgency and some of the school like Almajiri modern school was occupied by refugees. Unfortunately the state announces the intervention into Almajiri education system, which was done by many state of the north. The state announces the collection of her indigenous Almajiris from other states and would not return those at her state to their state of origin. Instead they will intervention the system together with the formal education. Thus, the researchers want to find out the effectiveness of the intervention program. The Almajiri also has so many challenges as observed by the researchers before the introduction of intervention program. They were to look every day for what to eat three times in a day and also beg for other needs. They have no good place to sleep, no cloth to wear, no health care. They loss everything that human being need for survival. Apart from their own need they are to work in Mallam farm as laborers spending all day without giving anything to eat. Most of them it’s after they came back they look for what they will survive on. Therefore, this paper looked at the challenges facing the effectiveness of Almajiri intervention program in Yobe state.

**Objectives of the Study**

The following are the objectives of the study;

1. To determine the effectiveness of Almajiri intervention program in Yobe state, Nigeria
2. To determine the challenge facing the effectiveness of Almajiri intervention program in Yobe state, Nigeria.

**Research Questions**

The following are the research questions for the study;

1. What is the effectiveness of Almajiri intervention program in Yobe state, Nigeria?
2. What is the challenges facing the effectiveness of Almajiri intervention program in Yobe state, Nigeria?

### **Almajiri Education System in Nigeria**

The word Almajiri as written by Kabiru (2012) in Taiwa (2013) Quoting Abba Aji, a renowned Maiduguri based Islamic scholar, is a word borrowed from Arabic language, the word “Almajiri” meaning a seeker of Islamic knowledge. Its origin was the migration of Prophet Mohammed from Mecca to Medina. Those who migrated with the prophet to Medina were called ‘Al-mu hajirun’ means emigrants. These emigrants had no means of livelihood getting to Medina. But based on the fraternity established by the prophet, between their hosts and them, were co-opted into different trades and vocations as apprentices who were paid for their services. The Islamic religion came to Nigeria via the north, Fafunwa (1974) records that, Islam was brought to Hausaland in the early fourteenth century by traders and scholars about forty Wangarawa traders were thought to be irresponsible for introducing Islam to Kano, during the reign of Yakubu (1452-63) some Fulani scholars migrated to Kano beginning with books on Islamic theology and jurisprudence. During the reign of Muhammad Rumfa (1463-99) Islam became firmly rooted and Islamic principles were taught in different places. It was during this period that Muslim scholars from Timbuktu came to Kano to teach and preach Islam. The aim of the Islamic tradition which states that the best man among you is one who learns Qur’an and then teaches it, as written by Fafunwa, Islam gradually spread in the north and to the other parts of the country. The system of teaching and learning Qur’an and Arabic started from the northern Nigeria where the teachers depended on clarity (sadaqah). Fafunwa observed that this noble principle which was successfully applied in the early stage of the development of Islamic education reduced the status of the teacher to that of a mere beggar (Jawo 2013) Abdulqadir 2013, presented that, the British invaded the region and killed most of the emirs, were deposed and some of the emirs lost control of their territories and accepted their new roles, as mere traditional rulers. They also lost fundamental control of the Almajiri system; the British deliberately abolished state funding in respect to the system arguing that, they were religious schools with the loss of support from the government, its immediate community and the helpless Emirs, the Almajiri system collapsed like a pile of cards. Karatun boko western education was introduced and founded instead, the pupils now learned, Almajiri together with their mallams, having financial support reported to begging and other menial jobs for survival.

The term Tsangaya is thus word referring to Qur'anic learning center. It is usually used to be a locality build at the outside of the town, where the teaching and learning of Qur'anic education is observed. According to national council for the welfare of destitute (2001) and okugbeni (2003) in Babejo, Jamaluddin (2017) the Tsangaya system of educational has been in existence, centuries prior to British and it has been the source of moral and educational training, to northern muslim dominated societies. In Nigeria before the coming of the British colonial powers, in the year 1824, every family send their children to Qur'anic school, popularly known makarantar allo meaning the slate school; referring to the word curved object that the qur'an verse and chapters are hand-written and recited. Children daily go to the school for the careful of their haves and back when the school hour is over they live with parents receiving moral upbringing for further step in life (Kabiru 2012) qur'anic school predate British colonial in Nigeria and most parts of west Africa states, the school program went through couple of modifier especially during the Alkanemi dynasty. In this era the qur'anic education system was referred to as Tsangaya system and was based on the doctrine of migration (Hijrah). In pre-colonial era qur'anic schools have considered to be the respectable governors state treasurer through zakat fund (alms received for the rich people) parent of the pupils and people who came from faraway towns. In return the teacher and his pupils engaged in helping the community through cultivating their farms, laundry, and gardening sewing, washing and so on as their contribution to the society for patronizing them. That had been the way of the Tsangaya school system begging in the streets and public places had never been a chore of the early Almajiri (Abdulkadir, 2003 NEWD 2001) Odumusu et al. 2013 in babajo et al. 2017).

In 2013 argued that these traditional and religious institutions due to their flexible timetable are more appropriate for rural societies that rely solely on agriculture for their subsistence. Because these schools have multiple entry points (children can enroll in the schools at any time of the year provided they are in session), parent can schedule their childs' school attendance around seasonal agricultural activities, this flexibility also allows students to progress at their own pace. The local primary schools, in contrast, have a single point at the beginning of each academic year and a complex admission process entailing much paper work that agrarian societies are not comfortable with. Dr Khalid also point out that the schools agalitarian out look and affordability (no school fees, no uniforms, no textbook, no feeding and transport money etc) are also

extremely attracted to parent. Above all these schools do not alienate children from their traditional occupations whereas the formal schools do (Solomon, 2015).

### **Almajiri Interventions Program in Yobe State**

Nigeria was one of the first African countries where the United Nations children's Emergency fund (UNICEF) established a programme of co-operation. UNICEF's work for the survival protection and development of Nigerian children has continued ever since. Today UNICEF still work in partnership with many stakeholders including children and families to achieve national and international goals instrument in the fulfilment of children's rights. UNICEF's is deeply committed to creating a world in which all children, regardless of their gender, socioeconomic background or circumstance, have access to free compulsory and quality education. UNICEF's mandate to serve the most marginalized populations prompts it to focus special attention on girls, the largest group excluded from education. In 1995 Sokoto state Government and UNICEF agreed to model care academic subject be integrated into traditional Qur'anic school (Makarantar Allo) three (3) centers were pilot tested and continue to expand and now Sokoto state Agency for mass education in partnership with UNICEF managing 3131QE centers. They also supported the training of Qur'anic school proprietors for the development of system and influence budgetary provision through the education sector strategic and operational plans (ESSPS). These included the situation analysis, scenarios building projection of school needs, costing services (Alkali, 2019).

Northern education initiative (NEI/USAID) is Nigeria flagship education project being implemented in the focus state Bauchi and Sokoto. Despite the government of Nigeria's (GON's) to providing universal basic education, the delivery of education services is inadequate, and even more so in northern Nigeria. NEI also strengthens state and local government capacity to deliver basic education services by addressing key management, sustainability and oversight. Nigerian state strengthened systems include policy development and implementation; influence management and for decision making and human resources development and management, including training, monitoring and supervision. NEI works to increase access of orphans and vulnerable children including Almajiri. Basic education and other services in Bauchi and Sokoto through innovative approaches such as learning centers that will cater to the literacy needs of out of school youth and mainstream them into formal education system. Almajiri children are

integrated into this approach to address their special vulnerability services include in-school and out-school activities life skill education, and psycho-social support skills building for teachers and supported by additional USAID health and HIV interventions (Alkali, 2019).

According to Alkali, in each of the Almajiri learning center NEI provide the following facilities and services.

- Provision daily meal (Breakfast)
- Teaching of literacy and numeracy
- Payment of facilitators, craftsmen, women and proprietors monthly allowances.
- Provision of basic learning materials
- Provision of teaching aids
- Formation of center base management committee (CBMCS)
- Provision of vocational training equipment's

However during the Goodluck Jonathan's administration he organized National Policy of Education and transformation agenda. Federal authority took special interest in integrating the Almajiri system into the mainstream educational system in country. This was formally signed into law and presented to the National Economic Council in July 2013. On the occasion then the minister of state for education Nyesom Wike reiterated that the authority has set up the national committee on implementation of Almajiri education programme to ensure that the pupil are provided in the opportunities to access basic education. The programme according to him, would also include acquisition of various skills to enable them participate more positively in the development of their immediate environment and the nation at large. This development is an indication that the federal authority has not turned a blind eye to the menace of the Almajiri system for smooth implementation of the program, the federal authority sometimes collaborated with the states providing infrastructure while the state take care of suffering pupils' enrollment. Among the benefiting states of Niger, Jigawa, Zamfara, Sokoto, Kebbi, Kaduna, Plateau, Taraba, Yobe, Adamawa, Bauchi and Katsina. Qadri acknowledge governments intervention through the tertiary education trust fund (TETFUND) and universal basic education commission (UBEC),

which culminated in the provision of day and boarding facilities for pupils and their teachers (Shittu and Olaofe, 2015).

### **Challenges bedeviling the effectiveness of Almajiri intervention programme in Yobe State**

In recent time Federal Government of Nigeria made attempt to integrate western education with Islamic education so as to transcend the Almajiri to be functional member of noble society. Merging, the two systems of education together to curtail the plight of street begging by children and young pursuing Qur'anic education is as welcome development. The system is to accommodate the Almajiri who are coming to the city from far and near village for Qur'anic knowledge. The purpose of integrating the two system of education is to provide educational opportunity for these category of children to acquire Quran education as well as basic western Education so as to improve their living condition. By doing these, it will enable each state of the federal to achieve educational for all (EFA) and Millennium development goals (MDGS) by 2015. In this case, it is the combination of the western system of education with Qur'anic system of education. The concept of integration as clearly understood is the introduction of the elements of basic education i.e. the intimacy, numeracy and life skill of the western type of education into the traditional Qur'anic school system (Mahute, 2009). In other word, it connate injection the essential components of public schools into Qur'anic schools. The concept of integration means to join elements of basic education that is western type of education together with traditional Qur'anic school system without interfering with the goals of the Qur'anic school system. The purpose of the integration is to strengthen the ability of the learners to read write and memorize the Qur'anic in a conducive learning atmosphere and to introduce secular subject of western education in to Qur'anic school system thereby making the products integrate, numerate and equipped then with manipulating and survival skills in the modern system to meet the goals of education for all (EFA) and to eradicate Almajiri method involving teenage children into street begging, hard labour unhygienic condition, social vices and also to provide adequate and qualitative instructional materials both Islamic and secular subject (Yusha'u Tsafe, Babangida and Lawal 2013) in (Tejuddeen, 2015). Consequently, national guideline for the development state, local governments and nongovernmental organizations, which may collaborate with the federal government on the project to meet its objective and sustainability.

The model Almajiri educated has been implemented for more than one year since 2013 by president Good-luck Jonathan. Like say other innovation in education, there has been verbal report on some issues involving around non availability of relevant curriculum in school inadequacy of well trained and quality teachers, poor sanitation, lack of adequate infrastructure for learning poor and among others. According to (Maiyashi 2013) Pete and Isaac 2013, in kajudeen 2015, reported that percentage of the budget allocated to education is very low and also government has not performed up to expectation in terms of funding has never allocated up to 26% as recommendation by UNESCO to its annual budget to education in any given years in order to achieved the objectives of peace, citizenship, and security (education for EFA-Global monitoring report 2015. This has adverse effect on the effective implementation of the program (Jafar 2009) in Tajuddeen 2015.

### Methodology

This study employed exploratory research design. Exploratory study aims to gain a deeper understanding of the challenges facing the Almajiri Intervention Program in Yobe State. An exploratory study is a type of research that aims to explore and gain a deeper understanding of a particular phenomenon, issue, or problem. It is often used when there is limited knowledge or understanding of the research topic, and the goal is to gather more information and insights.

The target areas were Gashua, Nguru and Geidam of Yobe state where Almajiri Intervention Program implemented. The target population of this study was three thousand and ninety (3090) from twenty (25) tsangaya schools. Ten (10) tsangaya schools from Gashua, ten (10) tsangaya schools from Nguru and five (5) tsangaya schools from Geidam.

**Table 1: Details of Population and Sample Size**

S/N	Town	Number of Tsangaya	Population of Almajiri	Sample Size
1.	Gashua	10	1700	171
2.	Nguru	10	920	114
3.	Geidam	5	470	61
<b>Total</b>		<b>25</b>	<b>3090</b>	<b>346</b>

Source: Gashua Zonal State Adult and Mass Literacy Education (SAME), 2024

The study used purposive sampling technique to select specific program beneficiaries from the Gashua, Nguru and Geidam communities in Yobe state. Snowball was also use to recruit additional participants through referrals from initial participants. Interview was used to collect data from intervention program beneficiaries to gather data on the effectiveness of the intervention program. Thematic analysis was used to identify patterns and themes in the data.

## **Results**

The findings revealed the following themes:

Based on the objective one, the study revealed that, there was uniform improvement on participants Self-Esteem and Confidence, Health and Hygiene, Increased Nutritional Well-being, Literacy Skills, and improve educational Outcomes.

In objective two, the finding revealed that, distance, cost, and cultural beliefs forms the barriers in achieving the program intervention. Other barriers include low Community Engagement and Participation, Cultural and Social Factors, Program Evaluation and Monitoring, Sustainability and Maintenance of Almajiri program intervention

## **Discussion**

The research question one highlighted the effectiveness of Almajiri intervention program in Yobe state, Nigeria. Participants reported on the program's evaluation and monitoring processes, which will impact the program's effectiveness and accountability. Community Engagement and Participation also impact the program's effectiveness and sustainability

The research question two highlighted the challenges bedevilling the effectiveness of Almajiri intervention program in Yobe state, Nigeria. Barriers in accessing the program's interventions, such as distance, cost, or cultural barriers set an obstacle in achieving the intervention. the intervention tend to improved Self-Esteem and Confidence by provision of uniforms, which may have improved their self-esteem and overall well-being. Enhanced Health and Hygiene through the construction of new toilets have led to improved health and hygiene practices among participants, reducing the incidence of diseases and illnesses. It also increased nutritional well-being which will help to improved energy levels, ability to focus, and overall health.

**Conclusion**

The themes mention above regarding effectiveness of Almajiri intervention program in Yobe state revealed the program has been effective. It increases the beneficiaries' hygienic condition and nutritional wellbeing as well as their self-esteem and confidence. While the major challenges have been sustainability issue, social and cultural issues, cost and non-coverage of many Tsangaya schools from the communities. Program evaluation has been pointed as the key to ensuring accountability and continuity. The program however has significantly reduced dropping out of students from Tsangaya which in turn increases number of out of school children in communities and as a result social vices also significantly increase with increase in drop out or out of school children on the streets. Lack of accurate statistics of tsangaya students in each Tsangaya is making things very difficult for interventionist. Proper documentation of Tsangaya population can greatly impact when it comes to intervention. Therefore to ensure the effectiveness of intervention in Almajiri system of education there is need for formalization of record and addressing some cultural beliefs and perception. Therefore successful intervention requires series of measures in the Almajiri system.

**Recommendations**

Having identified the problem for the effectiveness of the system in Yobe state, the following are the recommendations:

- i. Government should join hand with non-government organizations to have an accurate statistic of the tsangaya Almajiri population.
- ii. Government should introduce register for head counting of all the Almajiri.
- iii. The politicians and stakeholder should volunteer in employing literacy and numeracy teachers to improve their skills
- iv. Government should build hostels to Almajiri to keep them in one place and provide feeding.
- v. Government should provide vocational training to them for self-reliance.
- vi. Government should sensitize parent so as to block the chances of collecting new Almajiri into the system.

