

Role of Fieldwork in the Quality of Teaching and Learning of Geography in Senior High Schools the Upper West Region, Ghana

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Abstract

The study was undertaken to examine the contributions of fieldwork towards the teaching and learning of Geography in selected senior high schools in the Upper West Region of Ghana. The descriptive survey design was adopted for the study. The population comprised 360 students and three Geography teachers. Both questionnaire and interview guide were the instruments used to collect the data for the study. Quantitative data were analyzed using descriptive statistics and the qualitative data were organized into themes. Findings from the study revealed that the extent to which fieldwork was used by Geography teachers is small though it was affirmed by students and teachers that fieldwork is vital in the teaching and learning of geography. Further, it was recognized that challenges such as lack of financial resources, inadequate time, lack of support from school management and parents and lack of logistics and material resources such as vehicles to convey students to the field in most instances, deprived teachers from organizing fieldwork as a method of teaching and learning. The study recommended the following; the Ghana Education Service should organize workshops and seminars to equip teachers in the organization of workshops, availability of videos of field sites that are in line with the geography curriculum for senior high schools, teachers should also explore more on the fieldwork opportunities within their immediate school and community environment and all educational stakeholders should assist in the organization of fieldwork to enhance effective teaching and learning of geography in senior high schools.

Introduction

The purpose of education is to develop the knowledge, skills and character of students and it is for this reason that the Ghanaian educational system made Geography as a course in the curriculum of senior high schools with the purpose of developing the knowledge base of students about their environment. This goal of geography can only be achieved if the appropriate methods of teaching are employed by the teachers (Shakil, Faizi & Hafeez, 2011). As espoused by Aggarwal (2010), the abstract nature of certain topics of the curriculum of educational institutions necessitates fieldwork as the ultimate teaching technique to aid the teacher to clarify, establish and correlate accurate concepts and interpretations vividly and meaningfully to students' understanding. Further, Thomas and Munge (2015) hold a similar notion that fieldwork eliminates abstract thinking and encourages practical activities among students. Since fieldwork is keener on observing the issue, it tends to reduce abstract thinking; which the bookish method (text books) rather encourages. Students would be able to connect concepts and principles to the real world. In corroboration is the indication by Knapp (2002) that learning in a hands-on setting is one of the best ways to reinforce topics learnt in the classroom, to integrate academic and experiential learning. This implies that students grasp the meaning of concepts better when they complement the theoretical lesson taught with a practical experience. Consequently, fieldwork cannot be underestimated and should not be underutilized since it gives a practical aspect of the lesson taught in the classroom (Ababio & Dumba, 2014). Fieldworks are beneficial to both the teacher and the student in view of the fact that most of the concepts and phenomena are easily clarified. As a result, a good deal of energy and time of both the teacher and the students can be saved (Shakil & Hafeez, 2011). In addition, Myers and Jones (2004) observed that numerous research studies in science education have documented significant increases in participants' factual knowledge and understanding after participation in well-planned fieldwork. This also applies in the discipline of Geography, for instance, taking students to observe the natural environment when treating topics that relate to the environment will cause the students to comprehend both the theories and concepts of the topic. Geography studies the interrelationship of the individual, physical and social environment, both in spatial and temporal terms.

Issues of the environment are becoming increasingly important and geography, which studies the environment as a system, can and does provide solutions to environmental problems. Geography thus has a vital contribution to make towards the purpose of education in the form of solving problems and further providing critical foundation knowledge in the development of Ghana.

Geography in the senior high schools covers the planetary systems with emphasis on the earth as the planet habitable by humans, plants and animals. The principal issues concern the physical environment with the prospects and challenges of the human-environment relationships. The issue of understanding and interpreting maps, the geographical understanding of political divisions, identification and utilization of resources, livelihood activities that are and can be pursued in specific environment are also dealt with. For the purpose of teaching and learning and, examining at the senior high school level, geography as a subject has been organized into three interrelated branches as follows: Physical geography (Geomorphology, Climatology, and Biogeography), Human and Regional geography and Practical geography (Mitchel & Forer, 2010).

The introduction of fieldwork as a pedagogical skill in teaching and learning of Geography boosts the interest and understanding of students learning certain topics which are mostly taught theoretically therefore making the subject abstract and uninteresting in the classroom. It will also help teachers in the teaching profession and this might aid them to upgrade their existing knowledge, skills and abilities by way of professional development to effectively impart to students what is worthwhile to enhance their performance (Ababio & Dumba, 2014). It is in light of this background that the researchers conducted this work.

