

# University of South Africa

## College of Education

### STRATEGIES IN THE TEACHING OF GEOGRAPHY IN HIGHER EDUCATION PREPARATORY SECONDARY SCHOOLS OF ETHIOPIA

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**DOCTOR OF EDUCATION**

**In the subject CURRICULUM STUDIES**

**By: MOHAMMED A. H.**

**AYALEW HASSEN**

***Id-4588-986-4***

***Tele. 251-09 11 70 67 77***

***P. O.Box-1145***

***e-mail [ayalewhassen@yahoo.com](mailto:ayalewhassen@yahoo.com)***

**Wollo University, Dessie, Ethiopia**

**SUPERVISOR: PROF. M.T. GUMBO**

**Student Number: 4588-986-4**

## **DECLARATION**

I, under signed, declare that **STRATEGIES IN THE TEACHING OF GEOGRAPHY IN HIGHER EDUCATION PREPARATORY SECONDARY SCHOOLS OF ETHIOPIA** is my own work and it has not been presented for any other degree and all the sources that I have used or quoted have been indicated and duly acknowledged by means of references

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**A.H MOHAMMED**

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**Date**

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**Title Page**

**STRATEGIES IN THE TEACHING OF GEOGRAPHY IN  
HIGHER EDUCATION PREPARATORY SECONDARY  
SCHOOLS OF ETHIOPIA**

**By: Mohammed Ayalew Hassen**

**Degree: Doctor of Education**

**Student Number: 4588-986-4**

**Subject: Curriculum Studies**

**University: University of South Africa**

**Supervisor: Prof. M.T Gumbo**

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## **ACRONYMS AND ABBREVIATIONS**

**ETA:** Ethiopian Teachers Association.

**MOE:** Ministry of Education

**NICED:** Northern Ireland Council for Education

**ESDP:** Education Sector Development Program.

**UNICEF:** United Nation Children’s Fund

**UNESCO:** United Nations Educational, Scientific and Cultural Organization

**EUEE:** Ethiopian University Entrance Examination

## ABSTRACT

*Education systems are currently undergoing transformational changes throughout the world and one of these changes is a shift from a philosophy of positivist paradigm to constructivist paradigm of teaching. Accordingly, constructivists claim children actively construct their knowledge rather than absorb information spoken to them by teachers. Therefore, the constructivist teaching of Geography places emphasis on the fact that learners should think more, understand and responsible for their own learning. This study thus focused on the practice of constructivist methods in the teaching of Geography at preparatory secondary schools of Ethiopia.*

*Geography is colourful and an outdoor oriented subject in which learners could get good opportunities to construct their knowledge through various in-and-out of school activities. Thus, constructivist methods are useful for Geography learners to develop their intellectual capacity for life-long learning and for generic skills such as critical thinking, information processing, problem solving, decision-making, etc. Therefore, the main purpose of this study was to investigate the merits and reasons for teacher dominance in the pedagogy of Geography and to suggest learner-centered teaching strategies in the context of constructivist principles on learners' learning activities to liberate them from passive learning pedagogy.*

*The study was confined to six Higher Education Preparatory Secondary Schools out of 20 preparatory schools of the South Wollo Administrative Zone of Amhara state of Ethiopia. It employed mixed-method approaches (qual-quant) and descriptive survey design. The target population for this study was 1053 Social Science learners and 12 Geography departmental heads and teachers. Among 1053 learners 199 learners were sampled through random sampling technique. But all Geography teachers and departmental heads were taken as the main participants through purposive sampling techniques. Semi-structured interviews, observation, documents and questionnaire were the main data collection instruments for the study. Data that were collected through interviews, observation and open-ended questionnaire were analysed inductively using narrations and descriptions through words, phrases and statements, whereas the data collected from documents were organised in the form of tables and analysed via percentage and mean. However, data that were collected through close-ended questionnaires were edited, coded, classified, tabulated and organised in the form of tables have been analysed through frequency, percentage and mean via SPSS software. Based on the analysed data, findings were depicted.*