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**EFFECT OF INDIVIDUAL AND GROUP COUNSELLING TECHNIQUES ON TRUANCY BEHAVIOUR AMONG SECONDARY SCHOOL STUDENTS IN GASHUA EDUCATION ZONE, YOBE STATE, NIGERIA**

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**ABSTRACT**

*This study examined the effect of individual and group counselling on truancy behavior among secondary school students in the Gashua education zone, Yobe State, Nigeria. The study had two objectives: to determine the effect of individual counselling on truancy behavior and to determine the effect of group counselling on truancy behavior among secondary school students in the Gashua education zone, Yobe State, Nigeria. Two research hypotheses were formulated to guide the study. A quasi-experimental interrupted time series design was used. The population comprised Eighty-four (84) truant students identified through class attendance registers for the first term in all secondary schools in the Gashua education zone, Yobe State, Nigeria. A convenience sampling technique was used to select all the 84 truant students, forming the sample size of the study. The Truancy Risk Index (TRI) was adopted for this study, with a reliability index of .87. The data collected were subjected to analysis using the Statistical Package for the Social Sciences (SPSS) software, where inferential statistics of t-test was used. The findings revealed a significant effect of individual counseling on truant behavior and a significant effect of group counseling on truant behavior among secondary school students in the Gashua education zone, Yobe State, Nigeria. Based on these findings, it is recommended that schools establish comprehensive counseling programs incorporating both individual and group counseling interventions. These programs should address the specific needs of students with truant behavior, providing them with personalized support and guidance. Additionally, these programs should be integrated into the school curriculum to ensure regular access for all students. Schools should also invest in training programs for counselors to equip them with the necessary skills and knowledge to effectively address truancy among students. This training should focus on evidence-based counseling techniques, behavior management strategies, and cultural sensitivity to better meet the diverse needs of students.*

**Keywords:** *Counselling, Group, Individual and Truancy Behaviour*

**Introduction**

Individual and group counselling are widely recognized as effective interventions for addressing truant behavior among students in educational settings. Truancy is characterized by unauthorized absences from school, is a complex issue influenced by various factors such as family dynamics,

peer relationships, academic challenges, and socio-economic status. Individual and group counselling approaches offer tailored support to students, targeting underlying causes of truancy and promoting positive behavioral change.

Individual counselling involves one-on-one sessions between a student and a trained counsellor. This approach allows for personalized assessment and intervention strategies tailored to the specific needs of the student. Through individual counselling, students have the opportunity to explore underlying issues contributing to their truant behavior, such as family conflicts, mental health concerns, or academic difficulties. Counsellors provide a supportive environment for students to express their feelings, identify goals, and develop coping strategies to address challenges effectively (Akos & Galassi, 2014). Individual counselling sessions enable counsellor and counselee to establish a trust ongoing support and follow-up to monitor progress and address emerging concerns.

Group Counselling involves sessions conducted with small groups of students who share similar experiences or concerns, including truancy. Group counselling provides a supportive and collaborative environment where students can share their experiences, learn from one another, and develop interpersonal skills (Hudson & McLean, 2015). Group sessions often incorporate psychoeducational components, such as problem-solving skills, conflict resolution strategies, and communication techniques, to empower students in managing their truant behavior. The group dynamic fosters peer support, empathy, and accountability, enhancing motivation and engagement in the intervention process. Moreover, group counselling offers opportunities for students to practice social skills, build positive relationships, and develop a sense of belonging within the school community.

Truancy refers to the act of unauthorized or unjustified absence from school, typically by students who are legally required to attend. It is a significant concern in education systems worldwide, as it can have detrimental effects on academic performance, social development, and long-term outcomes for students (Maynard et al., 2012). Truancy remains a pervasive issue in many public secondary schools, posing significant challenges to academic achievement and overall well-being among students.

Moreover, the socioeconomic context of many parents which is characterized by poverty, unemployment, and limited access to educational resources, can exacerbate truancy among

secondary school students. Financial constraints may prevent families from providing necessary support for their children's education, including transportation, school supplies, and uniforms. Additionally, students from disadvantaged backgrounds may face heightened stressors and barriers to academic success, leading to disengagement and absenteeism. On the other hand, community factors, such as peer pressure, neighborhood safety, and cultural norms, can influence students' attitudes toward school attendance. Peer influence, in particular, may contribute to truancy as students may be tempted to skip school to engage in social activities or risky behaviors. Moreover, perceptions of school safety and support from community institutions may impact students' sense of belonging and motivation to attend school regularly.

School-Related Stressors may also hinder students to attend school regularly. Challenges within the school environment, including academic pressure, bullying, disciplinary actions, and inadequate support services, can contribute to truancy among secondary school students in Gashua education zone, Yobe state, Nigeria. Academic difficulties, such as low achievement or lack of interest in assignments, homework, may lead students to disengage from school and avoid attending classes. Moreover, punitive disciplinary measures or ineffective interventions may further alienate students and exacerbate truancy rates.

Numerous studies underscore the detrimental effects of truancy on students' academic performance, socio-emotional development, and future prospects (Garry, 2015; Henry, Thornberry, & Huizinga, 2012). Truant behavior is often associated with various risk factors, including family instability, peer influence, academic disengagement, and socioeconomic disadvantage (Reid & Dorrington, 2017). However, counselling interventions have emerged as promising approaches to address truancy by targeting underlying causes and promoting positive coping strategies among students (Dube, 2016). Individual and group counselling are valuable strategies for addressing truant behavior among students, offering personalized support, skill-building opportunities, and a sense of community. By targeting underlying factors contributing to truancy and promoting positive behavioral change, counselling interventions empower students to overcome challenges, improve academic engagement, and achieve success in school. It is against this background that the research deem it fit to investigate the effect of individual and group counselling on truant behaviour among public secondary schools students in Gashua education zone, Yobe state Nigeria. Truant behavior has been identified as a pressing concern,

affecting educational outcomes of the students. To address this issue, interventions such as individual and group counselling have been proposed as potential strategies to mitigate truancy and promote student engagement in academic activities.

Anyamene, Anyachebelu and Ngozi, (2017) investigated the effects of individualized counselling technique on remedying truancy among junior secondary school students. The findings showed that using individual counselling techniques had significant effects on truants and consequently reduced truancy. Ann (2018) investigated the effects of counselling on truancy among senior secondary school students in Port Harcourt city local government area of Rivers State using quasi-experimental study. The result shows that counselling has a significant effect on truancy, the experimental group significantly improved above their control group counterparts with respect to truancy but no significant difference was found among male and female students in the experimental group with regard to truancy. Ntwiga (2023) examine the efficacy of counselling in mitigating truancy among primary school students in Maara Sub-County in Tharaka Nithi County, Kenya. Findings further revealed that counselling had increased retention and class attendance among pupils in primary school under study largely at 50%, which suggests that it is an effective tool in control and management of truancy.

Muhammad, Usman and Msheliza, (2017) determining whether there is difference between students exposed to group counselling intervention in reducing truancy and those in the control group were among the objectives of the study. Findings from the study showed that only those in the treatment group were able to reduce their truancy behavior; students from low economic background practice truancy than those from high economic background and truancy among students during raining season is at the increase. Audu, Ali and Pur (2017) investigated the effect of group counselling on attitude of senior secondary school students' towards schooling in Federal Government College, Maiduguri, Borno State, Nigeria. The findings of the study showed that group counselling had significant effect on the attitude of senior secondary school students' towards schooling in Federal Government College, Maiduguri. It was further found that gender has no significant effect on the attitude of senior secondary school students' towards schooling in Federal Government College, Maiduguri.

Understanding the specific challenges contributing to truancy in Gashua education zone is essential for developing targeted interventions to address this pressing issue. Family dynamics

play a crucial role in influencing students' attendance patterns. Factors such as parental involvement, family structure, socioeconomic status, and household responsibilities can affect students' ability and motivation to attend school regularly. Economic hardships, parental neglect, domestic conflicts, and caregiver responsibilities may contribute to increased truancy rates among students in Gashua education zone Yobe state, Nigeria.

### **Statement of the Problem**

Truancy among public secondary school students in Gashua education zone, Yobe State has emerged as a pressing concern, as evidenced by the prevalence of students found outside of school premises during regular school hours, engaging in activities such as hawking and petty trading. The phenomenon of students being absent from school and participating in unauthorized activities raises significant questions about the factors contributing to truancy and its implications for educational attainment and social development. Understanding the root causes of truancy and its associated behaviors is essential for developing effective interventions to promote regular school attendance and support the academic and holistic development of students.

The researcher are concern by the issue of truancy among secondary school students in public secondary school students in Gashua education zone, Yobe State and compel that a comprehensive approach need to be put in place to addresses the underlying factors driving this behavior. By addressing truancy, stakeholders can work together to ensure that all students have access to quality education and the opportunity to fulfill their potential. As such, the study intent to examine the effect of individual and group counselling on truant behaviour among public secondary schools students in Gashua education zone, Yobe state Nigeria. The study aims to contribute to the existing literature on truancy prevention and intervention by providing empirical evidence on the effectiveness of individual and group counselling approaches in addressing truant behavior among secondary school students in Gashua education zone, Yobe State, Nigeria.

### **Objectives of the Study**

The objectives of the study are to determine the:

1. effect of individual counselling on truant behaviour among secondary school students in Gashua education zone, Yobe State, Nigeria

2. effect of group counselling on truant behaviour among secondary school students in Gashua education zone, Yobe State, Nigeria

### Research Hypotheses

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

**H<sub>01</sub>:** There is no significant effect of individual counselling on truant behavior among secondary school students in Gashua education zone, Yobe State, Nigeria.

**H<sub>02</sub>:** There is no significant effect of group counselling on truant behavior among secondary school students in Gashua education zone, Yobe State, Nigeria.

### Methodology

The study used quasi-experimental of interrupted time series design. The interrupted time series (ITS) design is a quasi-experimental research design that involves collecting observations on a dependent variable at multiple time points before and after an intervention or treatment is implemented (Creswell & Creswell, 2017). This design allows researchers to examine whether the intervention has a causal effect on the dependent variable by comparing the pre-intervention and post-intervention trends. In an interrupted time series design, data are collected at regular intervals over an extended period, both before and after the intervention (Trochim & Donnelly, 2006). The intervention is typically introduced at a specific point in time, known as the "interruption" point. By analyzing the trend in the dependent variable before and after the interruption point, researchers can assess whether any changes observed are attributable to the intervention rather than other factors.

The population of the study comprised eighty-four (84) truant students identify through class attendance register for first term in all public secondary schools in Gashua education zone, Yobe state, Nigeria. The researchers used multi-stage sampling technique in conducting the study. Firstly, simple random sampling technique was use to select all junior secondary schools in Gashua education zone. Secondly, purposive sampling technique was use in selecting truant students for the last term of 2023/2024 academic session. Thirdly, convenient sample technique was use to select 84 truant students to form the sample size of the study where 20 truant students received sessions on individual counselling while 64 truant students received sessions in-group counselling. The truant students received treatment in three separate but interconnect stages as follows:

At the pre-treatment, a class register was use to trace all truant students in the selected schools. After sorting out of the truant students, a preliminary meeting was organize to familiarize with the participants and to solicit their willingness to participate in the study. Furthermore, activities include the screening, recruitment and assigning of participants to the either individual or group counselling group was done.

At the second stage, all participants in the individual counselling group engaged in “one-on-one counselling session” for the period of six weeks. Each session span for one hours twice in a week. Student in-group counselling also receive counselling sessions for the period of six weeks also and each session span for one hour thirty minutes twice in a week.

At the third stage, a class attendance register was used to trace the number of the attendance miss by the truant students after the treatment implementation as post-treatment score. Paired sample t-test was use to analyzed the data collected for the study at 0.05 level of significance.

## Results

To evaluate the effectiveness of the intervention, data was systematically collected, processed, and analysed using inferential statistics of paired sample test. This analysis helps assess effectiveness of the interventions.

**H<sub>01</sub>:** There is no significant effect of individual counselling on truancy behavior among secondary school students in Gashua education zone, Yobe State, Nigeria.

**Table 1: Paired sample t-test on significant effect of individual counselling on truant behaviour among secondary school students in Gashua education zone, Yobe state, Nigeria**

Individual	N	Mean	SD	t	Df	p-value
Pretest	20	25.4500	8.24286			
Posttest	20	5.6500	1.18210	10.964	19	.000

Result in table 1 revealed a significant effect of individual counselling on truancy behaviour among secondary school students in Gashua education zone. The result indicated that there was significant effect of individual counselling on truancy behaviour. This is because the calculated p-value of .000 is less than the alpha level of significance .05. Therefore, the null hypothesis was rejected and the alternate hypothesis is accepted.

**H<sub>02</sub>:** There is no significant effect of group counselling on truant behavior among secondary school students in Gashua education zone, Yobe State, Nigeria.

**Table 2: Paired sample t-test on significant effect of group counselling on truant behaviour among secondary school students in Gashua education zone, Yobe state, Nigeria**

Group	N	Mean	SD	t	Df	p-value
Pretest	64	24.4688	8.08284	18.212	63	.000
Posttest	64	6.1250	1.30323			

Result in table 2 revealed a significant effect of group counselling on truancy behaviour. The result indicated that there was significant effect of group counselling on truant behaviour among secondary school students in Gashua education zone, Yobe state, Nigeria. This is because the calculated p-value of .000 is less than the alpha level of significance .05. Therefore, the null hypothesis was rejected and the alternate hypothesis is accepted.

### Discussions

Research hypothesis 1 have illuminated a substantial effect of individual counseling on truant behavior among Secondary School Students in Gashua education zone, Yobe State, Nigeria. This finding aligns harmoniously with the conclusions drawn by Anyamene, Anyachebelu, and Ngozi (2017), who study into the repercussions of employing individualized counseling techniques to address truancy among junior secondary school students. Their findings provide the significant efficacy of individual counseling techniques in mitigating truancy, thereby fostering a decline in absenteeism. Moreover, the present findings resonate strongly with the scholarly study conducted by Ann (2018) who scrutinized the impact of counseling interventions on truancy among senior secondary school students in the Port Harcourt city local government area of Rivers State. Ann's investigation provide the significant influence of counseling in ameliorating truancy rates, with the experimental group notably outperforming their counterparts in the control group concerning truancy reduction.

Furthermore, Ntwiga's (2023) study, which scrutinized the efficacy of counseling in alleviating truancy among primary school students in Maara Sub-County, Tharaka Nithi County, Kenya, provides supplementary support to the prevailing findings. Ntwiga's research illuminated a notable enhancement in retention rates and class attendance among primary school pupils, attributing this improvement significantly to counseling interventions. This corroborates the notion that counseling serves as a potent instrument in the supervision and management of truancy, underscoring its effectiveness in fostering academic engagement and attendance.

Research hypothesis 2 have revealed a significant effect of group counseling on truant behavior among Secondary School Students in Gashua education zone, Yobe State, Nigeria. This discovery is bolstered by the research conducted by Muhammad, Usman, and Msheliza (2017), which aimed to ascertain whether there existed a disparity between students exposed to group counseling intervention and those in the control group regarding truancy reduction. Their study revealed that students in the treatment group exhibited a notable reduction in truancy behavior, thus underscoring the efficacy of group counseling in addressing this issue. Furthermore, the findings of the present study resonate with the research conducted by Audu, Ali, and Pur (2017), who explored the impact of group counseling on the attitudes of senior secondary school students toward schooling in Federal Government College, Maiduguri, Borno State, Nigeria. Their investigation elucidated a significant positive effect of group counseling on the attitudes of senior secondary school students toward schooling, highlighting the capacity of group counseling to engender favorable perceptions and attitudes toward academic engagement.

Concisely, the current findings, in conjunction with the aforementioned studies, underscore the substantial efficacy of group counseling interventions in mitigating truancy and fostering positive attitudes toward schooling among secondary school students, thereby advocating for the integration of group counseling strategies as a viable approach to addressing truancy-related concerns.

### **Conclusion**

Based on the findings of the study conducted in Gashua education zone, Yobe State, Nigeria, the study concluded that both individual and group counseling have demonstrated significant efficacy in addressing truant behavior among secondary school students in Gashua education zone. This suggests that counselling, whether provided individually or in a group setting, can serve as an effective means of addressing truancy issues among students. The study also highlights the significant effect of group counseling specifically on truant behavior among secondary school students in Gashua education zone. Group counseling interventions have shown to be effective in addressing truancy, further emphasizing the importance of incorporating group-based approaches into truancy prevention and intervention programs.

