

ASSESSMENT OF THE IMPLEMENTATION OF GEOGRAPHY CURRICULUM IN SECONDARY SCHOOLS IN OSUN STATE, NIGERIA

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ABSTRACT

The study investigated the availability and adequacy of Geography instructional resources in senior secondary schools in Osun state. It also examined the instructional strategies being employed by Geography teachers in teaching and learning in the classroom. Furthermore, the study assessed the quality of teachers in terms of qualification, content knowledge and years of experience in the state. These were with the view to providing information on the implementation of the Geography Curriculum in Senior Secondary Schools in Osun state. The study employed a descriptive survey research design. The population consisted of all Geography teachers in senior secondary schools in Osun state. Eighty (80) Geography teachers constituted the sample for the study. Two instruments were used for data collection. These are the Instructional Resources and Strategies Observation Checklist (IRSOC) and Teaching Personnel Questionnaire (TPQ). Data collected were analyzed using frequency count and percentages. The results showed that instructional resources were not readily available for use. Globe (73.33%), Topographical map (83.33%), Atlas (93.33%), and Geography textbooks (100%) were resources that are available while Chart of Weather Symbols (60%), Globe (72.72%), Geography Textbooks (76.67%), Topographical maps (80%) and Wall maps (100%) were adequate in schools the resources were available. However, the instructional strategy employed by Geography teachers were peer tutoring (3.33%), group activity strategy (6.67%), inquiry (30%), demonstration strategy (36.67%) and expository strategy (100%). On the quality of Geography teachers in the state, the study showed that 57.50% studied Geography as a course while 6.25%, 10%, 11.25% and 15% studied Sociology, Urban and Regional Planning, Demography and Statistics and Geology, respectively. The study concluded that instructional resources, as well as instructional strategies employed by Geography teachers in Senior Secondary Schools in Osun state, were inadequate.

Keywords: Curriculum, Geography, Implementation, Teachers, Textbooks.

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INTRODUCTION

Geography is considered the study of the earth's environments, peoples, and the interactions among them. It is simply about the world of the living and non-living organisms. Abdul (2007) defined Geography as a science of spatial relationships that focuses attention mainly on the interaction between man and his environment. The study of Geography is concerned with the interaction between humans and their surrounding environments and the influence they have on each other. More than that, it entails the understanding of the earth as the world of man. Baerwald (2010) explained that Geography is of an interdisciplinary nature. That is, Geography as a discipline cuts across other disciplines such as agriculture, industry, economic development, anthropology, ethnography, among others. Geography is instrumental to cross-disciplinary learning and helps the student to recognize the connections between Geography and other fields of study or specializations. Therefore, knowledge of Geography is essential for successful living because of its practicable intellectual value (Abidoye & Ogunniyi, 2012).

The study of Geography in secondary schools is a prerequisite to studying Geography and other related courses such as Geology, Sociology and Geophysics, among others in higher institutions, as it provides students with a solid conceptual foundation. The objectives of teaching Geography at the secondary school level are conceived within the context of the national aims of secondary education. The following are the general objectives of teaching Geography in Nigeria secondary schools as stated in National Policy on Education, FRN, (2013). They are to:

1. Give learners a sound knowledge of their immediate environment;
2. Develop in learners the ability to comprehend and explain natural phenomena;
3. Inculcate in learners useful skills and outlooks, which enable them to make useful contributions to their community and nation;

4. Enable the learners to appreciate the problems of other peoples and, in fact, to show empathy to them;
5. Develop in learners the critical thinking ability, accuracy and objectivity for proper and logical investigation;
6. Foster in learners a sense of responsibility toward their own society;
7. Develop in learners comprehension of the spatial relationship and various features on the surface of the earth; and
8. Enable learners to comprehend the habitation of man within his environment.

To achieve the stated objectives, Geography students are exposed to curriculum contents which are divided into topics to span through a period of three academic sessions. The curriculum is a series of planned learning experiences deliberately and purposefully organized to maximize the opportunity available for individuals to actualize their inherent genetic blueprint in both formal and informal institutions (Ehinder, 2010). The genetic blueprint is actualized through the use of appropriate, effective and relevant utilization of resources, both human and material. Asebiomo (2009) opined that no matter how well formulated a curriculum may be, its effective implementation is a sine-qua-non toward achieving the desired goals of education. A curriculum, however beautifully planned it may be, will be of no relevance if it is not implemented.

Student's low performance in Geography in areas such as map reading, a survey among others at the senior school certificate examinations has become a recurring dilemma as reported by West African Examinations Council (WAEC) Chief Examiners in 2006, 2007, 2009, 2013 and 2015. According to the reports, students encounter problems in the areas of map reading, map interpretation, survey, remote sensing, among others, which have been recurrent challenges for students. This persistent

low performance of students in some aspects of Geography leaves one in doubt about the effectiveness and teacher's level of compliance with the implementation of the senior secondary school Geography curriculum. The low performance has been attributed to poor methods of instruction (Sharma, 2013), wide coverage of the subject (Ofodu, 2010), insufficient instructional materials (Abidoye & Oguniyi, 2012) and inadequate qualified teachers (Balogun, 2006). In essence, in order to achieve the objectives of teaching Geography in senior secondary schools, varieties of methods and instructional materials should be employed and Geography curriculum content must be implemented.