Statement of Problem

The prime aim of Geography as a subject of study is to impart and equip learners with the basic knowledge, skills, attitude and competence that can be used in solving the challenges they face in their environment. Scarce (1997) opines that appropriate methods of teaching must be adopted to enable students to connect classroom concept learning to real world situations. Hence, when the appropriate methods are used in teaching the student it will aid to help them put into

practice what they have been taught, thereby connecting conceptual learning to real world situation.

McLoughin (2004) further asserts that fieldwork tends to minimize a lot of expression in the classroom, thereby gives meaning to content and makes the subject matter more understandable, manageable, challenging and applicable for many members of the class. This implies that students should be given the opportunity to interact or visit places of importance to enable them understand some of the things they hear and learn about in the classroom so as to make them more practical in their thinking.

Further, as was envisaged in the final report of the President's Committee on Review of Educational Reforms in Ghana (2002), the education system should be focused on training students who will be intellectually and physically equipped with the requisite knowledge, skills, values and aptitudes for self-actualization, environmental sustainability and for the socio-economic and political transformation of the nation. It is in this phase that the Curriculum Research and Development Division (CRDD) of the Ghana Education Service (GES) developed the Geography syllabus in such a manner that each topic is assigned specific teaching and learning pedagogy or pedagogies.

The researchers' recent interaction with some Geography teachers in some senior high schools in Ghana, particularly the Wa municipality reveal that most of them do not undertake fieldwork as a teaching and learning technique. Nevertheless, research (Sithole 2010; Krakowkwa, 2012) has shown that fieldwork is essential for many reasons. But as to whether the teachers in the Wa municipality are fully aware of the benefits of fieldwork as a teaching and learning technique is a question that remains elusive. It is this problem that motivated the researchers to conduct a study that will investigate the extent and challenges in the use of fieldwork as a teaching and learning method in the teaching and learning of Geography.

Objectives of the Study

The general objective of the study was to examine the use and challenges of fieldwork as a teaching and learning method in the teaching and learning process. Specifically, the study sought to:

1. Assess the extent to which Geography teachers use fieldwork as a teaching and learning method in the teaching of Geography.
2. Evaluate the challenges Geography teachers face when organizing fieldwork.

Research Questions

In relation to the stated objectives enumerated above, the following research questions guided the conduct of the study:

1. To what extent do Geography teachers use field work as a method of teaching and learning Geography?
2. What are the challenges that teachers face when organizing fieldwork?

Literature Review

The concept of *fieldwork*

According to Pz'eazo (2005), fieldwork is an academic ground related to activities that serve educational purposes and occurs outside the classroom but at a location other than on a campus at which the course is regularly taught. For this reason, when it is organized away from the usual classroom confinement, it arouses students' interest on the topic being taught, thus, making the learning experience memorable. The term fieldwork is usually used when a person or a group of persons undertake a tour of places where they expect change from normal daily life (Shakil & Hafeez, 2011). When educational fieldworks are undertaken by students of an educational institution, the main aim is not only recreational and pleasure, but also for the students to gain additional knowledge through direct experiences (Shakil & Hafeez, 2011).

Knapp (2000) indicates that fieldwork strikes a balance between theory and real practice in any given field, and this suggests that there are certain learning experiences that necessitate learners to have a practical experience before they can practise in the real world. The use of educational fieldwork has long been a major part of the educational programme for both young and adults (Myers & Jones, 2004).

Fieldwork is an educational excursion that gets students away from the traditional classroom setting into a new mode of learning (Jonasson, 2011). In reference to geography, the teacher involved can take the students to a field where they would be allowed to observe operations in relation to the topic: land preservation and topography. When treating such topic, the teacher can decide to take students on a fieldwork to a site so as to make them have a practical understanding of the topic.

The concept of *teaching*

Teaching is quite a broad concept and many writers try to define it to suit their orientation and disposition as either a science or an art. Smith (2004) sees teaching as the process of carrying out activities that experiences have shown to be effective in getting the student to learn. Indicating that, the role of the teacher is very critical for the reason that it is the activities of the teacher that will inform the achievement of the desired goals intended in the student. From the perspective of Thring (2001), pouring out knowledge is not teaching. Having lessons is not teaching. Teaching is getting at the heart and mind so that the learners value learning and to believe that learning is possible in their own case. Teachers must therefore respect the intellectual prowess of their learners. Students must be actively engaged in the teaching - learning encounter since participation increases students' ability to grasp concepts.