## Recommendations

Based on the findings of the study, the following recommendations are proposed to address truancy among secondary school students in Gashua education zone, Yobe State, Nigeria:

1. Schools should establish comprehensive counselling programs that incorporate both individual and group counseling interventions. These programs should be provided to address the specific needs of students with truant behavior, providing them with personalized support and guidance. Additionally, these programs should be integrated into the school curriculum to ensure regular access for all students.
2. Schools should invest in training programs for counselors to equip them with the necessary skills and knowledge to effectively address truancy among students. This training should focus on evidence-based counseling techniques, behavior management strategies, and cultural sensitivity to better meet the diverse needs of students in Gashua education zone.
3. Schools should actively involve parents and guardians in truancy prevention efforts. This can be achieved through regular communication, parent education workshops, and family counseling sessions. By fostering positive partnerships between schools and families, greater support can be provided to students experiencing truancy, leading to improved attendance and academic outcomes.

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**ASSESSMENT OF AVAILABILITY AND UTILIZATION OF INSTRUCTIONAL FACILITIES AND RESOURCES FOR IMPLEMENTATION OF TRADE CURRICULUM IN PUBLIC SENIOR SECONDARY SCHOOLS OF YOBE STATE, NIGERIA**

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**ABSTRACT**

*This study assessed the availability and utilization of instructional facilities and resources for implementation of trade subjects in public senior secondary schools in Yobe state. The objectives of the study were to determine; the availability of infrastructure and instructional materials and the utilization of infrastructure and instructional materials in implementing the trade subjects curriculum. The study adopted descriptive survey research design. The population of the study was (8) government science and technical colleges, (49) trade teachers, (950) students. Krejcie and Morgan sampling size was used to select all the (8) schools, (40) trade teachers, (274) students as the samples size of the study. Checklist and questionnaire were used to collect data. The instruments were validated by experts. The reliability of the questionnaire was established using test-retest procedures. The reliability index was ( $r = 0.86$ ) Data collected were analyzed and presented using frequency count and percentage. The study revealed; low availability level instructional facilities and resources, poor utilization of available instructional facilities and resources was also found. Based on the findings the study concludes the inputs and process of implementing the trades were found to be poor. It is also recommended that building of more instructional facilities and supply of more resource materials to suffice the inadequacies. Recommendations were made based on the findings of the study.*

**Introduction**

Infrastructures play role in implementation of curriculum. They include plants; equipment, buildings and furniture which enable teacher deliver and implement the curriculum effectively.

Facilities are not provided adequately. What is found in most secondary schools in Nigeria are

dilapidated buildings, leaking roofs, lack of chairs and desks for students and teachers to use. This has negative effect on the implementation of new secondary school curriculum. Overbaugh (2010) revealed that facilities affect teacher's implementation of the curriculum. She further mentioned the important facilities that affect teachers in their implementation are classrooms, furniture and class equipment. Ehiamentalor (2011) argued that school facilities are the operational inputs of every instructional program. Instructional materials also play a vital role in the implementation of curriculum. Ajayi (2009) discovered instructional materials makes learning more interesting, practical, realistic and appealing. They also enable both teachers and students to participate actively and effectively in lessons. They give room for acquisition of skills and knowledge and development of self-confidence and self-actualization. Without availability of instructional materials the skill based curriculum will not be effectively implemented in Nigeria; youth would lack skills acquisition and economic empowerment ( Anyakogu, 2012).

### **Statement of the Problem**

The trade curriculum aimed to graduate students with skills of job creation to eradicate poverty and generate wealth. Despite this, the researchers observed that, the secondary school leavers lack the skills needed to create jobs and be self-employed especially those who did not proceed to tertiary institutions of learning. This prompted the researchers inquire from the state ministry of education if there is any document on the implementation of those subjects but all they have is the overall analysis of students' performance in final year examinations as determinant of effective implementation (Education Resource Centre, 2019), while, this may be influenced by many factors. Fullan (2006) stated that, researchers are asked to concentrate more on facilitating implementation than measuring outcomes, especially in a program's early stages. The implementation process is suggested as a more important research focus than degree of implementation. Learning outcomes are valuable, but in themselves, they tells very little about the process of change. This makes the researcher to look into the implementation of these trade subjects in some selected public senior secondary schools in the Yobe state.

### **Objectives of the Study**

The following are the objectives of the study;

1. Availability of instructional facilities and resources to implement the trade subjects curriculum in public senior secondary schools in Yobe state, Nigeria

2. Utilization of instructional facilities and resources to implement the trade subjects curriculum in public senior secondary school in Yobe state, Nigeria

### **Research Questions**

1. Do the schools have available instructional facilities and resources to implement the trade subjects curriculum in public senior secondary school in Yobe state, Nigeria?
2. Do the schools utilize instructional facilities and resources to implement the trade subjects curriculum in public senior secondary school in Yobe state, Nigeria?

### **Literature Review**

The four components of Stufflebeam CIPP evaluation model play important and necessary roles in the planning, implementation, and assessment of a project and this study involves implementation assessment and it captures two models input and process models of the CIPP therefore is relevant. The input evaluation step is a project designed to meet the identified needs. Methods used to execute an input evaluation include inventorying and analyzing available human and material resources, proposed budgets and schedules, and recommended solutions strategies and procedural designs. Process evaluation monitors the project implementation process. It asks, “Is it being done?” and provides an ongoing check on the project’s implementation process (Zhang et al, 2011). Process evaluation techniques include on-site observation, participants’ interviews, rating scales, questionnaires, record analysis, photographic records, and case studies of participants, focus groups, and self-reflection sessions with staff members and tracking of expenditures. (Zhang et al, 2011).

Infrastructural facilities refer to the basic structures and facilities necessary for effective teaching and learning in the school. Facilities are plants, equipment, buildings, furniture which enable teacher to deliver effective teaching thereby leading to attainment of behavioral objectives or more broadly curriculum goals. Olaniyan and Ojo (2008) in Okoye and Ekereobong (2015) identified non-availability of functional workshop, absence of electricity for operating the workshop equipment and insufficient funding as other challenges against effective vocationalisation of secondary education in Nigeria. Ivowi (2004) noted that to ensure that curriculum is effectively implemented, infrastructural facilities, equipment, tools and materials must be sufficiently provided. Olorok (2006) observed that the infrastructural facilities enhances learning experiences and leads to interaction within the learning environment. Amadi and

Lukman (2015) what is found in most secondary school in Nigeria are dilapidated buildings, leaking roofs, lack of chairs and desks for students and teachers to use; this has negative impact on effective implementation of new secondary school curriculum. Nwiyi and Okorie (2014) studied problems militating against Curriculum implementation on vocational and technical subjects in secondary schools in Nigeria. The paper identified shortage of specialized teachers, non-conducive learning environment, poor infrastructural facility and lack of fund.

Ukala (2018) challenges in the teaching of trade education are high cost of resources facilities, inadequate supply of needed facilities, lack of maintenance culture for existing facilities, obsolete facilities, lack of modern equipment, and frequent breakdown of facilities due to overuse. This is in agreement with Nwekeaku as cited in Oliobi (2017) who found that since the government directed the compulsory teaching of trade studies, no special funds have been made available for the execution of this directive. Okas-Wike (2013) who reported inadequate facilities as one of the challenges for the implementation of trade education. Kemenanaebi (2017) revealed that most Livestock equipment and structures recommended by the Nigerian Educational and Development Council (2009) for the teaching of Animal husbandry to students were not available.

Babalola (2004) noted that instructional materials are designed to promote and encourage effective teaching/learning experiences, and is resource materials to curriculum implementation. Ajayi (2009) in a study on relationship between availability of instructional materials and curriculum implementation in Nigerian secondary schools discovered a significant level of relationship between the two. Owoh (2016) examined the relevance of instructional materials to the successful implementation of Electrical Installation and Maintenance Works (EIMW) curriculum at the Technical School level in Enugu Educational Zone. The investigation indicated that students in instructional materials group performed better in the post-test than their mates in the group without instructional materials. Asogwa, Onu, and Egbo (2013) assessed the utilization of facilities and materials for effective implementation of fish production to students in senior secondary schools in Benue State, Nigeria. The study revealed that out of all the instructional materials recommended for teaching fish production to students, 8 of them are available and are often utilized by teachers in senior secondary schools. Bashir (2018) Instructional Equipment and Materials are not utilized for teaching Electrical Installation and Maintenance Work Trade in

Adamawa State technical colleges. Kemenanaebi (2017) Revealed that six (6) items, including teachers lack of zeal, lack of finance, lack of incentives to teachers and students, theft and vandalism, no live animals and teachers, lack of competence in motivating students that are involved in real productive activities were pointed as major constraints to the utilization of animal husbandry equipment and materials.

### **Methodology**

This study adopted descriptive survey research design. Gall and Borg (2007) described descriptive survey research as a method of data collection using questionnaire or interview to collect data from a sample that has been selected to represent a population to which the findings of the data analysis can be generalized. The population of this study therefore comprised of eight (8) Government Science and Technical colleges, forty nine (49) trade teachers and (950) senior secondary three students. The sample size was all the eight (8) schools, (40) trade teachers and (274) students, Krejcie and Morgan, (1970). Simple random sampling technique was used to select samples. Checklists and questionnaire were used as instruments for data collection. The checklist assessed the availability of infrastructures and instructional materials while questionnaire assessed the utilization of infrastructure and instructional materials in teaching trade subjects. The internal consistency of the questionnaire was determined and the reliability index was ( $r = 0.86$ ) obtained using test-retest procedure. The data collected was analyzed using descriptive statistic, percentage and bar chart.

### **Results**

Below are the analysis and presentation of the result of each research question

**Research Question One:** Do the schools have available instructional facilities and resources to implement the trade subjects curriculum in public senior secondary school in Yobe state, Nigeria?

**Table 1: Analysis of Data on Availability of Instructional Facilities and resources**

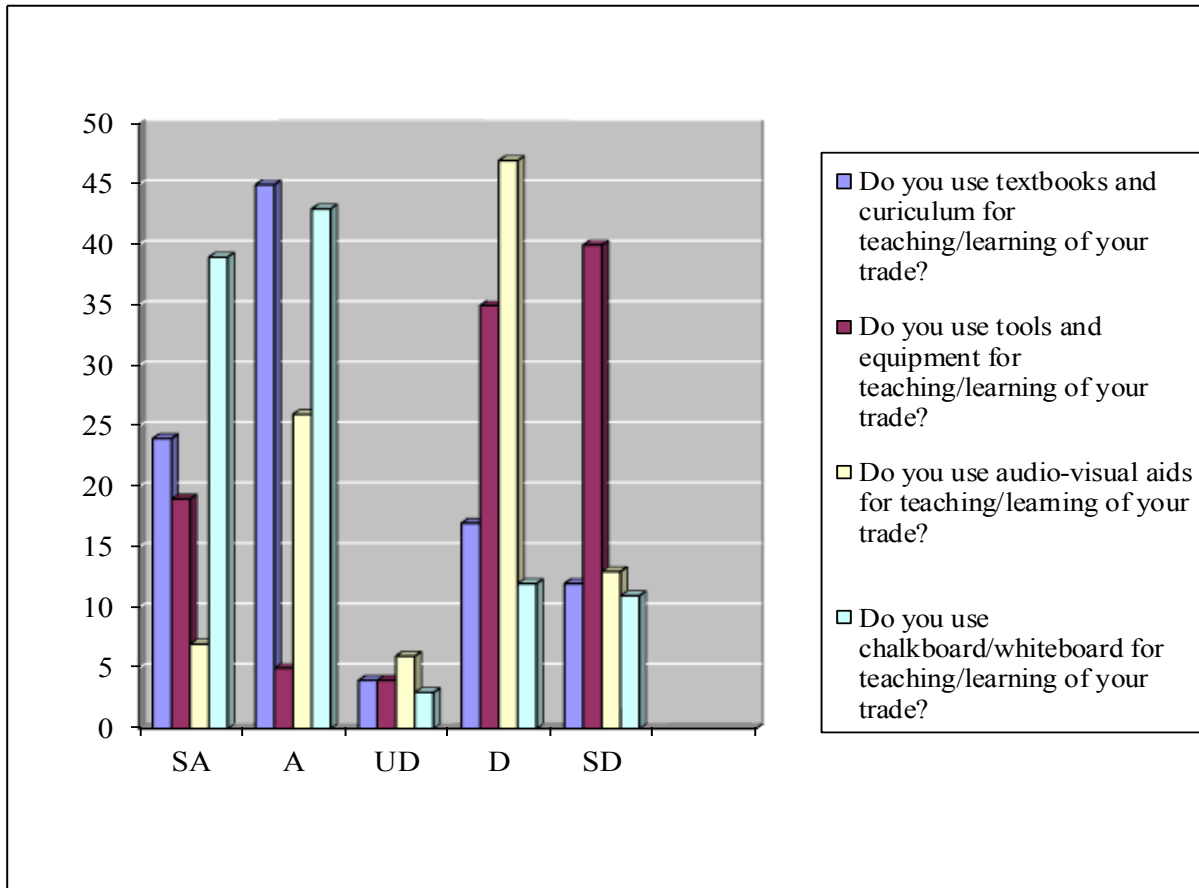
<b>Trade Subjects</b>	<b>No. of Schools Teaching the Subjects</b>	<b>Availability of instructional facilities and resources</b>
Animal Husbandry	7	39%
Auto Electrical Work	6	35%
Auto Mechanical Work	5	37%
Book Keeping	6	48%
Catering Craft	5	41%
Electrical Installation	7	36%
Furniture Making	6	44%
<b>OVERALL</b>		<b>40%</b>

**(Field Work, 2023)**

Table 1. Book Keeping shows higher percentage (48%) of infrastructure and instructional materials availability, while Auto Electrical Work has the lowest percentage (35%) and the overall percentage of infrastructure and instructional materials availability in the schools is (40%).

**Research Question Two:** Do the schools utilize instructional facilities and resources to implement the trade subjects' curriculum in public senior secondary school in Yobe state, Nigeria?

**Analysis on Utilizations of Instructional facilities and resources**



**Figure 1: shows responses on utilizations of instructional facilities and resources in the schools.**

The tools and equipment were not mostly used during teaching learning, audio-visuals are also not used mostly, and the most used instructional materials were textbooks and chalkboard or white board.

**Discussion of findings**

The finding on research question 1 (availability of instructional facilities and resources) shows that there was (40%) availability level of infrastructure and instructional materials to implement the trades in the schools which is below average. Lack of instructional materials greatly impact learning outcomes in schools and they available ones are below average in the study area, this shows instructional materials as critical teaching influencers especially in skill based subjects areas their inadequacy can greatly impact negatively the implementation of trade subjects.

However, Olaniyan and Ojo (2008) in Okoye and Ekereobong (2015) identified non-availability of functional workshop, absence of electricity for operating the workshop equipment as challenges against effective implementation of senior secondary schools trades curriculum in Nigeria. (Agusiobo, 2004; Okebula, 2005; Okunola, 2005) indicate that the availability of resources is an important variable in student learning. What is found in most secondary school in Nigeria are dilapidated buildings, leaking roofs, lack of chairs and desks for students and teachers to use, this has negative effect on effective implementation of new trades curriculum (Amadi and Lukman, 2015). However this findings is in agreement with (Kemenanaebi, 2017) revealed that amongst the eighteen (18) Livestock equipment and structures recommended by the Nigerian Educational Research and Development Council (2009) for the teaching of Animal husbandry to students, seven (7) were considered available while eleven (11) are not available. Ogbu (2015) inadequate instructional materials often influence the teaching and learning of Electrical/Electronic technology courses in 32 negative ways.