Curriculum implementation is the process of putting the curriculum into work for the achievement of the goals for which the curriculum is designed. It also integrates the application of physical facilities and the adoption of appropriate pedagogical strategies and methods. Curriculum implementation is the interactive stage of the curriculum process, which takes place in the classroom through the combined efforts of the teachers, learners, school administrators and parents. Curricular may be developed within the school i.e., school-based curriculum development or centrally based curriculum development. In the former, the teacher may be involved from planning to evaluation, while in the latter, the teacher's role is dominant only at the implementation stage as most curriculum activities are done by the Nigerian Educational Research and Development Council (NERDC).

Teachers play a key role in any curriculum implementation, as they determine whether curriculum innovations are successfully executed in the classroom as intended by policymakers. Teachers are supposed to rise above the constraining circumstances of poor material resources and government apathy by improvising materials. Moreover, the role of Geography teachers cannot be overlooked in the implementation of the curriculum. Teachers are largely responsible for the translation and implementation of educational policies, curriculum or course offerings, instructional materials packages and assessment of learning outcomes at the level of the learners. More knowledgeable teachers are likely to present problems in contexts that were familiar to the students and to link problems to what students already learned (Alonzo, 2002). Teachers who understood multiple representations of Geography concepts would be able to use these representations to enhance student's understanding. Therefore, the quality of teachers depends largely on how the curriculum will be implemented.

The problem facing curriculum implementation in Nigeria's educational system has been an issue discussed in the educational journals in which the Geography curriculum is no exception. One of the problems facing Geography curriculum implementation in Nigeria has been in the use of instructional strategies. Researchers such as Egunjobi (2014) have observed that senior secondary school Geography teachers are used to lecture methods in classrooms. The lecture method is the oldest teaching method applied in educational institutions. By this method, the teacher organises resources, prepares outlines and presents the topic verbally, while the learners are made to listen and remain passive.

In this method, students are not engaged in any form of activities to make the teaching-learning process interactive. The researcher observed and obtained evidence that this method is used mostly by Geography teachers due to time allocated for Geography on senior secondary school timetables, while some use the lecture method due to the class size.

Another problem facing the implementation of the curriculum is inadequate instructional resources. Instructional resources are key resources used by teachers to help students acquire knowledge of concepts taught. They are designed to supplement written and oral communication encountered in the interactive negotiation of knowledge, attitudes and ideas. Studies have shown that the level of instructional resources in most secondary schools in Nigeria is inadequate. Anyanwu (2000) revealed that the cause of poor implementation of

Nigeria curriculum at the secondary school level is as a result of the non-availability of materials.

Scholars such as Dare (2004), Lawani (2007) and Osokoya (2010) have observed that factors such as non-professionalisation of Geography teachers, inadequate funding, insufficient knowledge of Information and Communication Technology (ICT) have contributed to the challenges facing the implementation of curriculum at secondary schools. Furthermore, Amosun (2016) highlighted such challenges as poor preparation on the side of the teachers, inappropriate method of teaching, the problem of timing and timetable, among others as challenges facing the implementation of the Geography curriculum.

There is no doubt that the above-listed factors have contributed to the poor student's performance in geography in Nigerian secondary schools. There is a need to explore further the challenges facing the implementation of the Geography curriculum and suggest solutions that could foster teacher's presentation and enhance learners' performance in Geography at senior secondary schools in Osun state. It should be noted that little efforts have been made to find out how the Geography curriculum in secondary schools in Osun state are being implemented. Therefore, it is imperative to investigate the effectiveness of the implementation of the Geography curriculum in secondary schools in the state.

Statement of the problem

Student's performance in Geography has been consistently low in areas such as remote sensing, map reading and geographical information system; this is evident in SSCE as reported by chief examiners (2012-2015). The low performance reveals that the stated objectives of teaching Geography have not been attained in secondary schools. This might result from factors related to the implementation of the Geography Curriculum such as large class size, inappropriate methods, inadequate funding, attitudes of students to learning, lack of motivation for teachers, inadequate supply of teaching resources and teacher's quality (content knowledge, teacher's qualifications and years of experience) among others. However, it has been noticed that curriculum developers are concerned with curriculum content design and organisation without much control over the quality of implementation of the Geography curriculum. There is, therefore, a need to assess the implementation of the secondary school Geography curriculum in Osun state; hence this study.

OBJECTIVES

The purpose of this study is to investigate the implementation of the senior secondary school Geography curriculum in Osun state. The specific objectives of this study are to:

1. Investigate the availability and adequacy of instructional resources for teaching Geography in Osun state secondary schools;
2. Examine the instructional strategies used by Geography teachers in secondary schools in the state; and
3. Assess the quality of Geography teachers in secondary schools in the study area.

