

CHALLENGES OF TEACHING GEOGRAPHY: TOWARDS SUSTAINABLE GEOGRAPHY EDUCATION IN KANO-NIGERIA

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ABSTRACT

Geography education in Kano State and Nigeria faces a lot of challenges that significantly impede its effectiveness and student attainment. A primary concern is the severe inadequacy of infrastructure and instructional resources. Many schools lack basic teaching aids such as maps, globes, and geography instruments. Equally, overcrowding and poor classroom conditions are rampant. This is compounded by a critical shortage of qualified geography teachers, leading to high student-teacher ratios and didactic, theoretical teaching methods that fail to engage learners or develop critical spatial skills. The study found that poor/unavailable facilities and unconducive learning environment, affect geography knowledge. The cumulative impact of these challenges is a geography education that often fails to achieve its core objectives: fostering spatial literacy, environmental awareness and critical thinking about local and global issues. To address this, a multi-branched approach is essential, which includes massive investment in teacher training and resource provision, context-sensitive curriculum development and initiatives aimed at improving sustainable environmental education. Overcoming these hurdles is crucial for equipping Kano youths with the geographical understanding necessary for sustainable development and informed citizenship in a complex world.

Keywords: Challenges, Teaching, Geography, Sustainable, Geography, Education

INTRODUCTION

Geography education plays a pivotal role in fostering spatial awareness, environmental consciousness, and sustainable development among learners. In Nigeria, it has been recognized as a core subject within the national curriculum, aimed at equipping students with the knowledge and skills necessary for national development (National Policy on Education, 1981). However, the teaching of geography in Kano State faces numerous challenges that hinder its effectiveness and sustainability.

One of the primary obstacles is the lack of qualified teachers and inadequate instructional materials, which compromises the delivery of geography content in secondary schools (Onyabe, 1980; Olawepo, 1984). Many educators struggle with the conceptual clarity of geography as a discipline, leading to inconsistent pedagogical approaches and poor student engagement (Feather, 1982; Meece, Blumenfeld and Hoyle, 1988). Additionally, infrastructural deficits such as dilapidated classrooms, insufficient furniture, and absence of libraries further exacerbate the

situation, especially in rural areas of Kano State (News worth Magazine, 2024).

The recent declaration of a State of Emergency in Kano's education sector underscores the urgency of addressing these systemic issues. While efforts have been made to improve infrastructure and deploy more teaching staff, sustainable geography education requires a more holistic approach one that integrates curriculum reform, teacher training, and community involvement (Time Express Nigeria, 2024). Without such measures, the goals of geography education citizenship development, reflective inquiry, and environmental stewardship will remain unattainable.

Statement of the Research Problem

Despite geography's critical role in promoting environmental awareness, spatial thinking, and sustainable development, its teaching in Kano State faces persistent challenges that undermine its effectiveness and long-term impact. Many secondary schools in the region suffer from a shortage of qualified geography teachers, outdated curricula, and inadequate teaching resources such as maps, atlases, and fieldwork tools (Abdu, 2022; Yusuf and Ibrahim, 2023). These deficiencies not only limit students' understanding of geographic concepts but also hinder the development of skills necessary for addressing real-world sustainability issues.

Moreover, the pedagogical approach to geography in Kano often emphasizes rote learning over experiential and inquiry-based methods, which are essential for fostering critical thinking and environmental responsibility (Adewuyi, 2021). The lack of professional development opportunities for teachers further exacerbates the problem, leaving educators ill-equipped to integrate sustainability themes into their lessons (Muhammad and Sani, 2023). Compounding these issues are infrastructural deficits and inconsistent policy implementation, which reflect broader systemic challenges in Nigeria's education sector (Time Express Nigeria, 2024).

Given the urgency of global environmental concerns and the strategic importance of

geography education in addressing them, there is a pressing need to investigate the barriers to effective geography teaching in Kano State. This research seeks to explore these challenges and propose sustainable strategies for improving geography education, thereby contributing to the broader goal of educational reform and environmental stewardship through the following objectives;

1. To identify the available geography teaching aids in selected schools across Kano metropolis
2. To examine the learning condition of classrooms in selected schools across Kano metropolis
3. Suggest sustainable strategies for improving geography education

Literature Review

Geography education is widely recognized as essential for fostering environmental awareness, spatial thinking, and sustainable development. In Nigeria, geography was introduced into the school curriculum as a tool for national development and civic engagement (National Policy on Education, 1981). However, the teaching of geography in Kano State faces persistent challenges that threaten its sustainability and effectiveness.

