

Challenges Teachers Face In Integrating Fieldwork into Teaching and Learning of Geography in Senior High Schools

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Abstract: - *The main purpose of this study was to investigate the challenges that Senior High School Geography Teachers in Cape Coast Metropolis face in integrating fieldwork in the teaching and learning of Geography. For the purpose of this study, the descriptive design was used. This study was conducted in the Cape Coast Metropolis. The target population of this study consists of all Senior High Schools in Cape Coast Metropolis. However, the accessible population for the study was made up of only public Senior High Schools in the Cape Coast Metropolis. The researchers employed purposive sampling to select only the Public Senior High Schools in the Cape Coast Metropolis. Again, they employed purposive sampling to select only the geography teachers and form three students of the selected Public Senior High Schools. This study found that teachers who do not have the needed time to organise fieldwork for their students, the workload on them in the school usually does not permit them to plan fieldwork for their students, inadequate financial support from the school administration negatively affects the organization of fieldwork. Thi study found that reducing class size and including fieldwork in geography curriculum will enhance the integration of fieldwork in teaching and learning of geography at the Senior High School. It was recommended that The Ghana Education Service in Cape Coast Metropolis should reduce the workload on geography teachers to help the have adequate time to organize fieldwork. The Ghana Education Service in Cape Coast Metropolis should provide the schools with the needed resources to facilitate effective organization of fieldwork.*

Keywords: - *Geography, Fieldwork, Integration, Teaching and Learning,*

Introduction

Geography fieldwork mainly involves learners learning from practical experience. This presupposes that instead of pupils learning about soils or hills from text books, they learn from the actual hills or soils outside their classroom. According Ntalasha *et al* (2004), they define a geography field project as the study of a significant topic or a problem in the field where the learner is actively involved in the collection of information, processing and the final analysis of the information before preparing a report. According to Biggs (1999) the concept of field work is seen to be the “active engagement with the external world” (p. 34) whether every activity described as fieldwork fits the criteria of “active engagement” is

debatable. Ajibade and Raheem (1999) defined “fieldwork” to include field teaching, field trips, field research or field camps or indeed “any arena or zone within a subject where, outside the constraints of the four walled classroom setting, supervised learning can take place via first-hand experience.

According to Ntalasha, *et al* (2004) field work generates interest in students bringing about their awareness of resources and problems of the local area, and as such brings reality in the study of Geography. Fieldwork further equips students with opportunities to acquire data collection and report writing skills. Furthermore, it turns keen geography teachers into seasoned professionals

and provides them with opportunities to write local geography textbooks.

However, geographic field work has tended to be confused with picnics outings or class excursions this should be seen as a narrow concept of the term field work. For success and attainment of the goals of field work, Barnett (2009) opined that the following stages are critical: Abstract conceptualisation (pre field activities in class teaching and learning), Active experimentation (planning for Fieldwork); Concrete experience (conduct of the field work), and Reflective observation (post fieldwork evaluation).

Geography as a secondary school subject aims at helping learners understand their immediate environment as well as that of the universe. This cannot happen in rigidly planned classroom activities where the teacher and the textbook are the only source of information. Instead the new system calls for the teacher to be innovative and be able to bring about life in the lesson; learners must be able to give some explanations on what they see on the landscape. The only way of achieving this aim is by taking learners out of the walls of the classroom to the place where they will experience a direct contact with the landscape (Gold & Jenkins, 1999). Substantial evidence exists to indicate that fieldwork, properly conceived, adequately planned, well-taught and effectively followed up, offers learners opportunities to develop their knowledge and skills in ways that add value to their everyday experiences in the classroom (Rickinson, Dillon, Teamey, Morris, Choi, Sanders & Benefield, 2004).

Sauer (as cited in Gold & Jenkins, 1999) declares that the principal training of the Geographer should come, wherever possible, by doing fieldwork. Many others, from all levels of geographical education, have strongly articulated similar views (including Everson, 1998; Kent & Lambert, 1995). Much of this literature, however, consists either of general philosophical essays on the value of fieldwork or specifically relates to individual exercises. The educational aims and objectives of fieldwork are rarely examined and there is very little evaluation of outcomes of field excursions.