RESEARCH QUESTIONS

- 1a. How available are the instructional resources for teaching Geography in Osun state secondary schools?
- b. How adequate are the instructional resources for teaching Geography in Osun state secondary schools?
- 2a. What are the instructional strategies used by Geography teachers in secondary schools in the state?
- b. How are the instructional strategies employed for the teaching of Geography in senior secondary schools?
3. How qualified are the Geography teachers in secondary schools in Osun state?

METHODOLOGY

The study utilized a descriptive survey research design to assess the implementation of the Geography curriculum in

secondary schools in Osun state. The design helped the researcher to collect extensive and cross-sectional data for the purpose of describing and interpreting the existing curriculum implementation situation under study. The multistage random sampling technique was employed. The population consisted of senior secondary school teachers in Osun state. All the three senatorial districts in Osun state were used in the study. Sixteen Local Government Areas (LGAs) were selected from the 30 LGAs in the state using a simple random sampling technique. Five schools were selected from each of the LGAs using a simple random sampling technique. One Geography teacher was randomly selected from each of the sampled schools, also using a simple random sampling technique. Thirty out of the sampled 80 Geography teachers were selected using a simple random sampling technique for observation. Two research instruments were used for data collection:

1. Instructional Resources and Strategies Observation Checklist (IRSOC)
 2. Teaching Personnel Questionnaire (TPQ)
- Instructional Resources and Strategies Observation Checklist (IRSOC)

The IRSOC was designed by the researcher to take stock of the availability and adequacy of instructional resources employed in teaching Geography. The IRSOC was divided into Sections A and B. Section A, Part I consists of the list of recommended instructional materials by the Nigerian Educational Research and Development Council (NERDC). It was subjected to a 3-point rating such as Available (A), Not Available (NA) and Adequate (AQ) and rated as 3, 2 and 1, respectively. Part II of Section A consists of questions on the quality of instructional resources. It was rated Yes or No.

Section B, Part I consists of instructional strategies employed by Geography teachers. Part II consists of the instructional strategies employed by the teacher during the classroom teaching and learning process. Observers are to select Yes or No to the items in Part I and II. Part III consists of teacher's content knowledge, which is to be observed during classroom interaction. Observers are to select Excellent, Good, Fair or Poor to the items in this part. In section B, the researcher observed the classroom teaching-learning process (Appendix I). Teaching Personnel Questionnaire (TPQ)

The TPQ was designed by the researcher to collect data on the quality of Geography teachers, teacher's opinions on instructional resources and instructional strategies. The TPQ was divided into Parts I and II. Part I was used to obtain information on Geography teacher's academic qualifications, age and years of teaching experience, while Part II was used to elicit information from the Geography teachers on availability and adequacy of resources in their schools. Items in Part II of the TPQ were rated "Yes" or "No" as appropriate (Appendix II). Content and face validity of the research instruments were ascertained by the researcher's supervisor and experts from curriculum studies and Test & Measurement, Department of Arts and Social Science, Faculty of Education, Obafemi Awolowo University, Ile-Ife. Based on the researcher's supervisor and other experts' suggestions, items in Section A Part II, Section B Part II & III (Appendix I) and Part II (Appendix II) were modified. A field test of both IRSOC and TPQ was carried out to determine the reliability of the instruments. This was done in schools that had similar characteristics as those in the study area which were not part

of the study. A reliability coefficient of 0.69 was obtained for IRSOC using intra-rater reliability, while 0.67 reliability coefficient was obtained for TPQ using Cronbach's alpha. Thus, the instruments were considered reliable for use in the study.

The study was carried out in four weeks. The first week was used to visit the selected secondary schools in Osun state to obtain permission from the school principals and seek support from the Geography teachers in order to administer the questionnaire as well as to observe the senior secondary school Geography teachers while teaching. Training of the research assistants was also conducted during the first week. The second and third weeks were used to administer the questionnaire and carry out the observation process by the researcher and four research assistants. The fourth week was used for analyzing the data collected from the respondents in the selected senior secondary schools. Data collected were analysed using descriptive statistics. Frequency count and percentage were used to provide answers to Research Question One, Two and Three.

RESULTS

Table 1: Demographic characteristics of the respondents

S. no.	Characteristics	Frequency (%)
1	Location:	
	Rural	31 (38.75%)
	Urban	49 (61.25%)
2	Sex:	
	Male	51 (63.75%)
	Female	29 (36.25%)
3	Age:	
	20-30 Years	13 (16.25%)
	31-40 Years	25 (31.25%)
	41-50 Years	31 (38.75%)
	51 Years-Above	11 (13.75%)

Table 1 reveals the characteristics of the respondents in terms of their locations, sex and age. About 40% of the respondents (Geography teachers) were from rural settlements, while 61.25% were from urban settlements. Also, 63.75% of the teachers were male, while 36.25% of them were female. Teachers between age 20-30 years were recorded to be 16.25%; age 31-40 years were 31.25%, 38.75% were between age 41-50 years and 13.75% were 51 years and above. From the findings, it can be deduced that male teachers teaching Geography at secondary schools in Osun state are more than the female teachers while the majority of the teachers are between the age of 31 years to 50 years.