Curriculum and Conceptual Ambiguity

The Nigerian Educational Research and Development Council (NERDC) has outlined goals for geography education, including citizenship development and reflective inquiry (Olawepo, 1984). Yet, scholars argue that the philosophy, content, and methodology of geography remain vague to many educators (Onyabe, 1980). This conceptual ambiguity leads to inconsistent teaching practices and undermines the subject's relevance in addressing sustainability issues (Feather, 1982; Meece, Blumenfeld and Hoyle, 1988).

Teacher Qualification and Pedagogical Challenges

A major barrier to effective geography instruction is the shortage of qualified teachers. Many educators lack formal training in geography,

resulting in poor delivery and limited student engagement (Abdu, 2022). Pedagogical approaches often rely on rote memorization rather than inquiry-based learning, which is crucial for developing critical thinking and environmental problem-solving skills (Adewuyi, 2021).

Resource Deficiency and Infrastructure

Schools in Kano State frequently suffer from inadequate teaching materials such as maps, atlases, and fieldwork tools (Yusuf and Ibrahim, 2023). The lack of libraries, laboratories, and digital resources further hampers the teaching process. A recent report highlighted that nearly four out of five classrooms in Kano's primary and junior secondary schools are dilapidated, lacking basic amenities like furniture and toilets (News worth Magazine, 2024).

Policy and Institutional Gaps

Although the Kano State government declared a State of Emergency in education in 2024, implementation challenges persist. While infrastructure improvements have been made, including the construction of classrooms and distribution of desks, systemic issues such as poverty, absenteeism, and lack of teacher training remain unresolved (Time Express Nigeria, 2024). These gaps hinder the integration of sustainability themes into geography education.

Impact of Curriculum Substitution

The substitution of geography with social studies at lower levels of education has weakened students' foundational knowledge. A study conducted at FCE Kano revealed that students performed poorly in core geography areas like map work and regional geography, with failure rates exceeding 60% (Gombe Journal of General Studies, 2012). This trend reflects a broader neglect of geography education and its potential to promote sustainable development.

METHODOLOGY

The research was designed adopting descriptive survey which is appropriate for investigating existing availability and conditions related to

geography education in Kano State. The design enables the researcher to collect quantitative data. The population of the study consist of public schools within Kano metropolis. Out of these schools, ten were selected to be surveyed. Convenient sampling technique was employed.

A structured questionnaire was designed to gather quantitative data on the available facilities and condition of geography classroom. Where the data collection survey was conducted for a period of three weeks and administered in person to Geography teachers of the selected schools. Furthermore, the data was analyzed using simple descriptive tables.

RESULTS

Availability of geography teaching aids is a general challenge facing most public secondary schools across Kano State. The data presented in table 1 indicates that most of the listed facilities are not available which indicates serious challenge and in turn poor input from the teachers and ill-equipped geography students. Only one school; Federal Government College Kano had all the listed facilities available. Meanwhile, GSS Giginyu, Tarauni and GGC Dala showed significant availability in geography teaching facilities where only weather station was found to be unavailable in the schools. A study conducted by Yusuf and Ibrahim (2023) investigated the state of geography education in 20 public secondary schools across Kano State. The study found that: sixty-five percent of geography teachers lacked formal training in geography education, relying instead on general social science backgrounds. That eighty percent of schools did not have access to basic geography teaching materials such as maps, atlases, or globes. And seventy percent of students reported low interest in geography, citing poor teaching methods and lack of fieldwork as major reasons. However, only fifteen percent of schools incorporated sustainability topics such as climate change, urbanization, or environmental management into their geography curriculum.