The result on research question 2 (utilization of infrastructure and instructional materials) revealed poor uses of the infrastructures and instructional materials in the study area. Despite the inadequacy of the facilities still teachers are not fully utilizing the available ones. Bashir (2018) Instructional Equipment and Materials are not utilized for teaching Electrical Installation and Maintenance Work Trade in Adamawa State Technical Colleges. Asogwa, Onu and Egbo (2013) utilization refers to the rate or how often facility put into use or services by teacher in senior secondary schools. Utilization of facilities depends on their availability and adequacy in the school. But in this case available infrastructures are not fully put to use. Strategically teachers are expected to utilize available resources in the school for instructional delivery of different subjects. However this may be attributed to the fact that most of the teachers are not specials to teach the trades and were not trained to build their capacity on teaching the trades. Kemenanaebi (2017) Revealed that teachers lack of zeal, lack of finance, lack of incentives to teachers and students, theft and vandalism, no live animals and teachers lack of competence in motivating students that are involved in real productive activities were pointed as major constraints to the utilization of animal husbandry equipment and materials.

## **Conclusion**

The study found that there are instructional facilities and resources available but mostly not in good conditions and their number are not adequate. However, the available ones are mostly not functional while the ones functioning are not properly utilized and also some over stretched like classrooms. More supply instructional facilities and resources are needed to suffice the inadequacies, while some few equipment that are available most of the teachers lack the expertise to operate them efficiently as a result the equipment and some machines are not utilized. From the foregoing the study concluded that the inputs and the processes of implementing the trades were poor in the study area.

## **Recommendations**

The following recommendations were made based on the findings of the study:

1. Building of more infrastructural facilities and supply of more instructional materials to suffice the inadequacies and renovation of the faulty ones to suffice the inadequacies.
2. Training and motivation of teachers on use of instructional materials

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**EXPLORING THE POTENTIAL OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN ENHANCING TEACHING PROFESSION IN NIGERIA**  
BY

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**ABSTRACT**

*The striking and latest innovation in the field of education is the integration of information and communication technology (ICT). With the emerging new technologies, the teaching profession is evolving from an emphasis on teacher-centered, lecture-based instruction to student-centered and interactive learning environment. Knowledge of ICT and skills to use ICT in teaching learning has gained enormous importance for today's teachers. Teachers are expected to know and successfully integrate ICT in their subject areas to make learning more meaningful. This knowledge development in the teacher education programme has gained much importance with the notion that exposure to ICT during this time is helpful in increasing student teachers' willingness to integrate technology with classroom teaching. This paper focuses on issues relating to ICT integration as a core component in teacher education. Teachers' attitudes toward integration of ICT and their self-efficiency have been reviewed. Various approaches have also been suggested for implementing ICT into teacher education Programme which will help the teachers to apply technology in education settings. The paper highlights how information and communication technology can be employed to enhance teaching and learning. The paper finally identified some of the likely challenges of using ICT in enhancing teaching and learning delivery. Some recommendations on how to solve these problems are articulated in this paper.*

**Keywords:** *Exploring, Potential, ICT, Teaching Profession.*

**Introduction**

The world is experiencing changes owing to advancement in information and communication technologies. Bucher (2003) stresses that, the introduction of information and communication technology (ICT) in education is a panacea to ensuring quality in teaching. With numerous global advancements in ICT it is essential that educators have a thorough working knowledge of these media and their influence on the performance and engagement

of their students. Educators and policy makers believe that information and communication technologies are of absolute importance to the future of education and in turn, for the society at large. Educational systems around the world are under increasing pressure to use the new information and communication technologies (ICTs) to teach students the knowledge and skills needed in the 21 Century. Information and communication technologies have been powerful enabling tools for educational change and reform. When used appropriately, different ICT resources are said to help expand access to teaching, strengthen the relevance of education to increasingly digital work place, and raised educational quality. However, the effective integration of ICT in to the educational system is a complex process that requires not only technology but also curriculum and pedagogies, institutional readiness and teacher competencies. (Ataur, 2014).

The ability to use digital technology, communication tools, and or networks appropriately to solve information problems in order to function in an information society, will include the ability to use technology as a tool for research, organize, evaluate, and communicate information and the possession of fundamental understanding of the problems, needs, values, development policies and patterns of change which exist in a given society. The use of information and communication technology in teaching and learning in teacher education programme is useful to pre-service teachers with aim of building an intelligent and thoughtful disposition towards the integration of ICT in to teaching and learning of teacher education course in classroom and school context.

The revolution of ICT is a major challenge for teachers' professional development. They have to use technical skills adequate to use ICT productively, as well as to instruct and guide the students to use ICT purposefully. Teachers not only have to become familiar with ICT but also to acquire pedagogical expertise needed for fruitfully working with new technology based learning environments. The use of ICT provides opportunity for students to work both collaboratively and independently. Developing skills, knowledge and understanding in the use of ICT prepare students to use such technologies in there every day live. ICT is becoming an integral element for educational reforms and innovations at primary and secondary schools, this situation calls for an enhancement of pre-service education on ICT for prospective teachers. The traditional approach in teaching such as lecture is not really helpful in developing

teaching profession in this 21st century. This method of teaching can really be used to change attitude or attain higher cognitive goals. This is the era when the progress and development of any nation is determined by the extent of its involvement in the application of Information and Communication Technology (ICT) in its system and programme therefore, the concern of this paper is to examine the role of Information and Communication Technology in developing teaching profession in Nigeria. It rapidly becomes one of the important and widely discussed issues in contemporary education policies in modern times. Most experts in the field of education agreed that, ICT hold great promise in improving teaching and learning in addition shaping work force opportunities in Nigeria.

ICT application for teaching and learning process is not quite encouraging though some effort have been made to ensure integration of ICT in Nigerian Colleges of Education yet the level of ICT adoption and use is low compare to that of the developed and some developing nation.

#### **Concept of Teacher Education**

Teacher education refers to professional education of teachers towards attainment of attitudes, skills and knowledge considered desirable so as to make them efficient and effective in their work in accordance with the need of a society at any point in time. It includes training/education occurring before commencement of service (pre-service) and education/training during service (in-service or on the job). As a matter of fact, teacher education should constitute a conspicuous element in the totality of organized education, both formal and non-formal sub-systems. According to Anyacho and Naswen (1998) Teacher Education has been defined in various ways. Even though there is long standing and ongoing debate about the most appropriate term to describe the concept. Teacher education therefore refers to the structure, institutions and processes by which men and women are prepared in schools for the purpose of imparting knowledge, skills and favorable attitudes. In another words, teacher education is a form of education which is carefully design to prepare and groom those who teachers will teach or will provide relevant professional service to the school and colleges. It is in this context that Kulz and Raths (1985) defined teacher education as: a set of phenomena deliberately intended to help candidate acquire knowledge skills, dispositions and norms of teaching occupation.

Also Fafunwa (1974) described teacher education as a set of educational activities and experiences design to equip a prospective teacher with the skills, competences, knowledge and

disposition which help to develop his personality as well as making him a competent teacher. Osoji (N.D), defined teacher education as professional education of teachers towards attainment of attitudes, skills and knowledge considered desirable so as to make them efficient and effective in their work in accordance with the need of a society at any point in time. It includes training/education occurring before commencement of service (pre-service) and education/training during service (in-service or on-the-job). As a matter of fact, teacher education should constitute a conspicuous element in the totality of organized education, both formal and non-formal sub-systems.

### **Objectives of Teacher Education**

The federal government of Nigeria recognizes the value of teacher education in the country's education enterprises; so it was featured prominently in the National Policy on Education as one of the pivotal sections of the nation's educational system. This recognition was laudable even as teacher education is set to achieve the following objective:

1. To produce highly motivated conscious and efficient classroom teachers for all level of our educational system.
2. To encourage further the spirit of enquiry and creativity in teachers
3. To help teachers to fit into the social life of the community and the society at large and enhance their commitment to national objectives.
4. To provide teachers with the intellectual and professional background adequate for their assignment and make them adaptable to any changing situations not only in the life of their country, but the wider world.

To enhance teachers commitment to the teaching profession. (NPE, 2014).

### **Concept of Information Communication Technology (ICT)**

Information and Communication Technology: The Concept According to the Oxford Advanced Learner's Dictionary, Information Technology is the study of, or use of electronic equipments, especially computers for storing, analyzing and sending out information. according to UNESCO, ICT is a scientific technological and engineering discipline and management technique used in handling information, it application and association with the problems , needs, values and development policies and pattern of change which exist in a given society, social, economic and cultural masters. Information and Communication Technology (ICT) can be defined as the use of

all considerable digital media in managing and processing information, Information is power. No more swords to be feared than the learned pen (Maigari, 2014). According to Okoye in Maigari (2014), Information and Communication Technology is the use of electronic means to collect data, process, store, retrieve and make available different types of messages to anybody seeking to get or use it any time anyhow and anywhere in the world for the pursuance of national economic advancement. Odachi in Maigari (2014), sees ICT as a range of technology for gathering, storing, retrieving, processing and analyzing information, worldwide. Brave in Maigari (2014), defines ICT as a set of activities that facilitate the capture, storage, processing, transaction and display of information by electronic means.

Nwachukwu in Ashikuzzaman (2014) Information and communication technologies (ICTs) is the application of computers and other technologies to the acquisition, organization, storage, retrieval, and dissemination of information. However, in this context, information and communication technology is the use of electronic devices such as computers, telephones, internet, and satellite system, to store, retrieve and disseminate information in the form of data, text image and others.

### **ICT Gadgets as Tool for Enhancing Teaching Profession**

Pardeep, (2015) viewed Information and communication technology as one of the tool for current applications of technology in teacher education. “The Information and communication technology (ICT) is the scientific technological and engineering discipline and management techniques used in information handling and processing, their application; computers and their interaction with men and machines and associated social, economical and cultural matters” (UNESCO). In 1998, the UNESCO in its world education report “teachers and teaching in a changing world” described the radical implications of ICT in the conventional teaching learning process. Now in the present situation, ICT has become an important and integral part of the curriculum of teacher education. By using ICT technology such as computer, laptop, digital camera, video, internet, websites, CD ROMs, DVDs, application of software such as word processing, spread sheet, e-mail, digital libraries, computer mediating conferencing, video conferencing, projectors etc. We can overcome all barriers in communication and instruction. ICT can be used as a tool for training and support of teachers, regardless of geographical dispersion. Therefore, the challenge for teachers and teacher education institutions has been to

create a new generation of teachers capable of employing a variety of technology and tools in all phases of academic, administrative, research and extension functions. ICT is extremely useful for professional development of teachers and helps the teacher in the following ways:

1. The use of ICTs as presentation tools (through overhead and LCD projectors, television, electronic whiteboards, guided “web-tours”, where students simultaneously view the same resources on computer screens) is seen to be of mixed effectiveness. While it may promote class understanding of and discussion about difficult concepts (especially through the display of simulations), such uses of ICTs can re-enforce traditional pedagogical practices and divert focus from the content of what is being discussed or displayed to the tool being utilized.
2. In OECD (Organization for Economic Co-operation and Development) experience the use of technology in everyday teaching and learning activities appears to be more important than specific instruction in “computer classes”. While the development of technology skills is seen to have a role in the teaching and learning process, it is more important as an enabler of other teaching and learning practices, and not too important in and of itself. Schools that report the highest levels of student ICT-related skills and experience are often not those with heavy computer course requirements, but rather ones that made use of ICTs on a routine basis throughout the teacher professional development and the teaching and learning process.
3. Effective ICT use in education increases teachers’ training and professional development needs. However, ICTs can be important tools to help meet such increased needs, by helping to provide access to more and better educational content, aid in routine administrative tasks, provide models and simulations of effective teaching practices, and enable learner support networks, both in face to face and distance learning environments, and in real time or asynchronously.
4. Effective teacher professional development should approximate the classroom environment as much as possible. “Hands-on” instruction on ICT use is necessary where ICTs are deemed to be vital components of the teaching and learning process. In addition, professional development activities should model effective practices and behaviors and encourage and support collaboration between teachers. On-going professional development at the school level, using available ICT facilities, is seen as a key driver for success, especially when focused on the resources and skills directly relevant to teacher’s everyday needs and practices.

5. ICT enriches teaching by enhancing the initial preparation by providing good teaching and training materials, simulators, recording and feedback mechanisms.
6. ICT has removed the barriers of space, time and place between teacher and learner.
7. It has established a healthy and interactive relationship between teachers, schools, institutions, and universities and enabled teachers to expertise rich resources in cyber space.
8. In OECD (Organization for Economic Co-operation and Development) countries, research consensus holds that the most effective uses of ICT are those in which the teacher, aided by ICTs, challenge pupil's understanding and thinking, either through whole-class discussions or individual/small group work using ICTs. ICTs are seen as important tools to enable and support the move from traditional 'teacher-centric teaching styles to more 'learner-centric' methods.
9. Pedagogical practices of teachers using ICTs can range from only small enhancements of teaching practices, using what are essentially traditional methods, to more fundamental changes in their approach to teaching. ICTs can be used to reinforce existing pedagogical practices as well as to change the way teachers and students interact.
10. The cost of teacher training has been reduced by the didactic software and intelligent tutoring systems.
11. ICT provides lifelong professional development by providing courses in a virtual situation, training in demand, orientation and refresher courses through video conferencing and online.
12. By the exchange of materials through virtual communities, sharing of ideas and experiences and collaborating on projects the ICT can revolutionize the whole teaching profession.

### **Using ICT to Support Teaching and Learning**

The use of ICTs in teaching and learning, in its various modes, has the potential to enhance the teaching-learning experience at all levels of education. It may be adopted as:

1. as a support mode, it may raise the students' level of self esteem and confidence.

2. using simulations which allow students to experiment with virtual situations which cannot be represented in real life within the school environment.
3. engaging in new forms of creative design and production through combining various media in one product.
4. using the technology as an information resource to enable students to develop questioning and research skills.
5. as a link with other individuals and communities, the technology exposes students to new socio-cultural perspectives on diverse issues. This mode is also felt to be helpful as a channel for self-expression for children, particularly adolescents.

Stephen and Stanley (2001) in Ataur (2014) discuss the application of technology to the process of learning and highlight four general activities that have been shown to be successful through research, namely;

- presenting information;
- guiding the learner;
- practicing;
- assessing learning.

A teacher with the use of ICT can supplement these activities using a number of different methods:

- online tutorials;
- drill and practice exercises;
- knowledge reinforcement exercises;
- open-ended learning environment (project work);
- group exercise (games, simulation etc); and
- computer assisted assessment.

### **Challenges of ICT in teaching and learning in Nigeria**

There are many challenges militating against the effective use of ICT in teaching and learning in Colleges of Education in Nigeria and they are;

1. **Power Supply:** The State of Power supply in the country has made power holding company to be unreliable, and electronic device entirely depend on constant power supply and since the power unstable the facility cannot be used.
2. **Inadequate Manpower and lack of basic ICT skills:** Most teachers lack the necessary skills required for its application in teaching and learning and also very few Colleges of Education have made provision for ICT facilities for use by their teachers. This is a Very serious problem because teachers cannot inculcate the desired learning to the student of the ICT as facilities are not available. One of the greatest challenges in ICT integration in education is balancing educational goals with economic realities. ICTs in education require large capital investments. Due to financial difficulties, government in some part of the world specially developing countries priority is the rehabilitation of school buildings and teacher welfare. ICT for education on the other hand has not yet been considered a priority. In term of human resources, the constraints are due to the lack of trained teaching manpower and lack of motivation among educators to adopt and integrate ICT as a tool into their teaching or educational curriculum. Extra effort and time involve in the use of ICTs in education. In some part of the world due to educational background generally there is inadequate of preparedness for students entering higher education in the knowledge and skills required for the basic use of technologies. Still in educational, learning challenges arise in the delivery methods of using ICTs (online-based, blended etcetera), content not adapted to the technology and context, limited interaction between students and educators. In general, (Yelland, 2001).
3. **Virus:** Virus is another big problem that affects most computers and when this occurs document or programmemes stored in the computer are seriously affected.
4. **High Cost:** The high cost of information and communication technology (ICT) equipment especially the laptop have contributed to less patronage as the financial resources from government are poor.
5. **Poor Telecommunication:** The fluctuating network especially the internet creates problems to the users. The effect is that users living in areas without network coverage or with poor telecommunication system cannot have access to the net. It becomes necessary that there must be network all times. But the present situation leaves much to be desired. People are

expected to be able to work, learn, and study whenever and wherever they want to; this in developing world this still not possible. A country's educational technology infrastructure sits on top of national telecommunications and information technology infrastructures. There is a limited regional infrastructure for the full ICTs integration in education in Nigeria.