Elaborating on this, Ababio (2013) indicated that teaching is a process whereby a teacher imparts knowledge, skills, attitudes and values to a learner or group of learners in a way that respects the intellectual integrity and the capacity of the learners with the aim of changing the behaviour of the learners. Ababio's assertion brings to mind that the activity of the teacher alone may not ensure learning. It is therefore incumbent on every teacher to assess how the students process information relating to how the students value information and how learner characteristics influence teacher dynamism in ensuring effective teaching.

As ascertained from the above definitions, it is clear that teaching is a process and not a one-shot activity that leads to the transmission of knowledge from a well - informed person to a lesser-known person with the intention of changing the behaviour, attitude and

skills of the learners. It also shows that teaching does not only deal with the impartation of knowledge, but how the learner receives the message, makes meaning out of it and puts it into practice.

The concept of *learning*

According to Kraiger, Ford & Salas (1993), learning is a change in the human exposition or capacity that persists over a period of time. This definition shows that it is only when a change takes place that learning has occurred. It is therefore possible for teachers to teach without learning taking place. The act of acquiring new or modifying and reinforcing existing knowledge, behaviour, skills, values or preference and synthesizing different types of information occur as a result of learning. Armstrong (2006) has also viewed learning as a process by which a person acquires knowledge, skills and capability. He posits that cognitive learning involves gaining knowledge and understanding by absorbing information in the form of principles, concepts and facts and then internalizing them. Others have also described cognitive learning as a powerful mechanism that provides the means of knowledge and goes well beyond simple imitation of others (Kraiger, et al. 1993). Many researches show that greater learning occurs when teaching methods and learning styles match. Fedler and Brent (2005) say that the teacher is not expected to tailor – fit his or her teaching method according to students’ preferences. For example, if a teacher is inclined towards meeting the needs of students with different learning styles, some students will not feel left out. Also, students who are constantly taught through their dominant learning style will not know how to learn using their less preferred learning style. Thus, teachers should adopt balanced teaching methods to help more students learn effectively and become more flexible in the way they learn. To this end, a learner - centered teacher must employ different teaching methods to address students’ varied learning needs. It can be deduced from the above definitions by the various authors that it is clear that learning is a process that takes place within a period of time and not a one-method that leads to the change in the disposition of the learners.

The use of fieldwork as a method of teaching and learning, especially in a practical subject like Geography is of great importance in the learning process. Fieldwork provides the students with experiences outside the everyday activities; helps students link concept

in learning experiences to real world situation; reduces non-figurative thinking; eliminates the bookish method of teaching and learning and encourages practical activities among students (Aggarwal & Green, 2011). As further emphasized by Knapp (2000), fieldwork increases the factual knowledge and conceptual understanding of students. Hence, they intimated that fieldwork as a method of teaching should be employed frequently by Geography teachers. Nonetheless, they stressed that it will be prudent for teachers to organize field work into pre, actual and post fieldwork stages. The scholars also stated that teachers must play the role of guardians, offering suggestions, supervising, directing and clarifying issues and concepts during the work. It is realized from the discussions that fieldwork is pertinent to the performance of students in Geography.

The purposively organized fieldwork provides an observational platform for students and experiences outside their everyday activities (Aggarwal & Green, 2011). As a result, students will have the first-hand experience empowering them to connect abstracts to reality. Sometimes normal classroom teaching and learning experiences are unable to connect conceptual and theoretical learning experiences to real world situations thus creating learning difficulties. As such, fieldwork in the long term, translates all the experiences to igniting the students' desire to take up a career in the field of Geography.

Challenges teachers face in organizing fieldwork

In spite of the numerous benefits of fieldwork as a method of teaching, it has challenges as well. It is as a result of these challenges that discourage many geography teachers from using it. Due to this, fieldwork is less patronized and neglected as a method of teaching. One major challenge is time. Pawson and Teather (2002) agreed that time constraint and inadequate support and cooperation from both headmasters and parents are elements which pose problems in the teaching of certain subjects in schools. They stated that fieldwork demanded a lot of time and parents' or guardians' permission, particularly when they are conducted very far away from the school compound. There is no doubt that fieldwork requires time to conduct from the onset to the end of it. Some geography teachers opine that fieldwork is time wasting. They support their argument with the assertion that Geography topics are copious and almost impossible to

complete within the stipulated time period. Consequently, teachers neglect the use of fieldwork when faced with varied options of methods of teaching.