This means that there is virtually nothing or very little information available for a new Geography teacher needing guidance on how to justify and design a field excursion. According to Adu-Akoh, Ababio, Asante, and Mensah (2017), it seems geography teachers within the Cape Coast Metropolis considers and adopt fieldwork as the most appropriate method for transmission of knowledge in physical geography as far as teaching and learning of geography is concern.

Fieldwork as a method of teaching has been defined as a science of selecting, observing, evaluating and reporting information in a specific area (Gitau, 2008). In addition, it involves the direct use of the environment as a source of physical information. Fieldwork include field teaching, fieldtrips, field research or field camps or indeed any arena or zone within a subject where, outside the constraints of the four walls of the classroom setting, supervised learning can take place through first time experience (Ajibade & Raheem, 1999). Field work can be categorised into six types of activity: short field excursion: limited travel in limited time; residential course; extended travel and time; study tour; multi location activity, project work; learner practitioner and participant observation (Gold & Jenkins, 1991). Geographical fieldwork has been argued to be particularly useful in the development of insight, attainment of cognitive, technical achievements and development of empathy in students (Adu-Akoh. Ababio, Asante & Mensah, 2017). In view of this, geographical fieldwork becomes an inalienable and corporate part of teaching and learning process in schools. Mohammed (2016), therefore, concluded that fieldwork enhances students' understanding of geographical concepts and appreciation of natural environment.

Based on the views of the various aforementioned authors, it is possible to argue that fieldwork is an essential method in the teaching and learning process of geography. Notwithstanding, Senior High School teachers face challenge in integrating fieldwork into teaching and learning of Geography. This present study therefore sought to investigate into the challenges that Senior High School

Geography Teachers in Cape Coast Metropolis face in integrating fieldwork and the teaching and learning of Geography.

Purpose of the Study

The main purpose of this study was to investigate into the challenges that Senior High School Geography Teachers in Cape Coast Metropolis face integrating fieldwork in the teaching and learning of Geography. However, the study specifically was to find out:

- I. The challenges to effective use of fieldwork as method of teaching geography in the Senior High School in the Cape Coast Metropolis.
- II. Ways of making fieldwork more integrated in the teaching and learning of Geography in the Senior High School in the Cape Coast Metropolis.

Research Questions

1. What are the challenges to effective use of fieldwork as method of teaching geography in the senior high school in the Cape Coast Metropolis?
2. How can fieldwork be integrated into the teaching and learning of geography in the senior high school in the Cape Coast Metropolis?

Significance of the Study

The study was intended to expose teachers more on the importance and the need to use field work in teaching the subject to help their students understand more the theoretical concepts got in books. The research findings may also be of substantial help to National Council for Curriculum and Assessment (NCCA) as well as the Ministry of Education, as it will help to address the challenges that impede effective fieldwork. Also, it is expected that, this research will give more insight on the role of fieldwork in the teaching of geography in Senior High Schools. Finally, the study was intended to provide guidelines for stakeholders such as curriculum planners, headmasters and among others, to improve upon the teaching and learning of the geography using

fieldwork. And in conclusion, the findings will serve as a reference point for further studies into the effects of fieldwork as a method of teaching on students' learning.