*The findings of the study revealed that Geography is a unique discipline and its syllabus was prepared in line with the country's education policy which encourages constructivist approaches of teaching. However, majority of teachers frequently practice traditional teaching methods. Moreover, the study also identified that lack of teachers' professional training about the practice of a variety of learner-centered methods and continuous assessment techniques, lack of experience about learner-centered teaching methods both on the part of teachers and learners, low interest and commitment on the part of teachers, teachers' failure to utilise teaching materials, placing of less competent learners in the Social Science stream, learners' low interest to learn and incapability to learn through learner-centered methods, learners' low engagement in the teaching activities, learners' disturbance, shortage of time, absence of plasma TV transmission and shortage of resources such as school facilities, instructional media, reference books, Geography room, department room, pedagogical center, lounge and scarcity of budget were considerable hindrances on the implementation of Geography syllabus through the constructivist approaches of teaching methods. Based on the findings of the study, recommendations were made to the concerned bodies to alleviate the hindrances and to encourage the practice of constructivist teaching methods and making the learners free from teachers' dependency.*

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# CHAPTER 1

## INTRODUCTION AND BACKGROUND OF THE STUDY

### 1.1 Introduction

Geography is an outdoor oriented subject in which students could get good opportunities to construct their knowledge through interacting with their environment because most Geography domains such as Physical Geography, Bio-Geography, Economic Geography, Human Geography, Map-Reading are found outside the classroom (Olusegun, 2006:24). Geography is a colourful subject for students in secondary schools if lessons are invigorated with various in-and-out of school activities (Demirci, Kesler & Kaya, 2010:57). It is well known that educational experiences involving the actively participating in concrete examples are retained longer than abstract experiences (Abdelraheem & Al-Rabane, 2005:1).

As Demirci, Kesler and Kaya (2010:57) explain, evaluating the types of in-and-out of school activities that Geography teachers facilitate to create opportunities to the students to engage in the knowledge construction activities is one of the main focuses of current researchers. Moreover, Demirci *et al.* (2010:53) indicate that placing students at the center of learning while encouraging teachers to act as facilitators during the teaching process necessitates the use of activities in teaching and learning, which is commonly referred to activity-based learning paradigmme in pedagogical parlance.

According to Demirct *et al.* (2010:53), activity-based learning means learning by doing and it comprises many different in-and-out of school activities practiced by students either individually or as a group. It ranges from role-playing, discussion, case study to fieldwork methods, projects and laboratory experiments.

Furthermore, Rambuda and Fraser (2004:10) claim that the study of Geography in senior secondary schools provides opportunities for students to develop their intellectual capacity for life-long learning and for generic skills such as critical thinking, information processing, problem

solving, decision-making, etc. Learners should be more active than the teacher to perform activities and the objectives of Geography syllabus should be learner-activity oriented rather than teacher-activity dominated (Olusegun, 2006:61). On the contrary, most teachers practice the traditional lecture method that makes learners passive. In most Geography classrooms learners have been taught geographical facts and concepts with minimal understanding (Rambuda, 1994:57). Thus, literature indicates that teacher-centered approaches dominate learners' engagement in the knowledge construction activity.

Therefore, the main purpose of this study is to investigate the reasons for teacher dominance in the pedagogy of Geography and suggest learner-centered methods of teaching in the context of the constructivist principles on students' learning activities and recommend appropriate strategies in order to liberate learners from passive learning pedagogy. Teacher dominance teaching - learning process is now shifting to learner-centered approaches. Supporting the reality of the shift of teacher-centred approaches to learner-centered approaches, Demirci *et al.* (2010:53) writes:

*The world in the 20<sup>th</sup> century has witnessed of enormous changes in education due mainly to the advance in science and technology. Traditional teaching and learning methods, which were teacher-centered and based mainly on rote learning, have changed to student-centered structure over time and today's schools in many countries have become places where active learning strategies are practiced.*

Thus, this chapter orients the readers to the study of the background, statement of the problem, research questions, objectives, significance, motivation, operational definitions, scope, limitation, methods and design, ethics and organization of the study.