Research question one

1a. How available are the instructional resources for teaching Geography in Osun state secondary schools?

This question was answered using the Instructional Resources and Strategies Observation Checklist (IRSOC) based on recommended resources from National Educational Research Development Council (NERDC). The data were analyzed using frequency count and percentage (%).

Table 2: Analysis of the availability of instructional resources

S. no.	Items	Available Frequency (%)	Not available Frequency (%)
1	Stephenson screen	0 (0.00%)	30 (100%)
2	Fortin (mercury) barometer	3 (10%)	27 (90%)
3	Aneroid barometer	1 (3.33%)	29 (66.67%)
4	Max. & min. thermometer	9 (30%)	21 (70%)
5	Barograph	0 (0.00%)	30 (100%)
6	Wet & dry bulb thermometer	8 (26.67%)	22 (73.33%)
7	Cup anemometer	0 (0.00%)	30 (100%)

S. no.	Items	Available Frequency (%)	Not available Frequency (%)
8	Tube anemometer	0 (0.00%)	30 (100%)
9	Wind vane	0 (0.00%)	30 (100%)
10	Sunshine recorder	0 (0.00%)	30 (100%)
11	Rain gauge	0 (0.00%)	30 (100%)
12	Chart of weather symbols	10 (33.33%)	20 (66.67%)
13	Topographical maps	25 (83.33%)	5 (16.67%)
14	Wall map	13 (43.33%)	17 (56.67%)
15	Globe	22 (73.33%)	8 (26.67%)
16	Geography textbooks	30 (100%)	0 (0.00%)
17	Atlas	28 (93.33%)	2 (6.67%)
18	Satellites images	0 (0.00%)	30 (100%)
19	Geographical charts	7 (23.33%)	23 (76.67%)
20	Projection	3 (10%)	27 (90%)
21	Geographical garden	0 (0.00%)	30 (100%)
22	Geographical library	0 (0.00%)	30 (100%)

Table 2 reveals that most instruments possessed by the observed school were Geography textbooks (100%), Atlas (93.33%), Globes (73.33%) and Topographical maps (83.33%). None of the 30 observed schools visited had Stephenson screen, barograph, cup and tube anemometer, wind vane, sunshine recorder, rain gauge, satellites images, geographical garden and geographical library. Other instruments such as

projector (10%), fortin and aneroid anemometer (10%), wet and dry thermometer (26.67%) and wall maps (43.33%) were available in the observed schools. From the findings of the study, it can be concluded that most of the schools observed did not have resources for teaching and learning Geography which might have limited the implementation of Geography curriculum in the study area.

Table 3: Availability of instructional resources based on decision rule

Decision rule	Instructional resources	Frequency	Percentage
Greater than 60%	Topographical maps, Globe, Geography textbooks and Atlas	4	18.18%
Less than 60%	All other items on instructional resources expect from the four listed above	18	81.82%
Total		22	100%

From table 3, following the decision rule by Ogunkunle (2016) where she stated that a percentage of 60% and above to an item should be considered appropriate and relevant in taking the decision in any task. The finding of the study shows that 18.18% of the instructional resources have an acceptable level of availability while 81.82% of the resources were not readily available for the teaching of Geography in the schools. It can be deduced that the instructional materials are not readily available in the sampled schools.

1b. How adequate are the instructional resources for teaching Geography in Osun state secondary schools?

This question was answered using the Instructional Resources and Strategies Observation Checklist (IRSOC) based on the recommended number of instructional resources from the National Educational Research Development Council (NERDC). The adequacy was calculated based on the available instructional resources. The data were analyzed using frequency count and percentage (%).

Table 4: Analysis on adequacy of instructional resources

S. no.	Items	Adequately available	Frequency (%)
1	Wall map	13	100%
2	Projection	3	100%
3	Topographical maps	20	80%
4	Geography textbooks	23	76.67%
5	Globe	16	72.72%
6	Chart of weather symbols	6	60%
7	Geographical charts	3	42.86%
8	Fortin (mercury) barometer	1	33.33%
9	Max. & min. thermometer	3	33.33%
10	Atlas	6	21.42%
11	Wet & dry bulb thermometer	1	12.50%
12	Stephenson screen	0	0.00%
13	Aneroid barometer	0	0.00%
14	Barograph	0	0.00%
15	Cup anemometer	0	0.00%
16	Tube anemometer	0	0.00%
17	Wind vane	0	0.00%
18	Sunshine recorder	0	0.00%
19	Rain gauge	0	0.00%
20	Satellites images	0	0.00%
21	Geographical garden	0	0.00%
22	Geographical library	0	0.00%

On the adequacy of instructional resources, it is shown from table 4 that Wall maps(100%), projectors (100%), Chart of Weather Symbols (60%), Topographical maps (80%), Globe (72.72%) and Geography Textbooks (76.67%) are the resources which are adequate for the use of Geography teachers and students while Fortin Barometer, Maximum & Minimum Thermometer, Wet & Dry Bulb Thermometer, Atlas and Geographical charts had 30%, 33.33%, 12.50%, 21.42%, 42.86% are fairly adequate respectively.