Literature Review

Challenges to Effective Use of Fieldwork as a Method of Teaching Geography

In a study conducted by Mohammed (2016) to assess the implementation of fieldwork in the teaching of Geography in Some Senior Secondary Schools in Kano, Nigeria. Mohammed (2016) found that despite the benefits of field work given much is still yet to be expected as far as the use of field work as a method of teaching in Senior Secondary Schools is concerned. Mohammed (2016) stated that most of the teachers indicated that the use of fieldwork as a method of teaching geography is constrained by a number of challenges. Time was one of the challenges confronting the use of field work as a method of teaching in schools. Inadequate funding is also another challenge as it has been observed that all the stages of field work is hinged on fund available for the programme, thus students are mostly asked to make contribution to the conduct of the field work which in most cases students are not able to pay thus eventually end up calling off the fieldtrip. More also, students' population in most secondary schools have been on the increase as a result of modernization and the recognition of the importance of education. In consequences, it is usually the norm to find over 80 students in a class in public schools. This practice puts pressure and stress on available infrastructures. Another factor that has constrained field work in schools is the time allocation to the teaching and learning of the subject geography. Mohammed (2016) observed that the time allotted to geography in most schools never exceed four periods of 40 minutes by week per stream or class. This makes the time allocation in adequate taking into consideration the vast content knowledge of geography.

Furthermore, a study conducted by Ngcamu (2000) to investigate how fieldwork is implemented in the teaching of Geography in secondary schools, it was

discovered that though most teachers claimed to understand what fieldwork meant, very few were actually implementing it in their daily teaching activities. It was also discovered that most of the problems mentioned by teachers as hindering fieldwork implementation were as a result of poor planning and lack of creativity on their side. The results of this study revealed that community and parent participation was poor. As a result, the parents were adamant to support their children financially when it came to fieldwork activities because they did not know what it entailed. One of the observations made by the study was the lack of team work among teachers in Secondary Schools. Teachers mentioned that fieldwork was time consuming and that it overlapped with the time slots of other subjects. The researcher saw this as lack of collaboration and team work at a time when integrated learning is being advocated for by the Department of Education.

How Fieldwork Can Be Integrated Into the Teaching and Learning of Geography

Falk and Balling (1982) concluded that educational field trips could be "manipulated to maximize learning by placing students in settings of appropriate novelty" (p. 28). Orion and Hofstein (1994) were also interested in understanding the outdoors as an effective learning environment. Their study was based on an experimental design in which students were divided into three groups with different levels of preparation. The research instruments mainly included attitude questionnaires and achievement tests administered before and after the field trip, supplemented by observations of the learning performance and open interviews of the students. They reported that the educational effectiveness of a field trip was controlled by the field trip quality and the 'Novelty Space' which consisted of three pre-field variables: cognitive, geographic and psychological.

Orion and Hofstein (1994) found that students' learning performance was the best after a short and focused preparation session that helped to maximize familiarity and reduce the 'Novelty Space', and vice versa. They explained that cognitive novelty depends on the concepts and

skills that students are asked to deal with throughout the field trip. Geographic novelty reflects the acquaintance of the students with the field trip area. Psychological novelty of the population reflected their previous experiences in field trips as social-adventurous events rather than learning activities. (p. 1116). They also reported that the learning efficiency during the field trip might be influenced, by the place of the field trip within the curriculum and the field trip program. Based on the findings, they suggested a number of strategies to reduce the novelty space during the preparation stage, which included providing detailed information about the event, use of maps and audio-visual aids, and working with materials that students will meet in the field. Similarly, Burnett (1993) suggested that the strategies to reduce extreme novelty might include the uses of instructional sequences, advanced instruction and vicarious exposure of the study area, the effective use of worksheets, and the selection of local sites for fieldwork.

Research Methods

Research Design

For the purpose of this study, the descriptive design was used. The study was conducted in the Cape Coast Metropolis. Cape Coast is a city, a fishing port, and the capital of Cape Coast Metropolitan District and the Central Region of Ghana. Cape Coast is situated on the south of the Atlantic ocean and had a settlement population of 169,894 people (source: 2010 Population And Housing Census). The language of the people is Fante. From the 16th century until independence, the city and fishing port changed hands between the Portuguese, the Dutch, the Danes and the British. The target population of this study consists of all Senior High Schools in Cape Coast Metropolis. However, the accessible population for the study will be made up of only public Senior High Schools in Cape Coast Metropolis. Accessible population is a subset of the target population and is also known as the study population. It is from the accessible population that researchers draw their samples (Kothari, 2004).