Table 1: Availability of Geography Teaching Facilities

S/N	SCHOOLS	Maps/Globes	Weather Station	Stencils & Tracing Sheets	Basic Equipment
1	GSS Ginginyu	Available	Unavailable	Available	Available
2	GSS Tarauni	Available	Unavailable	Available	Unavailable
3	GSS Sabuwar Kofa	Available	Unavailable	Unavailable	Unavailable
4	Rumfa College	Available	Unavailable	Available	Available
5	GSS Na'ibawa	Unavailable	Unavailable	Unavailable	Unavailable
6	GSS Warure	Available	Unavailable	Unavailable	Unavailable
7	GGC Dala	Available	Unavailable	Available	Available
8	GSS Goron Dutse	Available	Unavailable	Available	Unavailable
9	GGSS Fatima Muhammad	Unavailable	Unavailable	Unavailable	Unavailable
10	FGC Kano	Available	Available	Available	Available

Source: Field Survey, 2025 Key: Basic equipment = **Thermometer, Anemometer & Hygrometer**

Across the selected schools surveyed, learning condition of classrooms was found to either be congested or in very poor condition. This is coupled with the fact that geography teachers lacked formal training in geography education, relying instead on general social science backgrounds. These findings highlight a significant gap between the intended goals of geography education and its actual implementation in Kano State. The result is as follows;

- Overcrowded classrooms were observed, which directly impact students' engagement and learning outcomes. In the ten surveyed schools only two; FGC Kano and GGC Dala

were not found to be overcrowded. The rest were all found to have students crowded in classrooms.

- Most of the classrooms' condition was found to be extremely poor, as there are no ceilings, cemented or tiled floors, windows, doors, seats, tables and whiteboards.

Abdu (2022) revealed that students in Kano performed forty percent lower in geography assessments compared to their counterparts in neighboring States like Kaduna and Katsina. The study attributed this disparity to infrastructural deficits, teacher absenteeism, and curriculum overload

Table 2: Classroom Condition and Over crowdedness

S/N	SCHOOLS	Classroom Condition				Crowdedness	
		Seats	Door & Window	Whiteboard	Cemented Floor	Ceiling	
1	GSS Ginginyu	PA	AA	PA	PA	PA	Not Over crowded
2	GSS Tarauni	PA	PA	PA	PA	PA	Over crowded
3	GSS Sabuwar Kofa	PA	PA	NA	PA	PA	Over crowded
4	Rumfa College	PA	AA	PA	PA	AA	Not Over crowded
5	GSS Na'ibawa	NA	NA	NA	PA	NA	Not Over crowded
6	GSS Warure	PA	NA	NA	PA	PA	Over crowded
7	GGC Dala	PA	AA	PA	AA	PA	Not Over crowded
8	GSS Goron Dutse	PA	PA	NA	PA	PA	Over crowded
9	GGSS Fatima Muhd	PA	PA	PA	PA	PA	Over crowded
10	FGC Kano	AA	AA	AA	AA	AA	Not Over crowded

Source: Fieldwork, 2025

Key: **AA** (Adequately Available), **PA** (Poorly Available), **NA** (Not Available)

CONCLUSION AND RECOMMENDATIONS

The teaching of geography in Kano State faces multifaceted challenges that hinder its potential to contribute meaningfully to sustainable development. These include a lack of qualified teachers, inadequate instructional materials, poor infrastructure, and limited integration of sustainability themes into the curriculum (Yusuf and Ibrahim, 2023; Abdu, 2022). Despite the strategic importance of geography in fostering environmental awareness and civic responsibility, its delivery remains suboptimal due to systemic issues within the education sector (Time Express Nigeria, 2024).

The recent declaration of a State of Emergency in education by the Kano State government signals a commitment to reform, but efforts must go beyond infrastructure to address pedagogical and curricular gaps. Without targeted interventions, geography education will continue to fall short of its transformative potential, leaving students ill-equipped to engage with pressing environmental and developmental challenges.

The following recommendations are made as sustainable strategies for improving geography education in Kano State and Nigeria:

1. Key investment in teacher training and professional development for geography teachers to enhance content mastery and pedagogical skills.
2. A revision of the geography curriculum to include contemporary sustainability issues such as climate change, urbanization and resource management. Equally, promoting experiential learning through fieldwork, GIS applications and community-based projects.
3. Equipping schools with essential geography tools including maps, atlases, globes, and digital learning platforms.

4. Improvement in classroom conditions, by providing adequate furniture, sanitation and learning spaces.

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