## **1.2 Background of the Study**

Education systems are currently undergoing transformational changes throughout the world and one of these is a shift from a philosophy of positivist paradigm to constructivist paradigm of teaching and learning (Rambuda & Fraser, 2004:10). In line with this philosophy, Ethiopia has designed its education policy for each education structure. The policy incorporates the structure of education in relation to the development of students' profile, organisation, methodology, media of instruction at various levels, educational measurement and evaluation, recruitment, training, professional ethics and career development of teachers (Ministry Of Education, 1994:15). Accordingly, the Ethiopian education structure is broken down into four cycles which includes:

- Kindergarten education for children aged 4-6 years;
- Primary education grades 1-8 and sub-divided into two cycles; the first cycle grades 1-4 (Basic education) and second cycle Grades 5-8 (General education);
- Secondary education Grades 9-12 and sub divided into two cycles; the first cycle Grades 9-10 (General education) and second cycle Grades 11-12 (Preparatory education); and
- Higher education of 2-3 years for Diploma, 3-4 years under-graduate and additional 2-3 years for post-graduate studies.

Therefore, in the Ethiopian education structure, secondary education has two cycles and four years of duration. This study focuses on the second cycle that is cycle for Grades 11-12 which is called preparatory education. Students who attend grades 11-12 are preparatory school students (MOE, 1994:5). Preparatory school education enables students to choose subjects or areas of training which will prepare them adequately for higher education and for the world of work (MOE, 1995:42), hence, it is called preparatory education. Based on their stream, preparatory students are divided into two which are Social Science preparatory students and Natural Science preparatory students. This study focuses on the Social Science teaching and more specifically on the teaching of Geography at preparatory schools of Ethiopia.

According to O'Mahony (2000:12), Geography is a reality-based subject with meaningful learning experiences and it thus needs suitable teaching methods and teaching aids. Getis and Fellman (2009) in Demirci *et al* (2010:54) also depict that Geography is broad and applied discipline which examines the earth from different perspectives by using different tools and methods in its wide range of sub-fields.

Moreover, Olusegun (2006:29) expresses that the secondary school Geography curriculum developers have to be elected from the outset to emphasise among others a conceptual approach. This is based on the belief that a conceptual approach to secondary school Geography supported by compatible problem-solving procedures and appropriate instructional resources, tempered by the good sense of an enthusiastic, resourceful and patient Geography teacher, and should assist the students to learn Geography more efficiently and effectively.

Geography is a very colourful subject for students in secondary schools if lessons are invigorated with various in-and-out of school activities (Aydin, 2011:298; Demirci *et al.*, 2010:57; Olusegun, 2006:5). Besides, Aydin (2011:277) forges the helpfulness of the application of the constructivist learning theory, that it has an important place in the field of Geography education as it creates an active role for students to engage in research for deep knowledge.

On the other hand, Demirci *et al* (2010:61) state that textbooks, notebooks, blackboards, and atlases have been the main materials and teacher-centred the dominant methods that teachers used in their Geography lessons until recent times. However, developments in science and technology have introduced many new methods, techniques and materials available to Geography teachers. Moreover, Nan (1992) and Shelagh (1997) in Demirci *et al* (2010:53) and Olusegun (2006:65) point out that active learning methods such as, applied learning, cooperative learning, project-based learning, problem-solving, questioning, discussion, fieldwork, map work, role-play and simulation are suitable teaching methods and should be employed to develop the cognitive, psychomotor and affective strategies in the teaching of Geography.

Similarly, Bednarz, *et-al* (1994) as cited in Aydin (2011:298) state that Geography has an important application field in our lives and should be conveyed to the students through brain-based learning, computer-based learning, research-based learning, project-based learning, problem-based learning, cooperative learning, subject-based learning, multiple intelligence and event-based learning. However, the teaching methods used in the Geography lessons are generally inefficient for students to learn issues that will be useful or practical in their real lives (Aydin, 2011:298).

The most important reason of an inefficient lesson is the use of teacher-centered methods and some of the students or all of them are in turn passive learners (Aydin, 2011:298). Aydin (2011:298) argues in this regard, that students' readiness level and learning styles to the issues, the techniques, methods and teaching materials that the teacher prefers and uses, and the Geography curriculum are important variables in the teaching process of Geography.

The realisation of active learning through new approaches such as field trips, activity-based learning, project method, group work, experiment, Geography Information System (GIS), computer-based learning and other methods which encourage students' engagement should be included in the Geography lessons as in all other sciences (Aydin, 2011:298). However, research and experience indicate that teaching Geography in most secondary schools of Ethiopia in general and preparatory schools in particular is teacher-centered instruction and students receive facts and concepts delivered from their teacher without their active engagement (Dufera, 2008:9). In most Geography classrooms students have been taught geographical facts and concepts with minimal understanding (Rambuda, 1994:57).