The researchers employed purposive sampling to select only the public Senior High Schools in the Cape Coast Metropolis. Again, they employed purposive sampling to select only the geography teachers and form three students of the selected public senior high schools. The purposive sampling was employed because the researchers are only interested in the geography teachers and the form three students in the selected schools and they are in the best position to respond appropriately, since the focus of the study is on the role of fieldwork in the teaching and learning of geography. The sample size was made up of 162 respondents; this consisted of 150 students and 12 geography teachers. A questionnaire was deemed most appropriate for the study. The questionnaire

was made up of three (3) sections, thus sections A, B and C. Section A dealt with the background information of respondents. Section B dealt with the challenges to effective use of fieldwork as method of teaching geography in the Senior High School in the Cape Coast Metropolis. Section C focused on ways of making fieldwork more integrated with the teaching and learning of geography in the senior high school in the Cape Coast Metropolis.

Results and Discussion

Analysis of Background Data

This section of the chapter presents the analysis of the background data of the respondents.

Table 1- Gender Distribution of Teachers

Gender	Frequency	Percent
Male	7	58.3
Female	5	41.7
Total	12	100

Source: Field survey, (2019)

From Table 1, it can be observed that, out of the 12 teachers used for the study, 7 (58.3%) were males while 5 (41.7%) were females. This means that the males out-numbered the female.

Table 2 presents the gender distribution of students used for the study

Table 2- Gender Distribution of the students

Gender	Frequency	Percentage
Male	70	46.7
Female	80	53.3
Total	150	100.0

Source: Field survey, (2019)

Table 2 above shows that, out of the 150 student respondents, 70 representing 46.7% were males and 80 respondents representing 53.3% are female. This shows gender balance among respondents.

Table 3- Age Range Distribution of Pupils

Age (in years)	Frequency	Percentage
13-15 years	12	8.0
16-19 years	132	88.0
19 years and Above	6	4.0
Total	150	100.0

Source: Field survey, (2019)

The age distribution of the students as presented in Table 3 indicates that 132 (88.0%) were between the ages of 16 to 19 years. This was the age group with the highest respondents. The next age group is those between 13-15 years and they were 12 (8.0%) out of the 150 students used for the study.

Age ranges from 19 years and above registered were 6 (4.0%). This indicates that most of the students who participated in the study were between 16-19 years of age. We solicited for teacher's academic qualification. The analysis of the result is presented in Table 4.

Table 4- Academic Qualification of Geography Teachers

Educational status	Frequency	Percent
First Degree	9	75
Masters	3	25
Total	12	100

Source: Field survey, (2019)

Out of the 12 geography teachers who participated in the study, 9 represent 75% of the sample size have first Degree and 3 teachers representing 25%

Master's degree. The result indicates that majority of the teachers who participated in the study have First Degree.

Table 5- Distribution of Teacher s' Number of Years Taught

Years	Frequency	Percent
Less than 5 years	2	16.7
5-10 years	7	58.3
11 years and above	3	25.0
Totals	12	100

Source: Field survey, (2019)

Table 5 shows that majority that is 7 (58.3%) of the teachers who responded to the questionnaires indicated that they have taught for 5-10 years. Notwithstanding, 2 of the teachers representing 16.7% indicated that they have taught for less than five years. This response shows that most of the geography teachers who partook in this study have taught for more least more than four years and are have some level of experienced in teaching the subject. In conclusion, the teachers are in the best position to give credible information with regards to the use of fieldwork in geography education.

This section deals with the discussion of the data from the field to address the research questions that were formulated to guide the study. The four point Likert scale questionnaire that was administered was analysed by using mean of means and standard deviations.

Research Questions One

The main objective of this research question was to explore the challenges to effective use of fieldwork as method of teaching geography in the Senior High School in the Cape Coast Metropolis.