The result from the study shows that wall map, projectors, topographical maps, Geography textbooks, globes and charts on

weather symbols are resources which were adequate in the schools in which they are available while other resources such as geographical charts, Fortin (Mercury) barometer, maximum & minimum thermometer, Atlas and wet and dry bulb thermometer are not adequately available in schools.

Checking the level of adequacy from table 5, only 27.27% of the instructional resources were adequate for the teaching of Geography, while 72.73% of the resources observed were below 60%. This implies that the resources were fairly adequate for teaching of Geography in the study area.

Table 5: Adequacy of instructional resources based on decision rule

Decision rule	Instructional resources	Frequency	Percentage
Greater than 60%	Weather symbols, Topographical maps, Wall maps, Globe, Geography textbooks, and Projection.	6	27.27%
Less than 60%	All other items on instructional resources expect from the six listed above	16	72.73%
Total		22	100%

Table 6: Quality of Geography instructional resources in senior secondary schools

S. no.	Questions	Yes Frequency (%)	No Frequency (%)
1	Are instructional resources related/relevant?	24 (80%)	6 (20%)
2	Are there adequate emphases on relevant features?	21 (70%)	9 (30%)
3	Are instructional resources handled correctly?	19 (63.33%)	11 (36.67%)
4	Are the instructional resources appropriate for the level of students?	23 (76.67%)	7 (23.33%)
5	Are the instructional resources durable?	30 (100%)	0 (0.00%)
6	Are the instructional resources unambiguous?	4 (13.33%)	26 (86.67%)
7	Are the numbers of resources available adequate for the number of students available?	3 (10%)	27 (90%)

Table 6 shows that 80% of the observed Geography teachers use relevant and related instructional materials during classroom interaction with their students, while 20% of the teachers do not use relevant or related instructional materials. It could be inferred that the majority of the observed Geography teachers had adequate knowledge of the instructional resources used in relation to the topic taught. Also, 70% of the teachers made relevant emphases on the features and 63.33% of the observed Geography teachers handled the instructional resources properly. About 77% of the teachers used appropriate instructional resources for the

students, while 100% of the instructional resources available were durable. Also, 86.67% of the instructional resources employed during teaching and learning of Geography were unambiguous to the students. On the adequacy of the available instructional resources, 10% of the resources were adequate for use in the Geography classroom.

The findings of the study show that the instructional resources used in the classroom are properly utilized by the Geography teachers in the dissemination of information to the students during teaching. However, it was gathered that the resources used during classroom interactions are not sufficient.

Table 7: Teacher's opinion on the adequacy of Geography instructional resources

S. no.	Item	YES (%)	NO (%)
1	Is the content in the Geography textbook relevant to the objective of what to teach?	68 (85%)	12 (15%)
2	Do the students have Geography textbooks?	15 (18.75%)	65 (81.25%)
3	Are all resources of teaching Geography available in your school?	9 (11.25%)	71 (88.75%)
4	Does the school have ICT facility for teaching of Geography?	3 (3.75%)	77 (96.25%)
5	Does the school fund the purchase of instructional resources?	7 (8.75%)	73 (91.25%)

Table 7 revealed that 85% of the sampled Geography teachers attested to it that contents in the Geography textbooks used are relevant to the objectives of what to teach, while 15% were against the opinion. From the table above, 18.75% of Geography teachers in the sampled survey schools believed that the students have Geography textbooks, while 81.25% of the teachers said students do not have Geography textbooks. This implies that many of the Geography students do not have textbooks on Geography to aid learning. Answering the question on available instructional Resources in the senior secondary school by Geography teachers, 11.25% attested that Geography resources are available in the school while 88.75% of the teachers believe that Geography resources are not available. The result indicated that 85% of the teachers said the resources are accessible for use. Out of the 80 surveyed Geography teachers, 3 (3.75%) confirmed the availability of ICT facilities to teach Geography. 91.25% of the 80 Geography teachers responded that the school does not fund instructional resources for teaching the subject.

From the results shown in table 7, Geography teachers in the study area believed that the contents in the Geography textbooks used are relevant to the objectives of what is to be taught, but information elicited from the teachers show that majority of Geography students do not have Geography textbooks. Also, schools observed were not funding the purchase of instructional resources to facilitate the teaching-learning process.

Research question two

2a. What are the instructional strategies employed for the teaching of Geography in senior secondary schools in Osun state? To answer this question, the researcher observed 30 teachers on instructional strategies used during teaching. The researcher observed all the 30 teachers teaching the theme: population in senior secondary schools. Geography teachers were observed using instructional Resources and Strategies Observation Checklist (IRSOC, Appendix 1 Section B). The data collected were analyzed using frequency counts and percentage (%).

