



**FACTORS INFLUENCING EFFECTIVE TEACHING AND LEARNING OF
GEOGRAPHY IN SENIOR SECONDARY SCHOOL; A CASE STUDY OF KANO
METROPOLIS, KANO STATE, NIGERIA**

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Abstract

This study was carried out to investigate factors influencing effective teaching and learning of Geography in senior secondary schools in Kano metropolis of Kano state. Descriptive research design was used. The population of this study consists of Students and geography teachers in senior secondary schools in Kano Metropolis of Kano State which comprises of (8) eight local governments areas of Kano state (Dala, Fagge, Gwale, Ungongo, Kano municipal, Tarauni, Nasarawa, and Kumbotso) comprising 267 schools and 53,326 senior students. Eight (8) schools were randomly selected for sampling. The instrument of data collection used was questionnaires. Two sets of questionnaire were used; one for the teachers and the second for the students. Questionnaire for the teachers distributed copies were 100, out of which 87 were filled and returned, while that of the students 389 copies were sent out from which 350 copies of the questionnaire were filled and returned. It was validated using Taro Yamane's formula of sampling with confidence level of 95% and error margin of 0.5%. Frequency counts and percentages were used to analyse the data. The study showed that teachers' qualification, socio-economic status of students' family, teaching aids and students attitude towards the subject play vital role in achieving effective teaching and learning in senior secondary schools in Kano metropolis. Therefore, the followings were recommended; government should provide the necessary materials for Geography lessons and practicals. Parents and guardians should endeavour to provide necessary materials for their children and wards to ease their participation in learning activities. Students should show interest in the subject as it has the necessary skills to guide them through future life challenges. The government should train and retrain secondary school teachers on handling teaching aids for better understanding of the subject.

Keywords: Effective Teaching and Learning, geography and Kano Metropolis

INTRODUCTION

Geography education in senior secondary schools plays a pivotal role in shaping the Geo- spatial awareness and critical thinking skills of students, contributing to their overall academic development. As students engage with the subject, the effective dissemination of geographical knowledge faces challenges influenced by both systemic and contextual factors. Effective teaching and learning of any subject are influenced by a number of factors including admission points, socio-economic status and school background. Considine and Zappala (2002) argue that families where the parents are advantaged socially, educationally and economically foster a high level of achievement in their children. Geography is a vital subject in the senior secondary school curriculum in Nigeria, as it provides students with a broad understanding of the physical and human world around them. It is also subjects that help students to develop critical thinking and problem-solving skills.

However, there are a number of factors that can affect the teaching and learning of Geography in senior secondary schools (Onuoha *et al.*, 2021). One of the main factors affecting the teaching and learning of Geography is the availability of qualified teachers. According to Musa (2013), many Geography teachers in Kano metropolis are not degree certified, or they lack the necessary experience and training to teach the subject effectively. This can bring about difficulty in learning the subject, or not being taught it in a way that is engaging and interesting (Opoku, 2021). Another important factor is the availability of resources. Geography is a subject that requires the use of a variety of resources, such as maps, globes, atlases and field trips. However, as highlighted by Abdullahi (2014), many schools in Kano Metropolis lack these resources, or they have insufficient quantities of the resources on ground. This can make it difficult for teachers to teach the subject effectively, and the outcome of this is poor learning of the subject. The teaching and learning of Geography in senior secondary schools in Kano Metropolis Kano State, Nigeria. confront a spectrum of challenges that warrant careful examination. Despite the inherent importance of Geography in fostering spatial awareness, critical thinking, and a holistic understanding of the world, there exists a gap in understanding the specific factors that impede the effectiveness of Geography education in this region. The identified issues encompass both systemic and contextual dimensions, influencing the quality of education and the overall academic experience for students (Adeyemo, 2010).

Systemic challenges may include inadequacies in curriculum design, instructional resources,

and teacher training programs. The curriculum may not align optimally with the diverse geographical and cultural context of Kano Metropolis, hindering students' engagement and comprehension. Additionally, limited access to updated instructional materials and insufficient training for educators may further hamper the delivery of high-quality Geography education. According to Shehu *et al.*, (2021), contextual challenges are deeply rooted in the sociocultural and economic landscape of Kano Metropolis. The region has faced significant disruptions due to factors such as insurgency, displacement, and economic instability. These external factors can contribute to a dissonance between the intended curriculum and the day-to-day experiences of students, affecting their ability to relate to and apply geographical concepts. Furthermore, the statement of the problem necessitates an exploration of how these challenges intersect and amplify one another, creating a complex web that impedes the achievement of educational objectives in Geography. Understanding and addressing these issues are crucial for educators, policymakers, and stakeholders in devising targeted interventions and reforms that can enhance the teaching and learning of Geography in senior secondary schools (Shehu et al.,2021).