Main Discussion

Table 6: Challenges to effective use of fieldwork as a method of teaching Geography		
Statements	N=12 Mean	Std. Deviation
I do not have the needed time to organise fieldwork for my students.	2.81	.172
I do not have the requisite knowledge and skills to organise fieldwork.	2.31	.075
The workload on me in the school usually does not permit me to plan fieldwork for my students.	2.69	.112
The large class size does not permit me organise fieldwork for my students.	2.32	.160

Inadequate financial support from the school administration negatively affects the organization of fieldwork.	3.17	.114
Headmasters are not willing to support fieldtrips.	3.03	.141
Inadequate financial support from parents also negatively affects ability to go for fieldwork.	2.51	.230
Inadequate logistics/material resources negatively affect organizations of fieldwork.	2.88	.135
The loaded nature of the content for teaching geography does not permit me to organise fieldwork.	2.63	.172
Unwillingness of parents to allow their wards to embark on field trips.	2.05	.163
Mean of Means/Standard deviations	2.64	0.14

Source: Field Survey (2019)

Table 6 present the analysis of teachers' challenges to effective use of fieldwork as method of teaching geography. One of the challenges geography teachers put forward using fieldwork is the fact that they do not have the needed time to organise it for their students (M=2.81; SD=.172). With regards to why they do not have the need time to organise fieldwork for their students, they indicated that the workload on them in the school usually does not permit them to plan fieldwork for their students (M=2.69; SD=.112). Furthermore, the teachers agreed that inadequate financial support from the school administration negatively affects the organization of fieldwork for their students (M=3.17; SD=.114). This implies that financial limitation is one of the challenges that the geography teachers face in organising fieldwork for their students.

Moreover, the teachers strongly agreed that the headmasters and headmistress mostly are not willing to support fieldtrips (M=3.03; SD=.141). We therefore can conclude from this findings that unwillingness or the headmasters and headmistresses equally poses a challenge to effective use of fieldwork in the teaching and learning of geography in the Senior High School. Furthermore, teachers strongly agreed that inadequate financial support from parents also negatively affects ability to go for fieldwork (M=2.51; SD=.230). Notwithstanding, the sampled geography teachers are of the opinion that inadequate logistics/material resources negatively affect organizations of fieldwork (M=2.88; SD=.135). For the fact that the geography teachers

do not have adequate resources to organise fieldwork, thus negatively affecting effective use of fieldwork in geography education. Finally, the geography teachers also indicated that the loaded nature of the content for teaching geography does not permit them to organise fieldwork for their students (M=2.63; SD=.172).

This findings support the work of Mohammed (2016) who stated that most of the teachers indicated that the use of fieldwork as a method of teaching geography is constrained by a number of challenges. Time was one of the challenges confronting the use of field work as a method of teaching in schools, inadequate funding is also another challenge as it has been observed that all the stages of field work is hinged on fund available for the programme, hence in most cases students asked to make contribution for the conduct of the fieldwork. Consequently, in most instances students are not able to pay so they eventually end up calling off the fieldtrip. Furthermore, students' population in most Secondary Schools have been on the increase as a result of modernization and the recognition of the importance of education resulting in the usually the norm to find over 80 students in a class in public schools which is also as a stress on available infrastructures. Another factor that has affected the integration of fieldwork in the teaching and learning of geography is the allocation for the teaching of geography. Mohammed (2016) observed that the time allotted to geography in most schools never exceed four periods of 40 minutes by week per stream/class given the vast content of geography this time is

inadequate. The security issues have also contributed to the problem of using field work as a method of teaching geography in secondary schools.

Again, a study conducted by Ncgamu (2000) to investigate how fieldwork is implemented in the teaching of Geography in secondary schools. It was discovered that though most teachers claimed to understand what fieldwork meant very few were actually implementing it in their daily teaching activities. It was also discovered that most of the problems mentioned by teachers as hindering fieldwork implementation were as a result of poor planning and lack of creativity on their side. The results of this study further revealed that

community and parent participation was poor. As a result, parents were adamant to support their children financially when it came to fieldwork activities because they did not know what it entailed. Another observations made by the study was the lack of team work among teachers in Secondary Schools. Teachers mentioned that fieldwork was time consuming and that it overlapped with the time slots of other subjects.