Table 8: Instructional strategies used by Geography teachers in senior secondary schools in Osun state

S. no.	Instructional strategies	Adequately used	Used frequency (%)
1	Expository strategy	30	100%
2	Demonstration strategy	11	36.67%
3	Inquiry strategy	9	30%
4	Group activity strategies	2	6.67%
5	Peer tutoring	1	3.33%
6	E-learning	0	0.00%
7	Cooperative learning	0	0.00%
8	Project work	0	0.00%
9	Guided discovery	0	0.00%

Table 8 shows the instructional strategies used by Geography teachers observed in senior secondary schools in Osun state. All of the Geography teachers (100%) employed the conventional method, which is the expository strategy. About 37% of the teachers in the observed schools used the demonstration strategy. Group activities and peer tutoring employed by the teacher take 6.67% and 3.33%, respectively. Guided discovery, E-learning, cooperative learning and project work strategies were not employed by the 30 observed Geography teachers in the study area.

From the findings of the study, it was gathered that the most used instructional strategy was the expository strategy. The study also finds out that demonstration strategy was employed by Geography teachers in the study area. It was noted that

inquiry method was also introduced during the teaching of Geography but was limited in use by few teachers. Wamutitu (1991) in Muita (2012) noted that Geography is both a body of knowledge and a distinctive discipline of study that requires a multi-method approach of teaching to be adopted by the teachers.

2b. How are the instructional strategies employed for the teaching of Geography in senior secondary schools in Osun state?

To answer this question, the researcher observed 30 teachers on teaching strategies used in senior secondary schools using instructional Resources and Strategies Observation Checklist (IRSOC, Appendix 1 Section B). The data collected were analyzed using frequency counts and percentage (%).

Table 9: Instructional strategies classroom activities used by Geography teachers

S. no.	Classroom activities	Yes	No
1	Are the objectives stated in line with what is taught?	26(86.67%)	4 (13.33%)
2	Does the teacher ask questions on previous knowledge?	21 (70%)	9 (30%)
3	Student's knowledge is assessed to guide lesson plan	12 (40%)	18 (60%)
4	Teacher explains to the whole class	30 (100%)	0 (0.00%)
5	Students are encouraged to ask questions	23 (76.67%)	7 (23.33%)
6	Class discussion occurs at the conclusion of activities to end the topic taught	9 (30%)	21 (70%)
7	Is there sufficient time to explain topic in depth?	12 (40%)	18 (60%)
8	Is assignment given to the students?	2 (6.67%)	28 (93.33%)

Further observation on the instructional strategy in classroom activities employed by Geography teachers during the teaching-learning process in table 9 reveals that 86.67% of the teachers stated their objectives alongside what to be taught. Many of the teachers (70%) asked questions on what was previously taught, while student's knowledge on the new topic to be taught was assessed by only 40% of the teachers. All of the Geography teachers (100%) took time to explain the new concepts to the students. During the process of the classroom teaching-learning process, 76.67% of the teachers encouraged their students to ask questions, while 23.33% failed to stimulate their students to ask questions. Classroom discussions were not mostly used by Geography teachers at the observed schools. It was indicated that only 30% of the teachers engage their students in classroom discussions, while

70% of the remaining teachers failed to employ the strategy during classroom interaction. Results revealed that time was not sufficient to explain the topic in detail as 60% of the teachers failed to meet up with the duration while 40% of the teachers managed their time to teach all what was outlined for the class. The assignment was not employed by 93.33% of Geography teachers, while 6.67% of the teachers gave the assignment to the students.

From the observation, it was deduced that Geography teachers at senior secondary school complied with their instructional objectives, explaining to the whole class and encouraging the students to ask questions. On the other hand, it was revealed that time allocated for the subject was not adequate, Geography teachers did not give the assignment to the students and classroom discussion was not properly utilized.

Table 10: Teacher's opinion on instructional strategies in Geography classroom

S. no.	Item	YES (%)	NO (%)
1	Does the student's population in Geography class indicate the instructional strategy to use?	52 (65%)	28 (35%)
2	Does the time allocated for Geography on the school timetable dictate the instructional strategy to use?	55 (68.75%)	25 (31.25%)
3	Do you use models, charts and pictures during classroom teaching?	35 (43.75%)	45 (56.25%)
4	Are Geography students taken on field trips?	7 (8.75%)	73 (91.25%)

Table 10 showed that 65% of Geography teachers believed that the population of Geography students in classrooms determines the type of teaching strategy to use, while 35% believed that the student population did not have an effect as to what type of strategies to be used. Likewise, 68.75% of the sampled Geography teachers acknowledged that the duration

of the subject on the school timetable dictates the instructional strategy used, while 31.25% disagreed with the fact that duration does not dictate the type of strategy to be employed. The findings showed that 43.75% revealed that they made use of teaching aids such as models, charts and diagrams during classroom interaction, while 56.25% testified that they did not

use them. From the 80 survey Geography teachers, 8.75% of the Geography teachers took students on a field trip while 91.25% did not take them on a field trip.