6. **Cultural challenges:** Diversities of culture in different part of the world are also challenges in introducing ICT in education. English is the dominant language of the internet. Research has shown that an estimation of 80% of online content is in English (Roblyer, 2004). A large proportion of educational software produced in the world market is in English also. In most part of this country eg in north-eastern part of this country where English language has less value compared to Arabic language. This represents a serious barrier in integrating ICTs use in education system. Using the example of Gamboringala in Borno state and Kebbi state among others the majority all the websites in the world are in English. This situation limits the information access for some people who has lack or no ability in English language. Similar to the situation in South Africa (Shaheeda, 2007), where student 'multilingualism background causes a major challenge in the role of ICTs in South African higher education system.

### **Conclusion**

The need for ICT in the teaching and learning in Colleges of Education in Nigeria cannot be over emphasized. It increases learning outcomes for students thus creating opportunity for learners to develop their creativity, problems solving abilities and communication skills etcetera. Therefore, Government should make necessary provision for ICT in Nigerian Colleges of Education and train teacher in the skills. This will make tertiary institution remain educationally relevant to global scheme. Teacher is considered to be the architect of the nation. In other words, the future of the nation lies in the hands of teacher. This shows the importance of teacher. One can realize how important education is which makes one a teacher. Teacher education is looked after by a systematic operation of various agencies involved in it. In our country, no system is free from problems; teacher education is not an exception to it.

In present scenario, teachers need to help their students in how to learn, how to grow in future, how to develop study skills, how to conduct fundamental research, how to examine, evaluate and assess information and also how to question and then dismantle unauthentic structure of

knowledge and cognition if need be. This is necessary if the teachers really want to survive in the ICT savvy world of education. All these expectations may be met only through need-based, goal-oriented and meaningful in-house discussion, conferences, symposia, workshops, refresher and orientation courses, crash courses, capsule courses and subject-based courses, interdisciplinary and holistic approaches to education and quality research and by enriching the existing libraries and making use of the user-friendly ICT with contextually appropriate and firm pedagogical scaffolding. The teacher educators and individual teacher ought to sincerely and persistently work hard toward this goal. By the latest developments in the information and communication technology the role of teacher in the process of teaching and learning has increased many fold and has become more complex as such teachers are to equip themselves with latest technology then only they cope up the new challenges in the field.

**Recommendations:**

- I. Effort should be made to provide stable and regular supply of electricity to facilitate use of programmed instruction and ICT in our schools at all levels. Considering the inability to acquire the necessary technology infrastructure needed for ICT as a result of power challenges, the governments should make necessary arrangement to improve on power supply in every community.
- II. To inculcate competencies in teachers on the use of ICT materials and its application should be an indispensable part of contemporary teacher education curriculum. Teacher should be sensitized to the various ways of using the ICT facilities in teaching and learning through workshop, seminars and conferences
- III. Integrating ICTs use in education requires establishment of infrastructural facilities, acquisition of technologies and their periodic updating, management and professional support services.
- IV. There should be an effective monitoring system to ensure that the available ICT facilities already provided are properly maintain and utilized for effective instruction. Philanthropic organizations and institution should make effort to donate these ICT facilities to the institution of learning

- V. In systematically prepared and carefully packaged course, tests, and drills should increasingly be made available. For Audio and Video transmission specific channels should be allocated to audio and video transmission of prepared courses, texts several hours a day. In order to achieve equal opportunity for education, the Federal Government should invest in the purchase of the necessary software for all fields of education.
- VI. It is very important for policymakers and planners before any ICT Implementation in education to carefully consider the following: Appropriate provision of available rooms or buildings for the educational technology. In some part this country where they have many buildings, they ensure proper electrically wiring, networking, heating/cooling, ventilation, security and safety. Course text arise written by the best Educational expert in the world should be made into Audio and Video tapes for group viewing in schools, study centers and made available to individuals and organizations on request.

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## COMMUNITY ENGAGEMENT IN SCHOOL GOVERNANCE: BENEFITS AND CHALLENGES

BY

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### **ABSTRACT**

*Community engagement in School Governance plays a crucial role in fostering a collaborative and inclusive educational environment. This research explores the multifaceted nature of community involvement in school governance, highlighting both its benefits and challenges. The study reveals that effective community engagement can lead to improved educational outcomes, increased accountability, enhanced School-community relationships, and diverse perspectives in decision-making. Active participation from parents, local organizations, and other stakeholders ensures that schools remain responsive to the needs of students and the community at large. However, several challenges hinder the full realization of these benefits, including a lack of time and resources, communication barriers, institutional resistance, conflicting interests, and power imbalances. This research discusses strategies to address these challenges, such as fostering trust, promoting inclusivity, leveraging technology, and creating transparent communication channels. Ultimately, the findings emphasize that while community engagement in school governance can transform educational practices and outcomes, overcoming the associated challenges requires deliberate efforts and sustained commitment from all stakeholders involved. By addressing these barriers, schools can create a governance structure that is truly representative and effective, leading to better educational outcomes and a stronger, more connected community.*

### **Introduction**

Community engagement in school governance is a critical aspect of the educational process, emphasizing the involvement of parents, students, teachers, local organizations, and other

stakeholders in the management and decision-making processes of schools. This form of engagement not only improves the quality of education but also strengthens the relationship between schools and the surrounding community. The involvement of diverse community members ensures that school governance is more inclusive, transparent, and responsive to the needs and aspirations of all stakeholders. In recent years, the idea of community involvement in school governance has gained momentum as education systems worldwide seek to build stronger partnerships between schools and the communities they serve (Henderson & Mapp, 2002).

School governance is traditionally seen as the responsibility of school leaders, such as principals and administrators, as well as school boards. However, a growing body of research emphasizes that when parents, local businesses, non-profit organizations, and other community members become actively involved in the decision-making process, schools can become more accountable and responsive to the needs of their students and the wider community. Community engagement in governance can take many forms, including participation in school boards, advisory committees, parent-teacher associations, and various volunteer activities aimed at improving educational outcomes (Epstein, 2011).

The potential benefits of community engagement in school governance are substantial, ranging from improved educational outcomes to enhanced social cohesion. Engaged communities are more likely to work collaboratively with schools to overcome educational challenges, ensuring that schools remain aligned with local needs. Moreover, community involvement can serve as a powerful tool for mobilizing resources, both human and financial, to support schools. For instance, volunteerism and donations can help fund extracurricular activities, improve school facilities, or provide additional support to students in need (Shatkin & Gershberg, 2007).

However, despite its clear benefits, there are several challenges associated with community engagement in school governance. One of the primary barriers is the unequal participation of community members, often due to time constraints, lack of awareness, or social and cultural differences. In some cases, this can lead to the dominance of certain groups over others, which may not accurately represent the diversity of the school students body. Additionally, conflicting interests among community members, resistance to change, and the complexity of balancing

multiple perspectives can hinder effective collaboration (Mapp & Kuttner, 2013). Furthermore, many schools struggle with the capacity to train and support community members to engage meaningfully in governance roles, leaving gaps in the decision-making process (Auerbach, 2012).

This paper provide insights into how schools and communities can work together more effectively to improve educational outcomes for all students.

### **Community Engagement in School Governance**

Community Engagement in School Governance is the process of building collaborative relationships between schools and the community to share responsibility for students' academic success and well-being. It includes efforts to involve families, local organizations, and other community members in the governance of schools, ensuring that decision-making reflects the values and needs of the local community" (Epstein, 2011, p. 24).

Further more, Community engagement in school governance is a process that ensures community members, particularly parents and local leaders, are actively involved in the governance structures of schools. It aims to foster stronger relationships between the school and its community, leading to improved educational outcomes, school accountability, and greater social equity" (Lochner et al., 2019, p. 94).

#### **Benefits of Community Engagement in School Governance**

Below is a comprehensive overview of these benefits, with inside citations and references.

1. **Improved Students' Achievement:** One of the most significant benefits of community engagement in school governance is the positive impact on Students 'achievement. When communities are engaged in school governance, it leads to a better understanding of the educational needs of students and a greater investment in their success.
  - i. **Parental Involvement:** Active participation from parents and families in school decision-making processes has been shown to positively affect student academic performance. According to Epstein (2011), students whose parents are involved in their education perform better academically because they benefit from a supportive home environment and an educational culture that values their success.
  - ii. **Supportive Learning Environment:** Community members, through engagement in governance, can create a more supportive and conducive environment for learning. Local

businesses or organizations may provide resources, mentorship, or enrichment programs, enhancing students' learning opportunities (Henderson & Mapp, 2002).

2. **Enhanced School Accountability:** Community engagement fosters greater accountability within the school system. When schools involve stakeholders in decision-making, they become more transparent and accountable to the community they serve. This accountability can improve the quality of governance and decision-making processes.

**i. Feedback Mechanisms:** Schools that engage with the community regularly, through forums, surveys, or meetings, are better able to reflect the concerns and preferences of the community in their policies. According to Bryk et al. (2010), regular engagement helps schools adjust their practices based on the needs and feedback from the community, thus improving their operations and educational strategies.

**ii. Responsiveness to Community Needs:** Engaged communities often hold schools accountable for meeting the needs of all students, including those from underrepresented or disadvantaged backgrounds. This transparency helps ensure that resources are allocated equitably, and that schools address the needs of all students (Lochner et al., 2019).

3. **Stronger School-Community Relationships:** Community engagement builds stronger, more collaborative relationships between the school and the local community. These relationships create a sense of ownership and shared responsibility for the success of the school.

**i. Fostering Trust:** When schools actively engage community members in governance, trust between the school and its stakeholders is strengthened. The more open and inclusive the decision-making process, the more community members feel they have a stake in the school's success (Sharma, 2019).

**ii. Resource Mobilization:** Strong relationships between schools and local organizations can lead to resource sharing, such as funding for extracurricular activities, mentorship opportunities, or facilities that benefit students (Epstein, 2011). These partnerships can greatly enhance the resources available for students.

4. **Promote Educational Support:** Parents who are engaged in school governance are better equipped to support their children's learning at home. They are more likely to understand the school's goals and initiatives, and they can help reinforce these values at home, further supporting their children's academic success (Epstein, 2011).

5. Promoting Social Equity: Community engagement in school governance can help promote social equity by ensuring that diverse voices are heard and considered in decision-making processes.

**i. Inclusive Governance:** Schools that actively engage all sectors of the community, including marginalized and underrepresented groups, ensure that decisions reflect the needs of every student. This helps bridge gaps in educational access and achievement, particularly for disadvantaged communities (Henderson & Mapp, 2002).

**ii. Equitable Resource Distribution:** Community involvement in governance can also help ensure that resources, such as funding and educational programs, are distributed equitably across the student body, addressing inequalities and providing all students with opportunities for success (Lochner et al., 2019).

6. Improved School Culture: Community engagement can positively influence the school culture, leading to a more inclusive, respectful, and supportive environment for students and staff.

**i. Strengthening School Climate:** Schools with strong community engagement are likely to have better school climates, characterized by mutual respect and collaboration among students, teachers, and community members. According to Epstein (2011), a positive school climate enhances the learning environment, which is conducive to better academic and social outcomes for students.

**ii. Shared Values and Goals:** When community members collaborate on governance, it fosters a shared understanding of the school's values and goals. This alignment helps create a cohesive school culture where everyone is working toward the same objectives, leading to greater unity and a sense of belonging among students and staff (Sharma, 2019).

### **Models of Community Engagement in School Governance**

Below is a comprehensive overview of the models of community engagement in school governance, along with inside citations and references.

**1. Traditional School Board Model:** The **traditional school board model** is one of the most commonly used forms of community engagement in school governance. In this model, a group of elected or appointed individuals (often from the local community) is responsible for overseeing the management and operation of a school district.

**i. Decision-Making Authority:** School boards have formal authority to approve budgets, set educational policies, and make decisions on school governance (Sharma, 2019). Board members typically represent the local community and ensure that the school's direction aligns with the values and needs of the community.

**ii. Stakeholder Representation:** In some districts, the school board is composed of a variety of stakeholders, including parents, local business leaders, and teachers, to ensure that all sectors of the community have a voice in school governance (Bryk et al., 2010).

**iii. Limitations:** While this model provides formalized governance, it can sometimes lack direct, day-to-day involvement from a broad spectrum of the community. Decision-making can become disconnected from the day-to-day realities of the school if not properly managed (Lochner et al., 2019).

2. Collaborative Governance Model: The **collaborative governance model** emphasizes shared responsibility and decision-making among various stakeholders, including school staff, parents, students, local businesses, and government agencies. This model aims to break down the barriers between school administration and the community, creating a more integrated approach to decision-making.

**i. Shared Decision-Making:** In this model, the governance process is collaborative, with decisions made through discussions and consensus-building among stakeholders. This structure ensures that all voices are heard and valued (Epstein, 2011).

3. Participatory Action Model: The **participatory action model** focuses on active, ongoing involvement from all segments of the community, particularly underrepresented and marginalized groups, in school governance. This model promotes a continuous cycle of action, reflection, and improvement.

**i. Inclusive Participation:** The participatory action model encourages involvement from all community groups, including parents, teachers, students, and local organizations, with a specific focus on giving voice to marginalized or disadvantaged groups (Sharma, 2019).

**ii. Action and Reflection:** Stakeholders collaborate to identify school issues and then take collective action to address them. Afterward, the group reflects on the effectiveness of their actions and makes necessary adjustments (Henderson & Mapp, 2002).

**iii. Empowerment:** This model empowers community members by involving them in both the decision-making and implementation phases of school governance. It seeks to foster a sense of agency and responsibility within the community, which can lead to more sustained involvement (Sharma, 2019).

**4. School-Community Partnership Model:** The **school-community partnership model** is based on building formal partnerships between schools and external community organizations. This model highlights the importance of external support networks and how they contribute to the governance and success of a school.

**i. External Collaboration:** Schools may form partnerships with local businesses, nonprofit organizations, cultural institutions, and government agencies to enhance educational programs, secure additional funding, and provide resources or expertise that the school might lack (Epstein, 2011).

**ii. Focus on Resource Sharing:** These partnerships may focus on resource-sharing initiatives, such as mentorship programs, after-school enrichment activities, internships, and local business involvement in curriculum design or career readiness programs (Bryk et al., 2010).

**5. Decentralized Governance Model:** In the **decentralized governance model**, schools are given more autonomy over their governance, with decision-making processes pushed down to the school level rather than being controlled by a central school district or board. This model encourages local school leaders and staff to make decisions that best serve their students.

**i. Autonomy at the School Level:** Schools have the freedom to make decisions regarding curriculum, staffing, and budgeting without needing approval from a central authority. This local control allows schools to tailor their programs to the specific needs of the student body (Lochner et al., 2019).

**ii. Community Involvement:** In this model, the school's leadership is expected to engage with local community members, including parents, students, and local leaders, in order to make decisions that reflect the unique needs and values of the community (Sharma, 2019).

**iii. Potential for Innovation:** This model fosters innovation because it allows schools the flexibility to experiment with new teaching methods, school structures, and community engagement strategies. However, it also requires strong leadership to ensure accountability and transparency.

6. **Civic Engagement Model:** This model focuses on encouraging broader community involvement in educational decision-making through public forums, debates, and civic activities. This model aims to cultivate a culture of active citizenship, where community members take on an ongoing role in shaping the educational landscape.

**i. Public Involvement:** Community members participate in public meetings, debates, and forums to discuss important school issues, policies, and priorities. This model emphasizes the democratic nature of school governance, where decisions are made through public discourse and collective action (Epstein, 2011).

**iii. Engagement beyond Parents:** While parental involvement is a significant aspect, this model also emphasizes engaging all community members, including local residents, businesses, and civic organizations, in shaping school policy and decisions (Epstein, 2011).

### **Challenges of Community Engagement in School Governance**

Below is a comprehensive discussion on the challenges of community engagement in school governance, along with inside citations and references.

1. **Lack of Trust and Communication Barriers:** One of the most significant challenges in community engagement is the lack of trust between the school and the community, which can inhibit open communication and collaboration.