As Aydin and Kaya (2010:631) state, the main purpose of Geography teaching is not to explain particular geographical events and to measure how much of them were memorised via examinations by the students. Moreover, Aydin and Kaya (2010:631) also explain that in order to reach the purpose of Geography teaching in terms of individuals, society, country and the world, teachers should have sufficient knowledge, skills and necessary equipment and should be conscious and responsible. Logically, then, providing Geography teaching in accordance with the

society's expectations will be possible through reflecting the most recent methods, audiovisual aids and technology to the lessons. So, as Aydin and Kaya, (2010:632) explain, Geography teachers should be relevantly qualified in the Geography Science and should have the skills to teach with suitable methods and techniques using the necessary materials and technologies in their lessons.

Similarly, Kagoda (2009:31) writes that Geography teachers in general and preparatory teachers in particular should be supported with training to update their subject matter knowledge and pedagogical skills to practice active-learning methods and to support the lesson with relevant teaching aids that encourage students' engagement/participation. Geography education at secondary schools is regarded as a burden to the memory because students are expected to memorise too many facts (Rambuda 1994:10). Thus, the application of learner-centred methods of teaching and utilisation of varied resources in the teaching of Geography are likely to reduce memory problems by encouraging learning by doing, thinking critically and using information creatively (Martin et al. in Rambuda & Fraser, 2004:10). Geography being a dynamic and practical subject strongly suggests the variety of methods for teaching it (Kagoda, 2009:28).

Learners, teachers, teaching colleagues, adults, classroom/Geography room, the school, the world beyond the school, printed materials, audio-visual materials, information technology, other equipments, consumables, models, objects, food and drink, games and activities are important resources in Geography teaching (Fisher, 1998:40). From this point, it is possible to say that not only subject matter knowledge and pedagogical skills but also availability of resources and learners' engagement have a great contribution on the quality of education in general and Geography education in particular.

Cook and Leckey (1999:157) express that the quality of education and the effectiveness of instruction given in a classroom are determined by methods of instruction and efficient utilisation of resources. Currently, the "how" of teaching is now being given as much significance as the "what" and "why" in academic circles (Dhand, 2004:1) because teaching methods and strategies have great influence on contents and objectives of the lesson.



Therefore, to assure the quality of instruction and achieve the intended educational objectives, teachers in general and Geography teachers in particular should practice varied methods and strategies and varied materials of instruction. Hale (in Ramsden, 1992:19) asserts that an implicit aim of education in general and higher education in particular is encouraging students to think themselves and teachers to facilitate students' self-learning effort.

Freire (1972:45) also explains that in the banking concept of education, teacher-student relationship at any level, inside or outside the school reveals a narrative character. This relationship involves a narrating subject/ the teacher, and the patient (listening objects)/the learners. This relationship turns learners into "containers" to be filled by the teacher and to memorise mechanically narrated content.

The more completely the teacher fills the containers the better s/he is. The more meekly the containers (passive learners) the more they permit themselves to be filled, the better learners they are perceived to be. In other words, the more dominantly the teacher narrates, the more s/he is perceived as a better teacher, and the more passive receiver the learner is, the better the learner. Education thus becomes an act of depositing, in which the students are the depositories and the teacher the depositor. Reacting to this treatment of education, Freire (1972:45) states that the content tends in the process of being narrated to become lifeless and petrified; education suffers with narration sickness.

Freire (1972:45) furthers his reaction by claiming that teachers consider education as banking in which they deposit knowledge in the students' mind, consider themselves as knowledgeable and students knowing nothing. Thus, positivists claim that knowledge is a gift from knowledgeable teachers to know-nothing students (Freire, 1972:45). However, education must begin with the solution of the teacher-student contradiction by reconciling the poles of the contradiction so that both are simultaneously teachers and students. In contrasting to the banking concept of education, Freire (1972:46) argues that revealing reality is not an individual or merely

intellectual act. Knowing the world is a collective, practical process involving different kinds of knowledge, consciousness, feeling, desire, will and physicality.