Research Questions Two

The main objective of this research question was to explore how fieldwork can be integrated into the teaching and learning of geography in the Senior High School in the Cape Coast Metropolis.

Statements	N=12 Mean	Std. Deviation
Educational field trips could be "manipulated to maximize learning by placing students in settings of appropriate novelty	3.75	.648
There should be a place of the field trip within the curriculum.	3.68	.574
Class size should moderate so as to permit organisation of fieldwork.	3.84	.421
Head teachers should be given orientation on the benefits of fieldwork in geography education	3.68	.574
There should be adequate preparation for the trip.	3.76	.643
Parents should support fieldwork financially to help facilitate effective fieldwork organisation.	3.55	.819
The school administration should support fieldwork.	3.61	.763
Mean of Means/Standard deviations	3.69	0.63

Source: Field Survey (2019)

Table 7 presents the analysis of how fieldwork can be integrated into the teaching and learning of Geography. From Table 7, sampled teachers indicated that educational field trips could be "manipulated to maximize learning by placing students in settings of appropriate novelty (M=3.75; SD=.648). Thus, they agreed that students' interest can be aroused by placing students in settings of appropriate novelty. Furthermore, teachers agreed that to integrate fieldwork into teaching and learning of geography, there should be a place of the field trip within the curriculum (M=3.68; SD= .574). This implies that fieldwork should be made part of the curriculum so as to help with the effective use of fieldwork in the teaching and learning of geography.

Moreover, teachers strongly agreed that class size should be moderate so as to permit organisation of fieldwork (M=3.84; SD=.421). This result implies that for effective integration of fieldwork into teaching and learning of geography, the class size should be large so that teachers can effectively organise fieldwork. Also, sampled teachers indicated that for effective integration of fieldwork into teaching and learning of geography, Head teachers should be given orientation on the benefits of fieldwork in geography education (M=3.68; SD=.574). Notwithstanding the teachers agreed that for effective integration of fieldwork into teaching and learning of geography, parents should be brought on board to support fieldwork financially to help facilitate effective fieldwork organisation (M=3.55; SD=.819). In addition, for effective integration of fieldwork into teaching and

learning of geography, the teachers agreed that the school administration should support fieldwork with the needed resources (M=3.61; SD=.763).

This finding supports the work of Falk and Balling (2002) who concluded that educational field trips could be manipulated to maximize learning by placing students in settings of appropriate novelty. Again, Orion and Hofstein (2005) were also interested in understanding the outdoors as an effective learning environment, they reported that the educational effectiveness of a field trip was controlled by the field trip quality and the 'Novelty Space' which consisted of three pre-field variables: cognitive, geographic and psychological. The findings further support the work of Burnett (1993) who stated that there should be a place of the field trip within the curriculum. He suggested a number of strategies to reduce the novelty space during the preparatory stage which includes, providing detailed information about the event, use of maps and audio-visual aids, and working with materials students are likely to meet in the field.

Summary, Conclusions and Recommendations

The study also found that geography teachers face challenges in effective use of fieldwork in teaching. The study found that teachers do not have the needed time to organize fieldwork for their students, the workload on them in the school usually does not permit them to plan fieldwork for their students, inadequate financial support from the school administration negatively affects the organization of fieldwork for their students as well as inadequate logistics/material resources negatively affect organizations of fieldwork. Again, unwillingness on the part of headmasters and headmistresses and lack of adequate resources to organize fieldwork also negatively affect effective use of fieldwork in geography education. The study further found that to effectively integrate fieldwork into teaching and learning of geography, educational field trips could be manipulated to maximize learning by placing students in settings of appropriate novelty. More also, there should be a place of the field trip within the curriculum. Class size should be moderate so as to permit organisation of fieldwork. Head teachers should be

given orientation on the benefits of fieldwork in geography education and parents should support fieldwork financially to help facilitate effective fieldwork organisation. The school administration should support fieldwork.