**i. Distrust between Stakeholders:** In many communities, parents and local residents may not trust school administrators or decision-makers due to previous negative experiences or perceived failures in leadership (Bryk et al., 2010). This lack of trust can make it difficult for the school to engage effectively with the broader community.

**ii. Communication Gaps:** Effective community engagement requires clear, consistent communication. However, many schools struggle with communicating their needs, goals, and initiatives to the community. For example, schools may fail to use accessible or inclusive communication channels, which can alienate parents or community members who feel excluded from decision-making processes (Sharma, 2019).

2. **Cultural and Socioeconomic Barriers:** Cultural and socioeconomic factors often create barriers to effective community engagement in school governance. These factors influence the extent to which individuals and families participate in school activities and governance.

i. **Cultural Differences:** In diverse communities, cultural norms and practices can create barriers to engagement. For instance, some cultures may have different expectations about the role of parents in education, or there may be language barriers that prevent effective communication (Epstein, 2011). Schools may not always have the resources or strategies to engage non-dominant cultural groups in governance.

ii. **Socioeconomic Disparities:** Low-income families may face challenges that prevent them from engaging in school governance. Time constraints due to work schedules, lack of transportation, or financial barriers to attending school meetings or events are common issues in lower-income communities (Lochner et al., 2019). These barriers limit the ability of disadvantaged families to participate in decision-making processes that affect their children's education.

3. **Limited Time and Resources for Engagement:** Schools often lack the time and resources to fully engage the community in governance processes, which leads to a superficial or token involvement from stakeholders.

i. **Time Constraints:** Teachers, administrators, and parents frequently have limited time to engage in community meetings, events, or committees. As a result, school governance can become the responsibility of a small group of committed individuals, rather than a broad cross-section of the community (Henderson & Mapp, 2002).

ii. **Financial Constraints:** Schools and communities with limited financial resources often cannot provide the necessary infrastructure for community engagement, such as transportation, childcare, or incentives for attendance at meetings (Sharma, 2019). These limitations reduce the ability to engage all members of the community, particularly those from disadvantaged backgrounds.

4. **Power Imbalances and Unequal Participation:** Another challenge in community engagement is the potential for unequal power dynamics, where certain groups have more influence over school governance than others.

i. **Elite Control:** In some communities, powerful or influential groups (such as local elites, business leaders, or politically connected individuals) may dominate governance processes, leaving less vocal groups, such as marginalized communities, with little to no influence (Bryk et

al., 2010). This can lead to policies that benefit a narrow segment of the population, rather than the broader community.

**ii. Lack of Inclusivity:** Even when community engagement is encouraged, some groups may still face barriers to participation due to power imbalances. For example, parents of children with disabilities or those from immigrant background may find it difficult to make their voices heard if their concerns are not adequately represented or if they feel excluded from decision-making spaces (Epstein, 2011).

**5. Resistance to Change from School Leadership:** Resistance from school leadership can be another significant challenge to community engagement. School leaders may resist changing the status quo, especially if they are not accustomed to involving the community in decision-making processes.

**i. Administrative Resistance:** School administrators may resist efforts to involve the community in governance because it could challenge existing authority structures or demand additional resources (Sharma, 2019). Some school leaders may perceive community involvement as a threat to their control over school decisions.

**ii. Lack of Training:** Many school leaders may not have the skills or training necessary to effectively manage community engagement. This can result in poorly executed initiatives that fail to create meaningful or sustained involvement from community members (Lochner et al., 2019).

**6. Competing Priorities and Interests:** In communities with diverse needs, there can be a clash of priorities and interests that makes it difficult to reach a consensus on governance issues.

**i. Diverse Needs:** Communities may have conflicting interests based on socioeconomic status, educational goals, cultural backgrounds, or political affiliations. For example, parents of students in advanced programs may prioritize resources for gifted education, while others may advocate for more support for students with disabilities or English language learners. This can make it difficult to find common ground (Epstein, 2011).

**ii. School versus Community Needs:** Schools and the community may have differing priorities. Schools might prioritize academic outcomes, while community members may be more concerned with issues like safety or extracurricular activities. Balancing these different needs can be challenging and can limit the effectiveness of community engagement (Lochner et al., 2019).

## **Overcoming the Challenges of Community Engagement in School Governance**

This section explores methods to overcome these challenges, providing practical approaches that can be employed by school leaders, administrators, and communities to enhance engagement and improve governance.

### **1. Building Trust and Improving Communication**

One of the fundamental barriers to effective community engagement is the lack of trust and communication gaps between schools and their communities. Overcoming this challenge requires proactive strategies to rebuild trust and establish open, transparent communication channels.

**i. Establishing Transparent Communication:** Schools should ensure that communication is consistent, transparent, and accessible. This can be achieved by holding regular meetings, using multiple communication channels (emails, social media, community events), and ensuring that information is available in multiple languages to accommodate diverse community members (Bryk et al., 2010). Additionally, schools should clearly communicate the decision-making processes and how community input will be integrated into governance.

**ii. Creating Open Dialogue:** Schools can establish regular forums or town hall meetings where community members, parents, and students can express their concerns, ask questions, and receive updates. These forums help build trust and create a space where community members feel their voices are heard (Sharma, 2019).

**iii. Building Relationships:** School leadership should focus on relationship-building activities, such as community service projects or informal gatherings, to establish a more personal connection with parents and local residents. These initiatives can foster positive engagement and help to break down barriers of distrust (Epstein, 2011).

### **2. Addressing Cultural and Socioeconomic Barriers**

Cultural and socioeconomic factors often create significant barriers to community engagement. Overcoming these barriers requires intentional efforts to be inclusive and to create equitable opportunities for all community members to participate.

**i. Culturally Responsive Engagement:** Schools can engage with diverse communities by recognizing and respecting cultural differences. It is crucial for schools to actively involve parents and community members from various cultural backgrounds in the governance process.

This could involve providing translation services, offering culturally relevant materials, and ensuring that meetings are scheduled at times that accommodate the availability of all parents (Lochner et al., 2019).

**ii. Overcoming Socioeconomic Barriers:** For low-income families, schools can provide incentives for participation, such as offering childcare, transportation assistance, or stipends for attendance. Additionally, hosting events in accessible community spaces can reduce the barriers to involvement, ensuring that all families can take part in governance activities (Henderson & Mapp, 2002).

**iii. Creating Equity in Participation:** Schools must ensure that all groups, especially those from marginalized backgrounds, have equal access to the governance process. Engaging in outreach and actively seeking input from these groups through surveys, focus groups, or one-on-one meetings can help ensure that the voices of all community members are heard (Sharma, 2019).

**3. Empowering Stakeholders and Reducing Power Imbalances:** Power imbalances often lead to unequal participation in school governance, where certain groups dominate decision-making while others are marginalized. Schools must take steps to empower all stakeholders and ensure that decisions reflect the needs of the entire community.

**i. Creating Inclusive Governance Structures:** Schools can establish governance structures that provide equal representation for all stakeholders, including parents, teachers, students, and community members. School councils, advisory committees, or task forces that include diverse voices can help ensure that no group is excluded from the decision-making process (Bryk et al., 2010).

**ii. Facilitating Shared Leadership:** Schools should promote shared leadership where decision-making authority is distributed across multiple stakeholders. This can involve giving parents and community leaders a greater role in shaping school policies, budgets, and curricula. By ensuring that these stakeholders have a tangible influence on governance, schools can mitigate the power imbalances that often occur (Epstein, 2011).

**iii. Training and Capacity Building:** Providing training for both school leaders and community members on governance processes can empower all stakeholders. This can include workshops on understanding school budgets, policy-making, and how to advocate for the needs of the

community effectively. Empowering participants with knowledge enables them to navigate power structures more effectively (Lochner et al., 2019).

4. **Allocating Adequate Resources and Time for Engagement:** Effective community engagement requires adequate resources, including time, personnel, and financial support. Addressing resource constraints can make a significant difference in ensuring meaningful participation from all stakeholders.

**i. Providing Incentives for Participation:** To overcome time constraints, schools can provide incentives such as stipends for parents attending meetings, offer flexible meeting times (e.g., evening or weekend meetings), or provide refreshments to encourage attendance. These efforts can help ensure that time and financial constraints do not prevent individuals from participating (Sharma, 2019).

**ii. Leveraging Community Resources:** Schools can tap into local community organizations, businesses, and civic groups to provide resources and support for engagement efforts. For example, local businesses could sponsor events or offer volunteers to assist with engagement activities. By leveraging local resources, schools can extend their reach and minimize costs (Henderson & Mapp, 2002).

**iii. Staffing and Administrative Support:** Schools should allocate dedicated staff or resources to manage community engagement activities. This could involve creating a specific role for community liaison officers or engagement coordinators who focus on building and maintaining relationships with the community (Lochner et al., 2019).

#### **5. Sustaining Long-Term Engagement**

One of the most significant challenges in community engagement is maintaining interest and participation over time. Schools must develop strategies to ensure that community engagement is not only a one-time effort but a continuous and sustainable process.

**i. Building Long-Term Relationships:** Schools should focus on building lasting relationships with the community by staying connected even when there are no immediate decisions to be made. Ongoing activities, such as community service projects or regular social events, can help sustain engagement over time (Sharma, 2019).

**ii. Celebrating Successes:** Regularly celebrating the achievements of community engagement efforts can help maintain momentum. Recognizing the contributions of parents, students, and

local organizations through awards, public recognition, or events can create a culture of appreciation and encourage continued involvement (Epstein, 2011).

iii. **Evaluating and Adapting:** Schools should regularly assess the effectiveness of their engagement strategies and make necessary adjustments. Soliciting feedback from community members and using this input to refine engagement efforts helps ensure that the process remains relevant and meaningful to all stakeholders (Lochner et al., 2019).

### **Conclusion**

Community engagement in school governance is essential for improving educational outcomes, fostering accountability, and ensuring that schools remain responsive to the needs of their communities. However, the benefits of community involvement can only be fully realized if the challenges, such as lack of time, resources, and communication barriers, are addressed. By promoting inclusive decision-making, ensuring equitable participation, and leveraging technology, schools can overcome these challenges and create a more collaborative and effective governance structure. Ultimately, the successful integration of community engagement in school governance can lead to stronger educational systems that better serve students and the wider community.

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**RELATIONSHIP BETWEEN PRINCIPALS' LEADERSHIP STYLES AND  
TEACHERS' JOB PERFORMANCE IN YOBE STATE SENIOR SECONDARY  
SCHOOLS, YOBE STATE, NIGERIA**

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**ABSTRACT**

*This study examined the Relationship between Principals Leadership Styles and Teachers Job Performance of Senior Secondary Schools in Yobe State Nigeria. The study determined the relationship between Nomothetic leadership style of Principals and Teachers job performance in senior secondary schools in Yobe State, relationship between Transformational principals leadership style of Principals and Teachers job performance in senior secondary schools in Yobe state, and relationship between Idiographic leadership style of Principals and Teachers job performance in Senior Secondary Schools in Yobe state, Correlational research design was used in the study. The population for the study comprised of three thousand four hundred and sixty (3,460) Principals and Teachers across the forty eighty (48) SSS in Yobe state. Three hundred and forty one (341) were used as a sample, which made up three hundred and eighty three (383) Teachers and forty two (42) Principals. Data were collected through the use of questionnaire; using convenience sampling techniques to select the respondents. The instrument had a reliability of 0.87 and 0.76 for Principal and Teachers Questionnaires respectively, determined using Cronbach Alpha analysis. The hypotheses were tested using Pearson Product moment Correlation Coefficient (PPMC). Based on these findings, it was found that, the integrated use of different leadership styles were meant to be effective in determining Teachers job performance. it was recommended that, the state government should recruit adequate number and calibre of staff with diverse knowledge of leadership for each school to ensure optimum Teachers job performance.*

**Keywords:** Leadership style, Nomothetics, Transformational, Idiographic, Teachers Job Performance

## **Introduction**

Ochoyi and Donald (2009) and Wilson (2016) viewed education as vital instrument in the development of the learners, through the communication of meaningful values such as skills, knowledge and planned activities that can upgrade the learners' competencies for the achievement of the community. Education, therefore offers for the growth of inhabitants, as well as attained over the application of the vital school prospectuses and education plan of the nation. In Nigeria, the education policy anchors on five fundamental objectives, basically a free and democratic environment; a just and egalitarian environment; a united, strong and self-reliant country; a great and vigorous economy; a land full of bright prospects for all inhabitants (FGN, 2014). Scholars affirmed that, the level which Principal involves the subordinate in making resolutions defines his leadership style pattern (Eleajo, 2017 & Jideofor, 2022) thus; the way the principal relates with his subordinate could contribute greatly to their effectiveness in contributing to goal attainment. Researchers have recognized some of leadership pattern exhibited in school system were nomothetic, idiographic and transformational leadership styles. The Nomothetic leadership conduct is characterized that, a Head who monitors the procedures and guidelines of an institution to the end.

Performance can be seen as an act of accomplishing or executing a given role and the ability to combine skillfully the desired or expected behaviours towards the achievement of institutional goals and objectives (Saleem, Aslam, Yin, & Rao, 2020). Teachers' work achievement therefore, is the act in where an employee in an organization discharges his duties to attain the predetermined goals and objectives. It might be attained by the employee's performance in various circumstances and/or by his level of involvement in the daily smooth running of the institution for objective achievement. Hence, instructors' work concert can be termed as low, moderate, high, etc, looking into level of teachers' involvement in discharging predetermined goals and objectives. (Day & Sammons, 2016; Fackler & Malmberg, 2016; Parveen, Phuc, Shafiq, & Xiaowei, 2021). In view of that, the attributes such as efficient teaching and learning, effective utilization of scheme of work, lesson preparation and plan, monitoring and supervision were the qualities teachers ought to be possess in the school structure. Therefore, the leader inspires active achievement of their teachers by pinpointing their desires and safeguarding their gratification. Hence, the performance of the teachers can be measured through the annual

appraisal, to determine whether they have fulfill the expected curriculum offerings, especially in the area of teaching and learning, effective record keeping, lesson planning and presentation, capability in mastery the concept of study and other curricular activities. In addition, other areas of assessment include effective leadership, effective supervision, effective monitoring of students' work, motivating students' interest, and disciplinary ability of the teachers (Adeyemi, 2004 & Gardner 2016).

The problems of Yobe state in educational sub-sector are quite enormous. Hence, the researcher observed that, ineffective supervision from the school administrators makes the teachers not to discharge their duties accordingly. Ineffective supervision affects teachers' job performance, which result to students' failure in terminal and final examinations. Over the years, Yobe state government has invested quite a sizeable share of its budgetary allocation on education. They recruited over 1,600 teachers in 2012, 2018 and 2020 with the aim to resolve the issue of inadequate teachers in the state (Yobe State Statistical Year Book, 2013, 2019 and 2020). Despite all this effort, most of schools were unable to complete the prescribe scheme of work, which in turn affects the overall curriculum offerings. Little or no actions have been taking by the school administrators. In years back, teachers submit their lesson plans and notes to the Principal or vice principal for inspection and observation to ensure that, the teacher is within the scope of the scheme of work given to him. Most of the schools now are not strict to this; they only did lesson plan, if they heard committee are coming for supervision. Similarly, the accomplishment of organizational objectives mainly depends on the approach and style of leadership an organization offered by the dweller of such position at a given situation.

### **Statement of the Problem**

Headship behaviours of principals aimed to ensure effective teachers job performance. Over the years, there is growing concern over the conflicting interest in Yobe state teachers on the management behaviours of some Head teachers in Yobe state secondary schools. Hence, teachers and students could be at disadvantage occasioned by unfavourable management elegances offered by Head Teachers in senior secondary schools in Yobe state. Evidences from studies and observations made through Yobe State extract of educational statistics indicate some of the nowadays candidates in the State could not get into post-secondary schools nor relish valuable survives in the environment for the reason of unsuccessful educational achievement, which may

be as a results of some factors among which is leadership's styles of principals. Consequently, all angles and corners in the state were debating on low educational achievement of the candidates, low participation from in discharging their tasks, difficulty of some Head teachers in efficiently governing the institutes. Individuals in the community were begun to ask managerial behaviors of Head Teachers. It was observed over the years that, teachers often miss their lessons, continuous assessment test and practical works. It might be the headships of leaders are accountable for the Teachers job performance. Based on these, the researchers examined the relationship between Head teachers management behaviours and instructors work performance in the Yobe state public senior secondary schools.