The result shows that teachers from secondary schools in Osun state used strategies based on the population of the students in the classroom. This can be attributed to the wide use of lecture methods by Geography teachers in the study area based on a large population of students in the classroom. Also, the duration of the subject on the school timetable is another factor that determines the strategies employed by the teachers as the lecture method focuses mainly on explaining terms and giving the students note to maximize the use of time.

Research question three

How qualified are the Geography teachers in secondary schools in Osun state?

In an attempt to answer research question three, data collected on Geography teacher's quality in senior secondary schools in Osun state were analyzed using frequency count and percentage (%).

From table 11, the majority of the Geography teachers (61.25%) had M. Sc. Ed, 36.25% of the teachers had M. Sc while

2.50% had NCE. On the percentage of Geography teachers with additional qualifications, 13.75% of the 80 sampled teachers had PGDE, 8.75% possessed M. Ed, 2.50% had M. Sc while 22.50% obtained M. Sc. Ed A larger percentage, 57.50%, of the sampled Geography teacher studied Geography, 11.25% studied Geology, 15% and 10% of the 80 sampled Geography teachers studied Urban & regional planning and Demography & Statistics, respectively, while 6.25% of the teachers studied Sociology and Anthropology. Analysing years of experience of Geography teacher in Osun state, about 30% had 21 years and above, 16-20 years of experience were 25%. Also, 15% of the sampled Geography teachers were within years of experience of 11-15 years, 13.75% of the teachers had 6-10 years of experience, while 0-5 years of teaching experience were 17.50%.

These findings indicated that Geography teachers in Osun state were professionally qualified; hence they had the skills to implement the Geography curriculum. Also, it could be concluded that the majority of the respondents had worked at current stations long enough, so they had enough experience in teaching Geography.

Table 11: Analysis on geography teacher's qualification and years of experience using simple percentage

S. no.	Qualifications	Frequency (%)
1	Academic qualification	
	NCE	2 (2.50%)
	HND	0 (0.00%)
	B. A	4 (5%)
	B. Sc	29 (36.25)
	B. Sc. Ed	45 (56.25%)
2	Additional qualification	
	PGDE	11 (13.75%)
	M. Ed	7 (8.75%)
	M. Sc.	2 (2.50%)
	M. A	3 (3.75%)
	M. Sc. Ed	13 (16.25%)
	M. A. Ed	2(2.50%)
Ph. D	0 (0.00%)	
3	Course of study	
	Geography	46 (57.50%)
	Geology	9 (11.25%)
	Urban and Regional Planning	12 (15%)
	Demography and Statistics	8 (10%)
	Sociology and Anthropology	5 (6.25%)
4	Years of teaching experience	
	0-5 years	14 (17.50%)
	6-10 years	11 (13.75%)
	11-15 years	12 (15%)
	16-20 years	20 (25%)
	21 years and above	23 (28.75%)

Table 12: Analysis of teacher's content knowledge in Geography

S. no.	Areas for observation	Rating (%)			
		Excellent	Good	Fair	Poor
1	Explanation of geographical concept taught	11(36.67%)	9(30%)	7(23.33%)	3(10%)
2	Relevance/suitability of the examples given to the topic under discussion	10(33.33%)	13(43.33%)	5(16.67%)	2(6.67%)
3	Continuous flow in the dissemination of relevant information to the students	9(30%)	12(40%)	6(20%)	3(10%)
4	Relating the concept taught to real life experience of the learners	6(20%)	10(33.33%)	9(30%)	5(16.67%)
5	Sequential arrangement of the components that make the whole topic	11(36.67%)	12(40%)	5(16.67%)	2(6.67%)
6	Logical explanation of contents	9(30%)	12(40%)	6(20%)	3(10%)
7	Emphasis on important points	8(26.67%)	13(43.33%)	7(23.33%)	2(6.67%)
8	Correctness of explanation of terms	9(30%)	14(46.66%)	5(16.67%)	2(6.67%)

Table 12 indicated that 66.67% of the observed Geography teachers did well in explaining the concept taught, 23.33% were fair in explaining concepts, and 10% were poor in explaining the concept. Given relevance examples under the concept taught, 76.33% gave relevance examples in line with the concept taught, 16.67% were fair in giving relevance examples, and 6.67% gave poor examples. In relating the concept taught to real-life experience, 53.33% of Geography teachers observed did well in applying real-life experience to the concept taught, 30% of the teachers gave a fair real-life experience, while 16.67% never gave real-life experience in relating to the concept taught. In addition, 70% of the Geography teachers took time to lay emphasis on the important terms in the concept, 23.33% did fairly in explaining the important terms, while 6.67% were poor on this aspect.

The result of the finding showed that although some of the observed Geography teachers did not have enough content knowledge of the concept taught, a greater part of the Geography teachers showed that they had adequate content knowledge on the subject taught.