From the findings it is very visible that fieldwork in geography education is very beneficial to students. Thus, fieldwork motivates and enhances students' interests and also provides them with sound and concrete basis for conceptualization. Despite the numerous benefits of fieldwork in teaching and learning of geography, teachers faces a number of challenges using fieldwork in teaching and learning, mostly the workload in the school usually does not permit them to plan fieldwork for their student. Inadequate financial support from the school administration, inadequate logistics/material resources and unwillingness of the headmasters and headmistresses negatively affect organization of fieldwork. Notwithstanding, including fieldwork in the geography curriculum, orienting parents, head teachers and school administration on the importance of fieldwork in facilitating effective teaching and learning can help integrate fieldwork in the teaching and learning of geography.

It is therefore recommended that The Ghana Education Service in Cape Coast Metro should organize workshops and seminars for headmasters/headmistresses, parents and school administrators on the importance of fieldwork in teaching and learning so that they can support it in addition. The Government in partnership with curriculum developers should factor fieldwork in geography. Furthermore the Government should help provide funds for schools that will be used to organize or subsidize fieldwork for students. More over the Ghana Education Service in Cape Coast Metropolis should reduce the number of students in a class as this will help make organization of fieldwork easier. More The Ghana Education Service in Cape Coast Metropolis should reduce the workload on geography teachers to help the have adequate time to organize fieldwork. The Ghana Education Service in Cape Coast Metropolis should provide the schools with the

needed resources to facilitate effective organization of fieldwork.

References

1. Adu-Akoh, J. P., Ababio, M., Asante, A. M., & Mensah, A. A. (2017). *Role of fieldwork in teaching and learning Physical Geography in some senior high schools within Cape Coast Metropolis*. Unpublished degree project, Department of Business and Social Sciences Education, University of Cape Coast, Cape Coast.
2. Ajibade, L.T., & Raheem, U. A. (1999). *Re-appraisal of field work as a teaching method in geography in Ilorin*. Ilorin: Haytee Press.
3. Barnett, R (2009). Knowing and becoming in higher Education Curriculum. *Studies in Higher Education*, 34(4), 429-440.
4. Biggs J. (1999). *Teaching for quality learning at University*. Buckingham; SRHE/OU.
5. Everson, C. S. (1998). *Monitoring and modeling components of the water balance in grassland catchment in the summer rainfall area of South Africa*. Scottville: University of Natal.
6. Falk, J. H., & Balling, J. D. (1982). The field trip milieu: Learning and behavior as a function of contextual events. *The Journal of Educational Research*, 76(1), 22-28.
7. Gitau, P. N. (2008). *Mastering PTE education*. Nairobi : Kenya. Kenya Literature Bureau.
8. Gold, J. R., & Jenkins, A. (1999). *Teaching Geography in Higher education: A manual of good practice*. United Kingdom: Blackwell Publishers.
9. Kent, A., & Lambert, O. (1995). *Geography in education: Viewpoints in Teaching and learning*. London: Cambridge University Press.
10. Kothari, C.R. (2004). *Research methodology: Methods and techniques*. New Delhi: New Age International Limited, Publishers.
11. Mohammed, N. (2016). Assessing the implementation of fieldwork in the teaching of geography in some senior secondary schools in Kano, Nigeria. *IOSR Journal of Humanities and Social Science*, 21(8), 05-11.
12. Ngcamu, R. N. (2000). *The implementation of fieldwork in geography teaching in Secondary school* (Doctoral dissertation).
13. Ntalasha, L.S., Mweene, C. B., Silumesi, P., Phiri, N., Solami., Manda, H.P., Shabukali, D., Simukoko, R., & Phiri, C., (2004). *A High School Geography – Text book of Zambia and the Sub-Region*. Ndola: Times Printpark (z) limited.
14. Orion, N., & Hofstein, A. (1994). Factors that influence learning during scientific trip in a natural environment. *Journal of Research in Science Teaching*, 31, 1097-1119
15. Rickinson, M., Dillon, J., Teamey, K., Morris, M., Choi, M. Y., Sanders, D., & Benefield, P. (2004). *A review of research on outdoor learning*. Preston Montford, Shropshire: Field Studies Council.