### **Objectives of the Study**

The objectives of the research were to examine:

1. the relationship between Nomothetic leadership style of Principals and Instructors job performance in public senior secondary schools in Yobe state.
2. association among transformational principals leadership style of principals and instructors job performance in public senior secondary schools in Yobe state.
3. Relationship among idiographic leadership style of principals and teachers job performance in public senior secondary schools in Yobe state.

### **Hypotheses**

The under listed null hypotheses were tested at 0.05 level of significance;

**H<sub>01</sub>:** There is no significant association among nomothetic leadership behaviour of principals and instructors job performance in senior secondary schools, Yobe state.

**H<sub>02</sub>:** There is no significant association among transformational leadership behaviour of principals and instructors job performance in senior secondary schools, Yobe State.

**H<sub>03</sub>:** There is no significant association among idiographic leadership behaviour of principals and instructors job performance in senior secondary schools, Yobe state.

### **Leadership Styles and its subdivisions in Schools**

According to Kruse (2013), stated that, "Leadership is a process of social influence, which maximises the efforts of workers towards the achievement of a goal" In his view, Ertas, 2015; Chen et al., 2017; Demircioglu, 2021), stated that leadership is the process of influencing the activities of a group of individuals by a leader in effort towards goal achievement. According to

Hsiung, 2012; Haque and Yamoah, (2021) leadership style “is a particular behaviour applied by a leader to motivate subordinates to realize the objectives of the organisation”. The researcher added that,, management is not a single act of persuading employees to transmit out the institutional objectives and the unique duty like reinforcement of workers certify that they discharge the roles that suit the manager’s needs. This act gives the manager chance of guiding the subordinates in the group.

Adeyemi (2006) acknowledged three (3) Styles of leadership used by school administrators. These were Nomothetic, Transformational and Idiographic Styles. The researcher affirmed, the nomothetic leadership style, the manager interest supersede the employee tasks and responsibilities. The basic subordinates’ wants were neglected and the manager is dreaded than valued. The head is self-centered, cruel and avaricious and rule irrational. The leader doesn’t involve any subordinates in making his decision. Whereas, the Transformational leadership behaviour the essentials and welfares of employees were putting more priorities or consideration. The employees were part of organization decision and there is good sharing of responsibilities. In the Idiographic leadership behaviour, the subordinates take the decision; the head is just a figurehead. The manager permits the subordinate to take their decision all the time so that he can preserve the employee gratification and unity as well as employee mutual support in the organisation.

### **Level of Teachers Job Performance**

Principals and teachers constitute the primary sources of effective leadership in educational institutions that lead to improve student academic achievement and performance (Fackler and Malmberg, 2016; Parveen et al., 2021). However, it is remarkably observed through previous studies that, the principals’ direct and indirect stimulate students success is amid considerable controversy of positive and negative (Tan, 2014; Hallinger and Ko, 2015; Wu et al., 2020a,b). The main acknowledgment then goes to teachers and others for the students’ personal and intellectual development in educational institutes (DuFour and Marzano, 2011). Furthermore, teachers’ leadership and their instructions matter most to students’ academic achievement (Sebastian and Allensworth, 2019). Thus, obviously, the school administration must be held accountable for facilitating and refining modern knowledge management and classroom

instructions that likely improve educational achievement of students and enhance teacher job performance (Antony et al., 2012; Al-Safran et al., 2014; Keddie, 2015; Parveen et al., 2022).

The effective performance, work motivation, and contentment level of employees constitute factors of great significance for all institutions, especially educational organizations (Chen et al., 2017; Demircioglu, 2021). Previous studies stated that, the ability to complete the job term and survive a position is due to not only performance or the economic need for organisation but also the leadership style practices of superiors (Sun and Wang, 2017; Bickmore and Dowell, 2018; Lee et al., 2019; Baig et al., 2021). Eventually, the leadership role has a great significance in decision-making to inspire subordinates and reach a consensus about how and what their needs to be fulfilled for the achievement of employees' needs and desired goal and objectives (Kafka, 2009). Teachers' job performance be described as the ability of teachers to combine relevant inputs for the enhancement of teaching and learning processes (Saleem, Aslam, Yin, & Rao, 2020). However, Agu and Oputa (2021) argued that job performance is determined by the worker's level of participation in the day to day running of the organization or institution. It is well-known that personnel act inversely beneath diverse circumstances. Hence, Head teachers should inspire active presentation of their instructors by recognizing their wishes, desires and attempt to actualizing it.

Mwangi (2013) in his study on effects of leadership styles on teachers' job performance and satisfaction, He sampled 21 public secondary schools with 20 respondents each. It showed that, there were different in the scores between Head teacher and the instructors when responded to initiation leadership behaviour, in which Head teachers marks themselves greater than where instructor recorded them. Nevertheless, it appeared that, higher number of principal involved in initiation behaviour sporadically. Maazu (2008) conducted a study to determine the relationship between teachers' job satisfaction and job performance in Yobe State senior secondary schools. He used correlational research design with teachers' population of 2,385, 47 senior secondary schools and 47 principals with a sample of 470 teachers and 47 principals. He used mean percentage, standard deviation and Pearson product moment correlation. In analyzing the extent to which tutors' work achievement in Yobe State senior secondary schools. The research revealed a significant extent of work achievement in Yobe State as opposed to other ways used in assessing performance of teachers like interview and filling of evaluation forms by head

teachers on behalf of teachers. The study showed a high extent of trainers performance in almost all the schools supervised in the state.

### **Nomothetic Leadership Style of Principals and Teachers Job Performance**

Wangul (2002), conducted a study on the relationship between the Nomothetic leadership style and teachers school performance in London. He also used a total population of 2,700 out of which 565 was sampled for the research. He used PPMC to analyse his result and questionnaires were to collect data. The research revealed that there is significant association among the nomothetic headship behaviour and school concert with  $p$  – value of -0.65 or -65%. Which is a strong relationship but on the negative side of it. It implies that, the higher the Nomothetic principal becomes, the lesser the capability of the school. Principals who practiced the nomothetic behaviour might reduce the educational achievement, for the reason that they choose rub management behaviour, which are extremely disliked by the workers.

Adeyemi (2010) conducted a study on principals' leadership styles and teachers' job performance in senior secondary schools in Ondo state. It shows that, the calculated  $t$ -value (3.46) were higher than table value (1.96) at 0.05 level of significant. Therefore, the hypothesis was unaccepted. It illustrated that, there was significant relationship among instructors working condition in schools with head teachers practicing nomothetic management behaviour and schools Head teachers practicing Transformational behaviour pattern. Similarly, there was greater mean score (45.71) for schools where Head teachers practiced transformational pattern of behaviour and (24.56) for Head teachers practicing Nomothetic pattern of administration. The study also suggests that, Head teachers that choose Nomothetic pattern of leadership get great Tutors work achievement as a lot of Tutors has to be force to perform their duties. The study indicated substantial association among transformational headship and instructors' job performance. It showed that, the higher the nomothetic a Principal is, the greater level of employees in discharging their duties. This finding was contrary to the findings made by (Akerle, 2007) who found no significant relationship between principals' nomothetic leadership style and teachers' job performance in secondary schools in Lagos State, Nigeria. It also negated the findings made in some earlier studies (Gronn, 2009). The outcomes indicated substantial affiliation among Transformational behaviour and educators work achievement. The study also entails that, Head teachers practicing Transformational headship achieve more performance from

the instructors in senior secondary schools in Ondo State. The finding was consistent with the findings made in some previous studies (Bickmore and Dowell, 2018). The finding was however contrary to the findings made by (Akerele, 2007) who found that teachers' perform better in schools having principals using Transformational style of leadership than in schools having principals using Nomothetic style of leadership. The study also found that, the significant relationship found in this study between Principals Transformational leadership style and teachers' job satisfaction in the schools implies that when the leadership style used by Principals of primary schools was Transformational by delegating authority to staff among other things, teachers' job satisfaction is better enhanced. This finding was consistent with the findings made in previous studies (Parveen; Phuc; Shafiq; & Xiaowei, 2021).

### **Transformational Leadership Style of Principal and Teachers Job Performance**

Ogalo (2013) in Igwe (2017) stated that transformational leadership style motivates teachers who, in turn, could directly influence students' achievement. In specific, transformational leadership style ensures that teacher's needs are met and this encourages teachers to be at their feet and bring out the best in their classroom interaction pattern, and therefore, students are taught well and they perform well in their internal and external examinations. Given teacher morale and performance improvement, certain leadership practices have empirically proved themselves valuable such as effective communication with teachers, well-established principal and teacher relationships, and attention to teacher professionalism (Lambersky, 2016; Terosky, 2016). Thus, the study suggests that, it necessitates tremendous efforts by both the school management and teachers to enhance teacher job performance (Imhangbe et al., 2018; Saleem et al., 2020). The ethical behavior of organizational leaders plays an important role in promoting work behavior, innovative ideas, and job satisfaction among workers (Hsiung, 2012; Haque and Yamoah, 2021). Adeyemi (2004) stated that, transformational style subordinates and individuals are consulted in decision making and in formulating organizational policies. Communication is multidirectional and ideas are exchanged between staff and the leader (Adeyemi, 2004; Hsiung, 2012; Haque & Yamoah, 2021).

Adeyemi (2010) , during a particular study on the forms of leadership style and the teachers performance using 281 senior secondary schools, 281 senior secondary schools, 281 principals and 7,060 teachers in Ondo state, choose stratified random sampling to pick a sample of 240

secondary schools, 240 principals and 1,800 teachers. He opined that, there is no substantial change in instructors' work achievement schools that Head teachers practiced Nomothetic pattern of behaviour and schools that Head teachers practiced Idiographic headship in the State. Similarly, the figures was analyzed and tested using t-test analysed, it was found that, there negative relationship which translate that such leadership styles were not encourage teachers to accomplish their responsibilities effectively. Furthermore, the study revealed that, the calculated t-value (4.52) was higher than the table t-value (1.96) at 0.05 significant. This shows that, there was a substantial variance in instructors' work performance among schools with Head teachers practiced nomothetic headship and schools with Head teachers practiced management panache in the State. Similarly, there was greater mean score (45.71) for schools where Head teachers practiced nomothetic pattern of behaviour and (14.31) for Head teachers practicing idiographic pattern of administration. The study also suggests that, Head teachers that choose Nomothetic pattern of leadership get great Tutors work achievement as a lot of Tutors has to be force to perform their duties. The study indicated substantial association among idiographic headship and instructors' job performance. It showed that, the higher the transformational a Principal be the greater level of employees in discharging their duties. This finding was in consistent with the findings made by researchers (Adeyemi, 2004; Imhangbe et al., 2018; & Saleem et al., 2020).

### **Idiographic Leadership Styles of Principals and Teachers Job Performance**

Adeyemi (2004), the Idiographic management pattern offers the chance to entities to have foremost tasks in policy creation. Employees have power to perform tasks without the consent of Head teacher in this style the leader plays the role of materials supplier (Omolayo, 2004; Parveen; Tran; Alghamdi; Namaziandost; Aslam; & Xiaowei, 2022).

Gabriel (2010) conducted a study on leadership styles of principal in relation to students' academic performance in Orakam District, Ogbadigbo Benue State, Nigeria. The study revealed that, there is significant association exist among Head teachers' Transformational management style and learners' educational concert. This suggests that, the greater the Transformational a Head Teacher is in his/her headship the colorful the educational performance of learners in the schools, because the performance of students is subject to the teachers' working performance. The finding was in agreement with the findings made by Akerele, (2007) who found significant relationship between principals' Transformational leadership style and students' academic

performance in secondary schools in Lagos State, Nigeria. The non-significant association exists in this research among Head teachers Idiographic control and learners' educational performance which indicates that, there was no agreement among them. The result advocates that, head teachers Idiographic management behaviour had no substantial association with pupils' educational performance. The finding was consistent with the findings made in by (Arar, & Oplatka, 2015).

Adeyemi (2010) conducted a study on principals' leadership styles and teachers' job performance in senior secondary schools in Ondo state. It shows that, the calculated t-value (2.41) were higher than table value (1.96) at 0.05 level of significant. Therefore, the hypothesis was unaccepted. It illustrated that, there was significant relationship among instructors working condition in schools with head teachers practicing transformational management behaviour and schools Head teachers practicing Idiographic behaviour pattern. Similarly, there was greater mean score (45.71) for schools where Head teachers practiced transformational pattern of behaviour and (24.56) for Head teachers practicing Idiographic pattern of administration.

### **Methodology**

This research adopted correlational research design, which determines the association among principal management behaviour and Instructors Job performance in senior secondary schools in Yobe State. The target population for this study consists of all the 48 principals and 3,460 teachers from the 48 public Secondary Schools spread across the 17 local government areas of Yobe state.

Six (6) senior secondary schools from the two local governments of Gujba and Gulani were removed from the study due to the insurgency in the state, which make the total to (42) senior secondary schools, while the overall figure of instructors in the schools to be sampled was (3,158). To determine the sample size of teachers, the table of Krajcic and Morgan (1970) was use. Thus, out of (3,158) 341 total population of Principals and Teachers would-be used as a sample for the research. Therefore, in total the study has the sample of 383, which are 42 Principals and 341 Teachers. Convenience sampling technique was used to draw the respondents from the selected schools. Convenient sampling technique simplifies the researcher work by having direct contact with the respondents and also prevents the loss of questionnaire and no reservation for the teacher that was absent.

Two sets of questionnaire were used for the research. Data on Head teachers' management behaviour and Teachers job performance were gathered from each school. The opinion poll were divided into two segments, A and B. Section A contains the questionnaire items, which examined Principals' leadership styles to be responded by Teachers, on a five point scale of A Always (5), FRQ Frequently (4), SD Seldom (3), OCC Occasionally (2) and NV Never (1). The Section B contains the questionnaire items, which examined Teachers job performance, were responded by the Principals, on a five point scale of Vr Very rarely (1), R Rarely (2), nRnR Neither Rarely Nor Regularly (3), R Regularly (4), VR Very Regularly (5).

The data collected were analyzed using correlation analysis of Pearson product Moment Correlational Coefficient (PPMC), using the SPSS. As Martin and Acuna (2002) observe, SPSS is able to handle large amount of data, and given its wide spectrum of statistical procedures purposefully designed for social sciences, it is quite efficient.

## Results

The researchers highlight the results obtained from SPSS analysis and subsequently discussed were based on the hypotheses;

**Ho<sub>1</sub>.** There is no substantial association among Nomothetic Leadership Style and Teachers Job Performance in Senior Secondary Schools Yobe State.

**Table 1: Summary of PPMC on Nomothetic Leadership Style and teachers Job Performance in Senior Secondary Schools of Yobe State**

Variable	n	Mean	SD	Df	R	p-value	Remark
NLS	383	3.16	0.44	381	0.572	0.09	Accept Ho <sub>1</sub>
Teacher JP	383	3.13	0.19				

Table 1 revealed that, there was moderate positive relationship between Nomothetic management styles and Instructors work achievement with Pearson Product Moment Correlation  $r = 0.572$ . The table also revealed that, the association among nomothetic management style and Instructors work achievement was statistically not Significant since the p-value (0.09) is higher than the level of significant 0.05. Hence, assumption one was accepted and nomothetic management behaviour do not has significant on Instructors work Performance

**Ho<sub>2</sub>** There is no significant association among Transformational Leadership Style and Teachers Work Performance in Senior Secondary Schools Yobe State

**Table 2: Summary of PPMC on Transformational Leadership Style and teachers Work Performance in Senior Secondary Schools of Yobe State**

Variable	N	Mean	SD	df	R	p-value	Remark
TLS	383	3.30	0.42	381	0.796	0.04	Reject Ho <sub>2</sub>
Teacher JP	383	3.13	0.19				

Table 2 discovered that, there was Strong positive association among transformational management styles and Instructors work performance with Pearson Product Moment Correlation  $r = 0.796$ . The table also revealed that, the association among transformational management style and Instructors Work performance was statistically substantial since the p-value 0.04 is lower than the extent of significant 0.05. Thus, assumption two was rejected and therefore transformational management behaviour is a determinant to Instructors work Performance.