By strengthening Frerie's view, Desta (2004:72-73) concurs that lecture method dominates the teaching-learning process. As the teachers usually focus on giving lectures, students depend primarily on lecture, independent learning is not encouraged. Most teachers lack familiarity with individual differences among the learners. They have no tendency of utilising different methods other than lecture. In this method the teacher views him/herself as the sole source of information whereas students remain passive listeners to formal and structured presentations. Students do not get opportunities to understand their natural inclination, to think critically, to develop confidence, to interact with their environment, to enjoy with their mates and develop their communication skills. Moreover, Olusegun (2006:68) explains the lecture method as follows:

*Lecture method is the oldest teaching method which is believed historically to be dated back into antiquity. It is also referred to as expository method because it is teacher-dominated and learners passive method. It is also known as talk-and-chalk method in a situation when the teacher decides to write the summary of the points s/he has taught on the board. In fact, in this method, the learners' involvement and participation is at low ebb because communication is often one way for most of the time during the teaching-learning process.*

Biswas (2007:79) indicates that Geography is the subject that more than any other enables people to comprehend the earth and its environment, and to appreciate the delicate balances between the human and physical elements that bind people to this planet. However, more than half of children are failing to achieve geographic literacy. Thus, to solve this problem, Geography should be taught practically through varied teaching and learning methods.

The variety of teaching methods which is used within a Geography course is an important ingredient in creating a course with interest to students and it improves students' achievement as well. Similarly, Desta (1986:42) mentions that students understand and keep in mind 10% of

what they read, 20% what they hear, 30% what they see, 50% what they see and hear, 70% what they speak and 90% what they do. Supporting this idea, NICED (in Fisher, 1998:21) is quoted as declaring that the acquisition of geographical knowledge involves much more than the memorisation of information. A well developed geographical understanding can only result from a process of enquiry in which questions are asked, evidence is examined and conclusions reached.

In order to carry out effective Geography teaching, Geography teachers should use different approaches of teaching such as sense of place, fieldwork, using new technologies and developing graphicacy (Fisher, 1998:42). In the planning and supporting of geography learning, Geography teachers should work with a complex interplay of three specific types of knowledge, being knowledge about students, knowledge about geography and pedagogic knowledge (Fisher, 1998:32).

According to Biswas (2007:1), Geography is one of the oldest and all-encompassing disciplines offered in schools. It seeks academically and pedagogically competent teachers to open the door of this dynamic world and prepare students to be a global competent citizen in the 21st century through distinctive teaching methods and investigative tools such as maps, fieldwork, and powerful digital communication technologies. Besides, Biswas (2007:112) also depicts that practice and project-based teaching in Geography addresses almost all educational objectives or combination of objectives, enables teachers to change radically their relationship with students to the benefit of both and provides different learning opportunities.

The traditional lecture method dominates the instructional process in general and students' engagement in particular (Demirci, et-al., 2010:53). To reverse this, Now a days, the old syllabus, teacher-centered method of teaching (the talk-and-chalk method of teaching), has been improved and replaced by a new one that facilitates the communicative approach which is student-centered method of teaching (Awlachev, 2010:85). Regrettably, researchers such as Desta (2004:72-73), Asgedom, Desta and Dufera (2006:22) and Dufera (2008:9) reveal that teachers resist varied active learning methods. As a result the practice of learner-centred

approaches is limited in Ethiopia. Lack of resources, time and support add to preventing teachers from employing enough number of activities in their lessons (Asgedom et-al., 2006:21-23). Thus, as stated earlier on in this chapter, literature and experience indicate that the practice of Geography teaching is dominated by teacher-centered approach in general and in Ethiopia in particular. This shows incompatibility of teachers to draw from constructivist theory of learning as well as existing Ethiopian education policy with real actual classroom practice.

Dufera (2008:9) declares that the Ethiopian educational policy and implementation strategies encourage learner-centered active pedagogy, cooperative learning, development of critical thinking and problem-solving skills. Yet is surprising to witness a teacher-dominated pedagogy is the norm in the vast majority of classrooms observed. Therefore, my intention is to investigate teacher dominance methods of teaching/teacher-centered approach and recommend alternative strategies that initiate active learning approaches in the teaching of Geography at preparatory secondary schools of Ethiopia.