Sithole and Lumadi (2013) stressed that most times, fieldwork fails to come off because of lack of support from the school management. Some school principals are at times hesitant to grant teachers the permission to conduct fieldwork probably due to the financial obligations involved (i.e. if the school would have to foot some of the expenses).

As affirmed by these scholars, although fieldwork plays a crucial role in the teaching and learning process, challenges such as financial constraints, time and attitude of people towards fieldwork impede teachers' efforts to use this method in teaching geography.

Methodology

The descriptive survey design was employed to help observe and describe the state of affairs regarding the reappraisal of fieldwork as a teaching and learning technique in the teaching of Geography. This descriptive study was a cross - sectional survey in which aggregate data were collected from different respondents at different points in time. The target population was all Geography teachers and students in senior high schools in the Wa Municipality. However, the accessible population consisted of Geography students and teachers in three selected senior high schools in the Wa Municipality. These schools were St. Francis Xavier Seminary, Wa Senior High School and Islamic Senior High School. The sample size for the study consisted of 160 respondents, made up of 160 Geography students from the selected schools. The proportionate approach by Seidu (2015), $n_j = \left(\frac{N_j}{N}\right) * n$, where n_j is the sample size for each school, N_j is the population size for each school, N is the total population size and n is the total sample size was adopted to determine the sample size for each school. St Francis Xavier Seminary 44 respondents, Islamic Senior High School 110 respondents and Wa Senior High School 166 respondents. The census method was employed to select the three Geography teachers; whereas the simple random sampling with the lottery technique was used in selecting the students from each proportion of sample assigned each school. This was used to ensure fair representation of the population and make sure that survey results statistically represented

the entire population under study. Interview guide and questionnaire were used by the researcher to collect data. Only teachers responded to the interview guide while students responded to the questionnaire which made use of descriptive statements based on the Likert type scale format. The researchers met the various headmasters of the selected schools to seek for their approval to conduct the research in their schools. The assistant headmasters for administration in the selected schools were assigned to help the researchers administer the questionnaire. The researchers introduced themselves to the teachers and students concerned to explain what the entire research was about and further responded to questions from both teachers and students. The questionnaire for students was administered and collected immediately they had finished completing them. It took the researchers three days to administer and collect a total of 160 copies of the questionnaires. This means that a return rate of 100% was achieved. The three teachers were interviewed separately for about 30 minutes and their responses were recorded accordingly. Data from the interview were transcribed and analyzed into thematic themes and that of the questionnaire were entered into SPSS to perform a descriptive analysis of data into frequencies, percentages and mean.

Results and discussions

Interview and questionnaire responses were analysed and discussed in this section. Data were presented to answer the research questions that guided the conduct of the study.

To what extent do Geography teachers use field work as a method of teaching and learning Geography? The results are presented in two parts. Part One presents the responses from the questionnaire while Part Two also looks at the results of the interview.

As presented in Table 1 (page 51), the responses show the several ways by which teachers get involved in organizing fieldwork as a method of teaching and learning Geography. It could be identified that all teachers teaching geography had used field work at least once 58 (35.8%) and 65 (40.1%) students affirmed “Agree” and “Strongly Agree” respectively. This will help to reduce the abstract nature of Geography subject. This finding consolidates the reason why the Geography syllabus in the Senior High Schools makes it explicitly clear that teaching methods such as fieldwork, use of resource persons,

project work, and group discussions among the likes are used. Though this finding is not in agreement with the findings of Sithole (2010), where out of six interviewees, three once took their classes for fieldwork, once in each case, and the other three had never used fieldwork.