**Ho<sub>3</sub>** There is no significant association among Idiographic Leadership Style and Teachers Work Performance in Senior Secondary Schools Yobe State.

**Table 3 Summary of PPMC on Idiographic Management Style and instructors Job Performance in Senior Secondary Schools of Yobe State**

Variable	n	Mean	SD	df	R	p-value	Remark
ILS	383	3.02	0.42	381	0.524	0.10	Accept Ho <sub>3</sub>
Teacher JP	383	3.13	0.19				

Table 3 revealed that, moderate positive association among idiographic management behaviour and Instructors work performance with PPMC  $r = 0.524$ . The table also indicated that, the association among idiographic management style and Instructors Work performance was not significant since the p-value (0.10) is higher than the level of significant 0.05. Consequently, assumption three was accepted and hence idiographic management behaviour has no substantial on Instructors work Performance

### Discussion

Hypothesis one found that, no significant association exists among nomothetic leadership behaviour and instructors' work concert with significant score of 0.90 which greater than level of significant of (0.05). This indicates that nomothetic guidance behaviour of Head teachers discourages teachers in certain level. The study is in line with Adeyemi and Adu (2013) which revealed that, the non-significant relationship found in this study between Principal Nomothetic leadership style and teachers' job performance, which implies that, when Principals are

Nomothetic in their leadership style, teachers' job performance tends to be abridged. Similarly, in another study of Adeyemi (2010) opined that, principals using Nomothetic leadership styles tend to accomplish better teachers' job performance since many teachers need to be forced before they do their job. It equally indicates that, the more nomothetic a leader is the greater efficiency obtained from the followers. This disparity could be due to the location or population of the study.

Hypothesis two affirmed that, there is significant association among transformational governance style and instructors' job achievement. The research found that, Transformational management style were better leadership behaviour in enhancing better job performance among teachers; it also found that, strong positive noteworthy relationship exists in instructors' work performance in schools having Head teachers practicing using transformational style of governance. This is similar to the study conducted by Aldag (2001) attested that, the transformational style of leadership has been recommended in the management literature dating back to the early 1950s. Lots of organizations nowadays were realizing effective outcomes with transformational leadership. Transformational Principals offer guidance to subordinates, besides they partake in the organisation and permit inputs from other followers. The study also in line with the Adeyemi (2010) that, transformational leadership style was the most frequently used leadership style among principals of senior secondary schools.

Hypothesis three revealed no significant association exists among the idiographic leadership behaviour and Instructors work performance with score of 0.10 higher than significant score of (0.05). This is similar with the findings of Adeyemi (2010) that, Idiographic leadership style has no significant influence on teachers' job performance in the schools. This indicates that, the Idiographic leadership flair is not an effective behaviour of headship might encourage improved work performance between instructors' in schools. Thus, this style of leadership may be effective with well-motivated and experienced subordinates (Northouse 2018), but could lead to failure when subordinates are deceptive, unreliable and untrustworthy. This finding was also concomitant with Akerele, (2007) who found non-significant relationship between principals' Idiographic leadership style and Teachers job performance, and this implies that, there was no agreement between them. The outcome further recommends that, Head teachers Idiographic management style has no substantial association with pupils' educational presentation.

## Conclusion

From the outcomes of the research, it concluded that, transformational management behaviour was the most frequent management behaviour practice by Head teachers of public senior secondary schools, Yobe State. This implies that, headship chic of the Head teacher has adverse influence on the instructors' work achievement. Similarly, teachers perform wonderfully when they are motivated or shared some responsibilities; they prepared their lesson plan always, keeps proper records of students' assessment. It was also concluded that, no particular management behaviour that would determine true management behaviour of the principals but, the integrated use of different leadership styles were meant to be effective in determining Teachers job performance.

## Recommendations

From the outcomes of the research, below the following commendations were made:

1. The principals ought to adopt transformational leadership, and integrate used of different leadership styles in secondary schools, as these management behaviour will improve Teachers work performance;
2. Yobe State Teaching Service Board should motivate teachers through workshops and seminars. Equally, merit awards should be given to teacher (s) that distinguished themselves in one way or the other in each school; and
3. The Yobe state government should employ sufficient quantity and competence of employees with diverse knowledge of leadership for each school to safeguard optimal Teachers work achievement

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**TEACHERS' PERCEPTIONS ON THE ADAPTATION OF ARTIFICIAL INTELLIGENCE IN TEACHING SENIOR SECONDARY SCHOOL STUDENTS IN YOBE STATE, NIGERIA**

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**ABSTRACT**

*Understanding Artificial Intelligence (AI) is the best way to prepare ourselves for the future. This study was designed with the aim of evaluating Teachers' perceptions on the adaptation of artificial intelligence in teaching senior secondary school students in Yobe State, Nigeria. In order to achieve this goal, it is essential to unveil teachers' perception of AI and systematically assess their views regarding their level of awareness on the integration of AI in teaching, determining their attitude towards integration of AI, and identify the challenges bedevilling the adaptation of AI in teaching senior secondary school students in Yobe State. Despite the growing interest, AI is still poorly understood in different domains. The research employs qualitative research design, the target population for the study was 134 teachers from government day senior secondary school, Damaturu, Yobe State. A systematic sampling was the technique used for sampling the respondent, where 10% (Le. nth item) of the population was randomly selected. A semi structured interview form was used to collect data. The results of the interview were interpreted based on the interviewees' responses. Findings revealed that, some teachers possess a moderate level of awareness of AI and some are not aware of AI at all and do not adopt it for teaching purposes, there was an average overall perception of teachers regarding the use of AI tools in teaching and learning and also, there are challenges faced by the teachers in the use of AI technology in teaching senior secondary schools in Yobe state. In order to seal the gap, the researcher recommended that Teachers need accessible ongoing training.*

**Introduction**

Artificial intelligence (AI) is revolutionizing education by providing innovative solutions that enhance both teaching and learning processes. AI technologies offer the potential to address various educational challenges, such as personalized instruction, efficient assessment, and increased accessibility. For Nigerian teacher, understanding and adopting these AI applications is crucial for modernizing the educational landscape and preparing future generations for a technology-driven world.

Rapid advancement of technology especially Artificial Intelligence (AI), has brought so many changes to all facet of human activity including education. Artificial intelligence (AI) is developing at a rapid pace, and this has impacted on industries, including education. Artificial intelligence (AI)-enabled tools and technologies are being included into teaching and learning

procedures more frequently, providing new opportunities to improve the quality of education. The display of intelligence in computers is known as artificial intelligence, or AI. The idea is to utilize pattern recognition and algorithms that learn from human behavior to offer machines independence and intelligence (Hashem et al, 2023). Technological development has changed the ways that humans carry out myriad activities and the education sector is not left out. The recent explosion in AI technology has made it so that businesses, organizations and institutions of learning have had to adapt to the changes brought about by these developments As AI permeates daily life more and more, it is critical to assess how it will affect education, especially on teaching (Asirit and Hua, 2023).

Artificial intelligence use in education is a concept that is being widely discussed as AI has infiltrated virtually all aspects of human endeavor. Various AI tools can be effectively integrated into teaching and learning in order to meet the growing need to reach learners. AI tools in education can be described as educational technology that are used to enhance teaching effectiveness (Lin, 2022). The use of educational technology is ingrained in the education sector and goes a long way in assisting learners. A study by Lin (2022) on the influence of AI in education on teaching effectiveness found that AI technologies can assist lecturers in providing more precise instruction by analyzing students' activities and by providing more scientific practice ideas based on their level of mastery of the material to grasp the course's important and challenging information elements.

AI tools have been posited to have the ability to revolutionize the classroom as it can improve teaching and learning, leading to smarter classrooms through personalized learning, improvement of assessments, and reduction in planning time for teachers (Ayala-Pazmiño, 2023). AI-based technologies provide a more individualized approach to education by analyzing student data and customizing learning experiences to meet their specific requirements. This may enhance student participation, enhance learning results, and lower dropout rates. AI can also enhance tests by giving immediate responses and enabling a more precise assessment of students' performance. By automating administrative duties like grading and reporting, AI-based technologies can also cut down on the amount of time teachers need to arrange their lessons. This allows teachers to concentrate on more useful instructional activities. Present AI research focuses on training

computers to converse intelligently with people, solve difficult problems, provide accurate predictions, and do a wide range of formerly manual tasks automatically (Holmes et al, 2023).

### **Statement of the problem**

Artificial intellect (AI) is an innovative technical framework that encompasses the creation of computer systems with the ability to execute activities that usually need human intellect (Okunade, 2024). These activities involve problem-solving, acquiring knowledge, comprehending language, and seeing visual information. AI has become increasingly prominent in recent years, bringing about a revolutionary transformation in the methods by which jobs are completed in numerous businesses. Within the realm of education, artificial intelligence (AI) offers a multitude of possibilities to augment the learning process. Intelligent systems provide the ability to adjust to the specific requirements of each learner, deliver tailored learning experiences, and provide immediate feedback (Okunade, 2024).

AI applications in education encompass adaptive learning platforms, intelligent tutoring systems, and virtual simulations. Through the use of artificial intelligence, educators have the ability to construct dynamic and interactive learning environments that accommodate the various learning styles and capabilities of students.

The main purpose of the study was to examine the level of teachers' awareness on the integration of AI, to determine teachers' attitude towards the integration of AI, and also to identify the challenges/barrier bedeviling the adaptation of AI in teaching senior secondary school students in Yobe State.

### **Objectives of the study**

The objectives of the study are to;

1. Examine the level of teacher's awareness on the integration of AI in teaching senior secondary school students in Yobe State.
2. Determine the attitude of teachers towards integration of AI in teaching senior secondary school students in Yobe State.
3. Identify the challenges bedeviling the adaptation of AI in senior secondary school students in yobe state.

### Research Questions

1. What is the level of teachers' awareness on the integration of AI in teaching senior secondary school students in Yobe State.
2. What are the attitude of teachers towards integration of AI in teaching senior secondary school students in Yobe State.
3. What are challenges bedevilling the adaptation of AI in senior secondary school students in yobe state.

### Methodology

The study employed qualitative research design. The target population for the study was 134 teachers from government day senior secondary school Damaturu. Yobe State. Systematic sampling techniques were used for sampling the respondents, where 10% (i.e. nth item) of the population was randomly selected. A semi-structured interview was used for data collection. Vilelas (2017) is of the view that the advantage of conducting interviews is that participants provide data based on their behaviors, opinions, desires, attitudes, and expectations, which makes it not difficult to observe them from the outside. Hill and Hill (2016) note that well-prepared interviews have some advantages over questionnaires; according to them, interview provides some freedom for both the interviewer and interviewee. The participating teachers were informed about the purpose of the interview, the researcher developed an interview script according to the intended objectives, which was validated by experts. The interviews were conducted and recorded remotely.

### Results

The results of the interview were interpreted based on the interviewees' responses.

**Research Question One:** What is the level of teachers' awareness of the integration of AI in teaching senior secondary school students in Yobe State?

Based on the above research question and the items used, some teachers possess a moderate level of awareness of AI, and some are not aware of AI at all and do not adopt it for teaching purposes. AI tools are not available at schools at all. Overall, AI is seen as a tool to improve teaching efficiency and student outcomes.

**Research Question Two:** What is the attitude of teachers towards the integration of AI in teaching senior secondary school students in Yobe State?

From the above stated question and the items used to test teachers' attitude toward integration of AI in teaching and learning processes, teachers perceive several benefits of integrating AI in to classroom, many teachers recognize AI's as transformative potential in enhancing learning, some teachers anticipate that AI could diminish educational inequalities and also handling routine task. Though some teachers were worried that over-reliance on AI may lead to a loss of some basic skills.

**Research question Three:** What are the challenges bedevilling the adaptation of AI in teaching senior secondary school students in Yobe State?

Based on the above-stated question, some teachers identified that there is often a shortage of personnel trained in AI, which can hinder both the implementation and maintenance of AI technologies. Some teachers do not have access to the necessary technology and the internet.

### **Discussion of findings**

Finding number one revealed that some teachers possess a moderate level of awareness of AI, and some are not aware of AI at all and do not adopt it for teaching purposes. This means that teachers' awareness of AI in teaching is low, with many teachers familiar with basic AI concepts but needing further understanding on how to effectively integrate AI tools into their classroom to enhance students' engagement. Based on the available research, there is a mix of findings regarding teachers' level of awareness regarding AI. Alkanaa (2022) reported that pre-service science teachers need the knowledge to employ AI in science education. On the other hand, Zhao (2022) found that most of the teachers have a moderate to high level of AI literacy, indicating a relatively in depth understanding of the use of AI resources in the classroom, Chounta (2018) also highlighted that teachers need more knowledge about AI and its potential to support their education practice.

Finding number two revealed that there was an average overall perception of teachers regarding the use of AI tools in teaching and learning. Specifically, teachers think that AI can help students gain a deeper understanding of academic concepts. The study further showed that secondary school teachers strongly agreed that AI can improve teacher productivity in the classroom. They also view the use of AI to automate administrative tasks as very helpful. This result supports the study of Hosseinzadeh, A., & Hughes, J. (2021), who said that teachers believed that AI tools

may help them run their classrooms more effectively and give their pupils greater feedback and that it could free up their time for tedious duties like grading and lesson planning.

Teachers' lack of knowledge of readily available educational tools and age-appropriate teaching materials for teaching AI to young students requires that they undergo ongoing training in order to remain updated in emerging AI educational settings (Su et al., 2022). This study corroborates research by Sperling et al. (2024) and Marques et al. (2020), highlighting the scarcity of professional development for teachers in AI literacy education. The results of this study also align with the review of Crompton et al. (2024), who find that without knowing how to effectively implement AI in teaching and learning, educators will likely use AI tools ineffectively or not at all. This study indicates that teachers perceive ongoing training, technical support, and funding as able to increase teachers' motivation to use AI educational tools within the context of the Chinese educational system.

Finding number three revealed that there are challenges to using AI technology in teaching senior secondary school in Yobe state, which include, lack of teachers' training and skills, a lack of motivational barriers due to limited understanding of AI technology by teachers, resource constraints, and also resistance to change by teachers.

One primary technical challenge identified across the sources in this study is the disparity in technological infrastructure and resources available to educational institutions. For instance, Su et al. (2023) highlighted the need for updated infrastructure and adequate tools to effectively integrate AI into curricula. Similarly, Ng et al. (2023) stress the importance of upgrading teaching equipment and incorporating AI-enhanced resources to create a smart learning environment. Chan (2023) notes that AI technologies should complement rather than replace traditional methods, yet the integration process often reveals issues related to system compatibility and user adaptation.

These challenges underscore the necessity for seamless integration strategies and technical support to ensure that AI tools enhance rather than disrupt existing educational practices.

### **Conclusion**

In conclusion, the study's findings indicated that some teachers lack a comprehensive understanding of AI and its functions. However, AI awareness levels are very low, there is a need to expose teachers to professional development programs to enhance AI literacy. The

majority of teachers have a positive attitude towards AI, they believe that AI can make the teaching and learning process more effective by providing digitalized learning material and catering to individual student needs. The challenges faced by teachers in the adaptation of AI can be overcome when comprehensive training programs are introduced to motivate teachers and also to improve their digital competence.

### **Recommendations**

Based on the findings of the study, the researcher recommended the following:

1. Teachers need accessible, ongoing training to understand and effectively use AI tools. Schools should empower teachers to adapt AI tools based on their unique classroom needs while aligning with district-level principles.
2. AI adoption should prioritize enhancing teaching outcomes such as personalized learning, content creation, and assessment, without replacing human judgment. Henceforth, Collaboration among government institutions and resource providers is needed to address teachers' preparedness and bridge the digital skill gap
3. Schools should establish clear policies on privacy, academic integrity, and ethical AI use. Teachers must guide students in using AI responsibly to avoid issues like plagiarism or misinformation.

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