### **1.3 Statement of the Problem**

According to the constructivist view, children actively construct their knowledge rather than simply absorb ideas spoken at them by teachers. The constructivist teaching of Geography places emphasis on the fact that the individuals should think more and responsible for their learning (Aydin, 2011:298). Regarding this concept, Freire (1972:45) asserts:

*No one knows everything and no one knows anything; no one educates anyone, no one educates himself alone, people educate each other mediated by the world. Whoever teaches learns, and whoever learns teaches” and not as a denial of the specifics the active role that educators must play (Freire, 1972:45).*

Learning and teaching are constantly interchanging activities. One learns by teaching but one cannot teach except by constantly learning (Eble, 1988: 24). Furthermore, Aggrawal (1996:77), Roberts (1996:58) and Slater (1997:55) points out that selecting teaching strategies is as

important as selecting content. The central place in the school has been given to the student and the present century has resultantly been termed the century of the child. However, from the traditional teaching-learning methods that teachers in Ethiopia seem to cling to it can be understood that students are perceived as containers to be filled by these teachers. Traditional methods make students powerless in the knowledge processing activities.

Most teachers in Ethiopia in general and Geography teachers in particular give more emphasis on the contents than the methods. Bonewell and Eison (1991:185-195) and Asgedom and *et al* (2006:21-23) indicate the reasons why most of the teachers have not embraced recent calls for educational reform and common barriers to instructional change – the powerful influence of educational tradition, teacher's self-perception, discomfort and anxiety that change creates and limited incentives for teachers to change, but certain specific obstacles associated with the use of active learning are limited class time, a possible increase in preparation time and scarcity of needed resources.

Generally, empirical research is important to know the common factors that create teachers' resistance not to transit to active teaching-learning methods. Therefore, I am highly aspired to investigate the tendency of teachers clinging to teacher dominated teaching of Geography in the preparatory schools of Ethiopia and to suggest alternative strategies that encourage active learning approaches. This problem identification leads to the stating of the research question subsequently.

## **1.4 Research Question**

The main research question is stated as:

How can Geography pedagogy be transformed to follow active learner-centered pedagogy in Ethiopian preparatory schools? This main research question leads to the sub-questions stated as:

- What is the nature of Geography and its related pedagogical strategies as a subject in a school context?

- What problems lead the teacher to practice teacher-dominance methods of teaching in the teaching of Geography in Ethiopian preparatory schools?
- How does these teacher-dominance methods of teaching in the teaching of Geography impact on the students' learning in Ethiopian preparatory schools?
- What are alternative strategies that can help to promote active-learning/learner-centered pedagogical strategies in teaching Geography in the Ethiopian preparatory schools?
- To what extent are resources available in the school and reliable to practice learner-centered methods in the teaching of Geography?
- How do Geography teachers measure and assess learners' understanding and achievement?

### **1.5 Aim of the Study**

The main aim of the study is to identify the merits and reasons for teacher dominance in the pedagogy of Geography and suggest alternative constructivist-based strategies that promote learner-centered methods of teaching and learning. Based on this, the specific objectives of the study are:

- To explore the nature of Geography and its related pedagogical strategies as a subject in a school context.
- To find out the problems that cause teacher dominance methods of teaching and to critique these methods in the teaching of Geography in Ethiopian preparatory schools.
- To know the impacts of teacher dominance method of teaching in the teaching of Geography on the students' learning in Ethiopian preparatory schools.
- To suggest alternative strategies that can promote learner-centered pedagogical strategies in the teaching of Geography in Ethiopian preparatory schools.
- To evaluate the extent of availability of school resources and their reliability to practice learner-centered methods in Geography teaching.
- To understand how Geography teachers measure and assess learners' understanding and achievement.

## **1.6 Significance of the Study**

It is desirable that the results of this study will be a means to help teachers, researchers, educational policy makers and other experts to explore possibilities of developing more effective strategies of practicing active learning methods in the teaching of Geography. Thus, the results of this study will create opportunities for curriculum designers, teachers, learners and other concerned bodies to get information so as to solve problems that hinder the practice of active learning approaches.

Moreover, the results will provide the necessary assistance to Geography teachers which will enable them to select the methods that encourage the learners to engage in their knowledge construction process. Furthermore, the results will raise teachers' and learners' interest towards active learning methods. Finally, they will serve as a stepping stone for researchers who want to carry out further investigation on the Geography syllabus implementation in Ethiopian schools contexts.