The study offers intuitions that can greatly improve the quality of geography education in senior secondary schools. By identifying challenges faced by both teachers and students, the research contributes to enhancing education through curriculum improvements, and more effective teacher training programs. The purpose of this exploration is to critically analyze the existing body of literature on the subject, drawing attention to the interconnected factors that shape the educational landscape in senior secondary schools. By incorporating insights from research conducted by scholars like Taura and Ibrahim (2023) on the challenges of curriculum implementation in Nigerian schools, one aims to provide a comprehensive understanding of the factors affecting teaching and learning of Geography in Kano metropolis's senior secondary schools.

Objectives of the Study

The objectives of the study are to:

- i. Determine the influence of teachers' qualification on effective teaching and learning of Geography in senior secondary schools in Kano Metropolis
- ii. Identify how family socio-economic status influence effective teaching and learning of geography in senior secondary school in Kano metropolis
- iii. Examine the influence of teaching materials in effective teaching and learning of geography in senior secondary schools in Kano metropolis

iv. Ascertain the attitude of students towards Geography in Kano Metropolis

Research Questions

The following research questions were answered:

- i. Does teachers' qualification influence effective teaching and learning of Geography in senior secondary schools in Kano metropolis?
- ii. What is the influence of socio-economic status of students' family on their learning outcomes in Kano Metropolis?
- iii. Does your school have and use suitable teaching materials in the subject?
- iv. what is the attitude of students towards Geography in Kano Metropolis?

Research Design

This is a survey study which seeks to ascertain the factors influencing teaching and learning of in senior secondary schools in Kano Metropolis. The population of this study consists of Students in senior secondary schools in Kano metropolis of Kano State which comprises of (8) eight local governments areas of Kano state (Dala, Fagge, Gwale, Ungongo, Kano municipal, Tarauni, Nasarawa, and Kumbotso) comprising 267 schools and 53,326 senior students(KSSSSMB, 2020). Primary data were collected through structured questionnaires to the students and teachers of the various schools in the metropolis, selected randomly for sampling. Senior secondary schools in the metropolis as recorded at Kano state senior secondary school management board (KSSSSMB) 267 schools with a total number of 53,326 students. The sample size was determined using Taro Yamane's formula for sample size calculation:

$$n = \frac{N}{1 + N (e)^2}$$

Where;

n = Sample size

N = Population size (53, 326)

1 = Constant

(e)² = Margin error (0.05)

Substituting the values:

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$$n = \frac{53,326}{1 + 53,326(0.05)^2}$$

$$n = \frac{53,326}{1 + 134}$$

$$n = \frac{53,326}{134}$$

$$n = 397.955$$

$$n = 398$$

Thus, a sample size of 398 respondents was determined to be statistically appropriate to ensure a 5% margin of error and better representativeness of the population. Data analysis was conducted using descriptive statistics, including frequencies and percentages, with results presented in tables and charts. This approach provides a structured understanding of the factors influencing effective teaching and learning of Geography in secondary schools in Kano Metropolis

Results and Discussion

Demographic Characteristics of the respondents

This section presents key demographic details, including gender, age, education level, and occupation, to understand the background of the study population.

Table 1: Demographic Characteristics of Respondents

Variable	Frequency	Percentage (%)
Gender		
Male	194	55.4
Female	156	44.6
Total	350	100
Age		
16 Years Old And Above	48	13.7
15 Years Old	90	25.7
14 Years Old	92	26.3
13 Years Old	120	34.3
Total	350	100
Class		

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SS3	128	36.6
SS2	102	29.1
SS 1	120	34.3
Total	350	100

Source: Field survey2020

The demographic data of the respondents indicates that 194 respondents representing 55.4% of the respondents were male and 156 respondents representing 44.6% of the respondents were female. 48 respondents which represent 13.7% were 16 years old and above, 90 respondents representing 25.7% were 15 years old, 92 respondents representing 26.3% were 14years old and 120 respondents representing 34.3% were 13 years old. Looking at the class distribution, 128 respondents representing 36.6% were in SS3 class, 102 respondents representing 29.1% were in SS2 class and 120 respondents representing 34.3% were in SS1 class.