Moreover, teachers also admitted using fieldwork though not frequently. Below are the responses of the Geography teachers on the use of fieldwork:

T1: *I organized a field work to the Mole National Park so students could learn how these natural elements are being preserved.*

T2: *I ever took students to the GHACEM cement factory and the Wa WADITH quarry to see some of the uses of rocks.*

T3: *I have organized a field trip only once to the mushroom rocks in Bulenga and the WA WADITH quarry the same day to see the nature of rocks and their uses. These two sites were visited the same day because they are both found on the same road.*

It was also revealed that all the necessary conditions to enhance activities on the field were all adhered to for a better understanding by the students. As was indicated by the study in Table 1 that; 65(40.1%) and 73(45%) agreeing and strongly agreeing that teachers hold discussions in class after the fieldwork, 67(41%) and 81(50%) also agreeing and strongly agreeing that teachers explain concepts and clarify misunderstandings during fieldwork, 76(47%) and 62(38%) agreeing and strongly agreeing to it that teachers play the role of guardians on the field as was further affirmed during the interview:

T1: *I have taken someone's child out. I am responsible for his or her safety till they get to back school.*

T2: *Guarding students was a requirement so I did as expected. Actually, I was protective of their welfare till I brought them back safely.*

T3: *Actually, because of the size of the class, I had to engage the National Service Personnel upon short briefing to go with us to enable me control and guard the students on the field.*

These are in conformity with Myers and Jones (2004), as the inclusive statement of their study asserted that teachers must play the role of guardians, offering suggestions, supervising, directing and clarifying issues and concepts during the trip. Further, in line with these findings of the study, Myers and Jones also affirmed that teachers should also function as guides other than directors. However, the study

interrogating the frequency of the fieldwork organization as in Table 1 identified that 48 (29.9%) and 81 (50%) respondents to the questionnaire disagreed and strongly disagreed respectively to the statement that fieldwork is frequently organized in the teaching and learning of Geography in senior high schools in the municipality. This, coupled with the aforementioned responses from the interviewees affirms that though field work is recognized as an important method in teaching Geography, its use as a method in the teaching and learning Geography is very rare in senior high schools in the municipality.

Table 1: Extent of Agreement of Students Regarding Teachers' Use of Field Work

Statement	Strongly agree N (%)	Agree N (%)	Strongly disagree N (%)	Disagree N (%)
Teacher has before used field work to teach once	65 (40.1%)	58 (35.8%)	15 (9.3%)	24 (14.8%)
Teachers always place students in groups when conducting field work	92 (57%)	61 (37.7%)	08 (5%)	1 (0.6%)
Teachers always inform the class on the learning materials to take along	76 (47%)	79 (49%)	6 (4.0%)	1 (0.6%)
Teachers play the role of guardian during field work	62 (38%)	76 (47%)	10 (6.1%)	14 (8.6%)
Teachers always conducts field work based on the concepts and theories in Geography	57 (35%)	89 (55%)	9 (6.0%)	7 (4.0%)
Teacher frequently uses field work to teach	15 (9.2%)	19 (11.7%)	81 (50%)	48 (29.9%)
Teacher always explains concepts and clarifies	81 (50%)	67 (41%)	8 (5%)	6 (4%)

misunderstanding
during field work

Teacher always holds discussions in class after the field work	73 (45.0%)	65 (40.1%)	13 (8.0%)	11 (7.0%)
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What are the roles fieldwork plays in the teaching and learning of Geography?

As posited earlier, fieldwork plays several roles in the teaching and learning of Geography (Aggarwal & Green, 2001). This study revealed several roles played by fieldwork in the teaching and learning of Geography.

As shown in Table 2, majority of the respondents, 81 (50%) and 52 (30%) agreed and strongly agreed respectively that fieldwork makes learning of Geography interesting and exciting. This outcome from 80% of the respondents and the responses from the teachers as presented below affirms the stance of Scarce (1997) who emphasized that fieldwork is also a good method of engaging and even entertaining students, thereby helping students to make the educational experiences more enjoyable.

T1: *It enhances various massive students' participation in the teaching and learning process in the field.*

T2: *It takes out boredom, like having to teach theories and concepts and;*

T3: *It creates excitement in the children and this helps the teaching and learning a lot;*

Further, the finding agrees with Aggarwal (2003) who stressed that fieldwork as a teaching and learning method aids the teacher to clarify, correlate accurate concepts and interpretations which makes learning more concrete, effective and interesting.

Similarly, another benefit which is overwhelmingly an aggregate of 138 (85%) of the students strongly agreed and agreed, was that fieldwork encouraged them to observe, discover and gain meaningful information on the topics taught in the classroom while 24 (15%) of the students strongly disagreed and disagreed as presented in Table 2. Buttressed by the submissions of the teachers that;

T1: Because the fieldwork is based on some theories taught in the classroom, it helps the students gain further information on those concepts.

T2: Most of the fieldwork is practice – based hence expatiate the classroom concepts; students gain extra knowledge.