DISCUSSION

The findings showed that instructional resources for teaching Geography at senior secondary school are not readily available and the resources which are available are not adequate for use in the classroom. It is known that no curriculum can achieve its desired aim and objectives if these resources are not in use for teaching and learning. It was reported by Jatau (2008) that if instructional resources are properly utilized, they could bring about effectiveness in the teaching and learning process. One factor which contributed to lack of availability of instructional resources as revealed by the study was lack of fund by the schools to purchase resources. Teaching and learning can produce desired results when instructional resources are adequately and appropriately provided and utilized. Instructional resources are integral components of teaching-learning situations; it is not just to supplement learning but to complement its process. This shows that if there must be an effective teaching-learning activity, utilization of instructional resources will be necessary (Adediran, Ibrahim, & Adelegun, 2011). Heffron & Downs (2012) further stresses that instructional resources should focus on big ideas to help students make sense of Geography and continue developing key understandings across learning experiences. As shown from the findings, the resources were not readily available for use which affected the implementation of the Geography curriculum in the study area. This is an indication that the non-availability and inadequacy of teaching and learning resources hindered proper implementation of the Geography curriculum in secondary schools in Osun state.

Findings on instructional strategies used by Geography teachers revealed that the expository method was mostly and widely employed by the teachers alongside other methods such as inquiry strategy, demonstration strategy, group activity and peer tutoring. Bichi (2002) revealed that the prevailing instructional strategy in teaching in Nigerian schools is the teacher's expository strategy. This form of instructional strategy encourages rote learning and forcing on memorization and regurgitation (Oduolowu, 2007). Various scholars in the field of education, such as Huba and Freed (2000), Brown (2008) and Hannatu (2016), had advocated the use of child-centered method as it makes learning meaningful to the students and also allow them to be active during teaching-learning processes. Liu, Qiao & Liu (2006) reported that while learner-centered language teaching has been advocated in higher education in recent years, teacher-centered teaching styles are still dominant in actual practice. Results of their study showed that most instructors still use teacher-centered styles despite the call for a paradigm shift to learner-centered ones. It was revealed that some of the Geography teachers also employed the use of a child-centered method such as demonstration strategy, peer tutoring, group activities and inquiry strategies. Also, the study showed that 8.75% of

Geography teachers make use of field trip strategy. This strategy has not been employed due to strenuous planning that is involved, such as pre-visit to the site of visit, affirming the parents' consent, the distance of the place of interest, the stress of securing transportation to convey the students and security concern for the students. From the findings of the study, it can be deduced that most Geography teachers use expository strategies to teach while a small percentage of the teachers had in-depth information on other strategies to be employed.

Regarding the quality of Geography teachers in terms of academic qualifications, the findings showed that the majority of Geography teachers are qualified to teach the subject while little percentage were not qualified to teach Geography. Aubusson and Watson (2003) observed that teachers have a critical influence on the quality of teaching and learning that occurs in the classroom. This supports the fact that there are qualified Geography teachers in the study area to influence the quality of teaching. Ayoola (2007), on the other hand, was of the opinion that the qualifications of teachers dictate the quality of information imparted to the students through teaching. This study revealed that the teacher had adequate content knowledge as to what to teach in the classroom. The quality of teachers in terms of qualification and content knowledge is vital as it influences the quality of teaching and learning in the classroom. As regards to years of experience, it was revealed that Geography teachers in the study area are well experienced in the field of teaching Geography as the majority had been 16 years and above in teaching the subject.

CONCLUSION

It can be concluded from the findings of the study that evidences exist as to the high quality of Geography teachers in Osun state secondary schools, but curriculum implementation might be hampered through non-availability and inadequate instructional resources. Likewise, expository strategy and demonstration strategy were mostly employed by Geography teachers in Osun state with little concentration on inquiry, group activities, guided discovery, peering tutoring, cooperative learning and project.

Recommendations

The following are the recommendations based on the findings of this study:

1. Government should ensure that schools are well equipped with recommended instructional resources to facilitate teaching and learning of Geography.
2. Inspectors from the Ministry of Education should inspect secondary schools on a regular basis to ensure compliance with requirements for instructional resources in both public and private schools.
3. Child-centered activity strategies should be encouraged among teachers who teach Geography in secondary schools as they allow students to be active during classroom interaction.
4. Teachers who are not educationally qualified to teach Geography should be allowed to undergo in-service training such as seminars, Post-Graduate courses in education so as to handle the subject effectively.
5. Qualified Geography teachers are to be employed and sent for in-service training such as a workshop, seminars so as to keep them updated and improve their knowledge and be aware of new instructional strategies to be employed.
6. Curriculum developers should regularly embark on an investigation into how the curriculum is being implemented in order to identify areas where improvement is needed.

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AUTHORS CONTRIBUTIONS

The authors have succeeded in adding to the existing knowledge in the area of Geography Education. They have

equally provided information on how the Geography curriculum could be effectively implemented in senior secondary schools in Osun state.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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