Teachers' Qualification and Effective Teaching and Learning of Geography

This examines the qualification of geography teachers across schools in the metropolis

Table 2: Teachers' Qualification

Qualification	Frequency	Percentage (%)
College Cert.	52	59.8
Degree	22	25.3
Post Grad.	13	14.9
TOTAL	87	100

Source: Field Survey 2020

The percentage of teachers without a degree in Geography rates higher than the combination of those with a degree and a post degree certificates. Indicating that the majority of teachers in secondary schools handling the subject in Kano Metropolis needs more training. Students taught by highly trained teachers are better in the subject taught connoting effective teaching and learning. According to Yusuf and Dada (2016), the students handled by well trained and qualified teachers do well in the subject compared to those not trained.

Table 3: Influence of Socio-Economic Status of Students Family on Effective Teaching and Learning of Geography

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Variable	Frequency	Percentage(%)
Adequate books (text and note)	198	56.6
Adequate feeding	263	75.1
Practicing with Atlas	191	54.6
Practice with large maps	112	32.0
Familiar with the globe	270	77.1

Source: Field Survey 2020

Table 3 shows some indices of socio-economic status of families that affect the student or could be seen in the classrooms. Availability of text and notebooks are indicators of stable families and not those who will not buy any textbook and note books will not go round the number of subjects being taught in such schools. This mirrors Fischer et al (2015) who investigated the effects of no-cost open digital textbooks on the achievements of students from lower socio-economic backgrounds in USA, found out that students using both traditional and digital texts achieve more than those without. Therefore, the socio-economic status of the families of 56.6% of the respondents supported their reading and writing materials in school which would greatly aid their work and equip them for better learning achievements. 75.1% of the respondents eats before school and have extra food and snacks to carry them through the day's work. Only 24.9% do not eat well as reported by their responses. Atlas is one of the major tool in explaining Geographic concepts to students because it shows locations and bearing of places. 64.6% of respondents have seen and used an atlas in their geography journey, meaning that 35.4% have not used atlas before. 32% have used the large maps to read and report a task meaning 68% are yet to handle it. The familiarity of the students to the large map is important as it carries the students compulsory question in external examinations and aids understanding of topographic analysis of regions.

77.1% of the respondents have seen and interacted with the globe. 22.9% are yet to and this will affect their understanding of lessons under the rotation and revolution of the earth and their effects. The above findings corroborate the work of Bar Koushik who highlighted the importance of teaching aid in geography to increase the thinking ability of students exposed to these materials.

Attitudes of students towards Geography

The attitude of students towards any subject is key to the overall achievement of the students in the subject. Two sets of questionnaire were given for this purpose. One to the students and the other to the teachers, in determining students' attitude towards the subject of Geography. 174 respondents from the students said they like the subject, which is 49.7% which is approximately half of the respondents liked the subject and are understanding it. The other half are those who are encouraged if not forced by parents and guardians who wants them to study a particular course at the higher institution. Similarly, the respondents from the teachers' segment also have 46 (52.9%) of the respondents ticking positively to having students who are attentive to them, and are doing well in the subject. This aligns with Joshua and Joshua kritsonis (2006) who used the scores of students to judge teachers' instruction effectiveness. These two reports show that the attitude of students towards Geography is not entirely negative. According to Falode, O. C., et al., (2020) revealed that provision of laboratories will better the attitudes of students towards the subject and the adoption of practical sessions will improve the overall academic performance of the students. These practices cannot be achieved with untrained teachers and also to achieve practical's in geography materials must be made available for the teachers and periodic trainings encouraged, for teachers of the subject as many people feel Geography is a theoretical subject.

Conclusion

This study on effective teaching and learning of Geography in senior secondary schools in Kano Metroplis has revealed that factors influencing effective teaching and learning of geography in senior secondary schools in Kano Metropolis include; qualification of teachers handling the subject, many teachers are yet to get a degree in Geography. The more qualified the teachers are, the better they will deliver in the classroom. Socio-economic status of family of the students also is a factor influencing effective teaching and learning of Geography in Kano Metropolis due to the additional materials such as the atlas, globe and Large maps required to aid the understanding of Geography. Teaching aids or materials should be provided enough for the execution of lessons, as

many students have not seen nor interacted with these materials. Provision of practical sessions to encourage students' attitudes towards the subject

Recommendations

To address the challenges of effective teaching and learning of geography the government should provide the necessary materials for Geography lessons and practicals.

Parents and guardians should endeavour to provide necessary materials for their children and wards to ease their participation in learning activities.

Students should show interest in the subject as it has the necessary skills to guide them through future life challenges.

The government should train and retrain secondary school teachers on handling teaching aids for better understanding of the subject.

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