T3: This technique gives students the practical experiences and makes it easy for them to understand abstract topics in the Geography Syllabus

These revelations are incongruent with the opinion of Knapp (2002) which indicates that fieldwork aids students to collate meaningful understanding of concepts which reinforces topics learned in the classroom, to integrate academic and experiential learning. Students are able to grasp concepts through exploration and observations on the field when exposed to practical work on activities and demonstrations carried out during fieldwork.

As a recommendation from the students on the use of fieldwork in the teaching and learning of Geography, the results show that 85% endorsed the fact that fieldwork should be used frequently by teachers with only 15% disagreeing to the statement.

Table 2: Responses of students regarding the roles of field work in teaching and learning of Geography.

Statements	Strongly Agree	Agree	Strongly Disagree	Disagree
	Number (%)	Number (%)	Number (%)	Number (%)
It makes learning of Geography exciting and interesting	52 (32%)	81 (50%)	14 (9%)	15 (9.2%)
It engages me in the teaching and learning process	76 (47%)	79 (49%)	5 (3%)	2 (1%)
It encourages me to observe, discover and gain meaningful on the topic	62 (38%)	76 (47%)	10 (6%)	14 (9%)
It assists me to connect the concepts in Geography to real world situations	45 (28%)	87 (54%)	20 (12%)	10 (6%)
It does not make me rely solely on textbooks	83 (51%)	71 (44%)	6 (4%)	3 (2%)
It motivates me to learn Geography	70 (43%)	81 (50%)	6 (4%)	7 (4%)
It is a good method of creating an opportunity to move away from the usual classroom environment to a new environment	83 (51%)	71 (44%)	5 (3%)	3 (2%)
It encourages me to pursue a career in the field of Geography	65 (40%)	58 (36%)	15 (9%)	24 (19%)
It should be used by teachers frequently to teach	62 (38%)	76 (47%)	10 (6%)	14 (9%)

In consonance to these findings, the teachers also agreed to the recommendation. The objective was to unearth the roles played by fieldwork in the teaching and learning of Geography. It was ascertained that fieldwork makes learning of Geography interesting and exciting, gets students involved in the teaching and learning process, helps students to observe, discover and gain meaningful information on the topic, helps students connect concepts of Geography to real world situation, causes students not to solely rely on textbooks, motivates students to learn Geography and encourages students to pursue a career in the field of Geography.

What are the challenges that teachers face when organizing fieldwork?

Presented in this section are the challenges associated with organizing fieldwork. Data were collected using a structured interview guide. Three teachers in each of the three selected schools who agreed to participate in the study were interviewed regarding the challenges they face during the organization of fieldwork. The responses were analyzed and categorized into themes as they emerged in the responses. Common responses that emerged during the interview include;

Lack of financial resources: The availability of financial resources or money to finance the fieldwork is woefully inadequate and sometimes not available at all. This was expressed in the responses of the teachers when they were asked about the challenges they face. The teachers had this to say;

T1: *You know organizing fieldwork involves money and trust me it is expensive, so I have been able to organize just one to the Mole National Park to learn about plants and animal life.*

T2: *The last time I organized a fieldwork was a year ago, it is very expensive and there isn't any financial support from parents nor stakeholders. Sometimes students have to pay for the field work.*

T3: *It was not easy at all in getting the funds, though students made contributions, we have to write to the Parish Priest through the Rector for some funds to top up.*

These expressions from the study are inconsistent with the submissions of Nesper (2000). He mentioned that lack of funds forces many teachers to forgo fieldwork. It is also in line with the findings of Sithole and Lumadi (2013) when they studied the Improvisation of and

the use of Community Resources in teaching Geography. They found that some teachers had never organized any educational fieldwork because they admitted it was expensive.

Inadequate time: It was evidenced from the study that the course content/curriculum is so loaded and per the requirement of the school arrangement and preparation for examinations, the syllabus must be completed within the set time, hence, there is not enough time to go on a fieldwork. The teachers said the following;

T1: *Time constraint is a major challenge, the syllabus is too voluminous for the teaching and learning periods in the academic years, restricting me from thinking of organizing field trips*

T2: *The school management wants us to prepare the students to pass the exams, and there is not enough time to teach so we have no time to organize a fieldwork.*

T3: *I hardly finish that voluminous geography syllabus hence; it's always a challenge organizing a fieldwork. The time for the fieldwork is used for the classroom work.*

Inadequate time as a challenge in this study complements that posited by Nesper when he mentioned that standardized curriculum and overloaded schedules have forced many teachers to forgo fieldwork (Nesper, 2000). In addition, Pawson and Teather (2002), agreed that time constraint is an element which poses a problem in the teaching of certain subjects in schools. They opined that fieldwork demands a lot of time, especially when they are conducted far from the school compound.

Lack of support from school management and parents: The lack of support from the school management and parents was also implicated in the challenges confronting the teachers in their bid to organize fieldwork. Fieldwork must be approved by school authorities and sometimes the parents of the students. The respondents said this;

T1: *Most parents always welcome that, but the way, and manner you suffer before the school management approves your trip, most especially if it is out of the municipality.*

T2: *The school is not willing to allow students to go far for any social event including fieldwork.*

T3: I don't take the students out for fieldwork because of lack of support from the school management. The school is supposed to assist in getting permission from the organization, but this is not done.

Sithole and Lumadi (2013) also found similar results. Their study showed that the principals of schools at times hesitate to grant permission to undertake fieldwork probably due to financial obligation involved (if the school has to foot some of the expenses involved), safety and fear of misconduct. Moreover, it is always a must for teachers to seek the consent of the parents or guardian for participating students directly or through the Parent Teacher Association. However, Myers and Jones (2004) opined that oftentimes, some parents do not grant the request due to certain reasons such as distance, safety and cost involved.

Lack of logistics and physical resources: The responses from teachers also showed that they were constrained by the fact that vehicles are not easily available to convey students for the fieldwork. This is consistent with the findings of Sithole (2010) when he found in his study that some teachers have never organized a fieldwork due to unavailability of means of transport.

Conclusions and recommendations

Conclusions

The study was undertaken to examine the contributions of fieldwork towards the teaching and learning of Geography in selected senior high schools in the Wa Municipality. With regards to the extent of use of fieldwork, it was revealed that fieldwork has been used at least once by teachers teaching Geography and the necessary arrangements before, during and after the field work are duly recognized. Hence, making teaching and learning of Geography in senior high schools more interactive and understanding.

It was identified that field work interestingly and excitedly made teaching and learning understandable to students. As they expressed that it aided them to observe, discover and gain meaningful information on topics taught in the classroom. It was further revealed that fieldwork made students to easily connect concepts and theories in Geography and eliminated the sole reliance on textbooks. Indicating that field work plays a major role in the teaching and learning of

Geography, as it helped in the development of the cognitive, affective and psychomotor domains of the learners.

It is concluded that lack of financial resources, time, support from management, parents and guardians, and other resources were the main challenges teachers faced in using fieldwork as a method of teaching and learning Geography. Relegating them to the use of other teaching and learning techniques that are inexpensive to prepare students adequately for West Africa Senior Secondary Certificate Examination (WASSCE).

Recommendations

In relation to the extent of use of fieldwork, the Ghana Education Service (GES) should put in place measures that will further enhance the teachers' will and technical know-how in the organization of fieldwork. If this is done, Geography teachers would have an in-depth knowledge on the organization of fieldwork. Therefore, geography teachers would employ fieldwork as a method of teaching at least more than once in an academic year.

Also efforts should be made by the District Assemblies and the Ghana Education Service (i.e. the District Education Oversight Committee) to provide room for such activities in the senior high schools. This would undoubtedly generate a significant amount of interest in the school authorities as well as the teachers to enhance their understanding of the subject and further encourage them to frequently adopt fieldwork in teaching and learning of Geography.

Again, with regard to the roles of fieldwork, Geography teachers should be more resourceful and attempt to incorporate regular fieldwork as a method of teaching in their lessons due to its numerous benefits in the teaching and learning of Geography. This will in effect link Geography as a subject of study to real world situations, encourage students to gain and discover meaningful information, make learning exciting and interesting, motivate students to learn and create the opportunity to move away from the usual classroom environment to a new environment and many more.

To help combat the challenges of cost and time constraints faced by the Geography teachers when organizing fieldwork, Geography teachers should explore more about the fieldwork opportunities in their schools and communities since this would be more cost effective and

less time consuming. In addition, non-availability of funds and inadequate support from school authorities should not be used as an excuse for not organizing fieldwork in Geography studies. Notwithstanding, school authorities should provide teachers with the necessary logistics to help reduce the challenges Geography teachers face when organizing fieldwork.

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