## **1.7 Motivation of the Study**

The main motive that initiated the need to conduct this study was the desire to solve educational problems related to the method of teaching in general and Geography in particular in the Ethiopian context. Accordingly, a lot of literature and forum discussions have indicated problems related to the quality of education in most African countries in general and Ethiopian education in particular. In developing countries, the quantitative expansion of education has been much more rapid than that of any other social variable (Grisay & Mahlak, 1991:5).

In addition to Grisay and Mahlak (1991) and Chapman et al. (1996:46) point out that the expansion of the education system hindered by many challenging factors such as powerful influence of educational tradition, lack of academically qualified and professionally trained teachers, teachers' self-perception, limited incentives for teachers, shortage of class time, a possible increase in preparation time and shortage of needed resources have emerged throughout the world and the situation is worse in the developing countries.

Moreover, Magnen (1991:130) states that while we know how to build schools for a growing number of pupils, our knowledge about methods to improve the quality of education is less advanced. Likewise, Baum and Tolbert (1985:119) express that developing countries are educating more of their population than ever before but the quality of education is often poor and graduates frequently find that what they have to offer is not what employers want. This indicates that education expansion has been achieved at the expense of quality education. Although quantitative progress has been made in Ethiopian education, the quality of education being offered is not the level of desired (MOE, 2004:1). Thus, the issue of quality education has been and is still a major concern in the Ethiopian education policy (MOE, 1999:37). The question of quality is attributed to the methodologies of Geography in the context of this study.

Furthermore, I practically observed that the intended number of Grade 11 learners in general and Social Science learners in particular could not be promoted to Grade 12 and the intended number of Grade 12 Social Science learners could not successfully join tertiary educational institutions. For instance, in the South Wollo Zone Education Bureau, in the 2010-2011 academic years 542 learners took Ethiopian University Entrance Examination (EUEE) in the 6 sample schools but 124 learners did not successfully join tertiary education. In other words, both Grades 11 and 12 Social Science learners have problems on their academic achievement in general and in Geography education in particular. The cause for the problems can be matched to a number of factors.

However, for the purposes of this study I am confined to teacher-dominance method of teaching as a factor. Thus, my intention was to investigate teacher dominance in the pedagogy of Geography in preparatory schools of Ethiopia. Generally, my experiences, theories, research findings, existing educational policy, and the forum discussions that I attended at different times and no such empirical research has been conducted in the south wollo zone were most essentially motivated me to conduct this research.



## **1.8 Scope of the Study**

To get access to data gathering processes and to make the study manageable and keep it within my resource capacity, this study was confined to six preparatory secondary schools out of 20 preparatory secondary schools of South Wollo Administrative Zone of Amhara state of Ethiopia. It was further confined to preparatory (secondary) schools among other educational institutions because, through my experience I observed that many Grade 11 learners in general and Social Science learners in particular can not be promoted to Grade 12. As a result, most of them end up unemployed and become a burden on their families and the government. This indicates problems in the practice of preparatory secondary education. Thus, to solve this problem and improve the quality of education in both educational institutions, more efforts and improvements should be made at all educational institutions in general and at preparatory secondary schools in particular.

A strong pedagogy in secondary education is a pre-requisite for effective higher education and skills training (World Bank, 1993:84). Secondary schools are educational institutions that prepare adolescents for higher education or prepare adolescents to work in different sectors (Smith, 1990:259). Secondary education is a half-way station between elementary school and higher education, which concentrates on preparing students for college and various vocations (Reed & Verna, 1995:478).

In order to manage this study I confined myself to investigating teacher dominance that may affect learners' achievement in all educational levels in general and preparatory education in particular. I was inclined to Geography because Geography is suitable subject for learner-centered methods of teaching. Moreover, it is my major subject in the undergraduate programme and I have long years teaching experience in teaching it.

## **1.9 Limitations of the Study**

I envisaged certain problems that I encountered in conducting this study. Shortage of time was the major problem because my research covers a wide site or scope (6 districts) and my research design was mixed methods. So it needed more time to collect and analyse quantitative and qualitative data. Regarding a limitation in the mixed design methods, Creswell (2009:16) as:

*For the mixed methods researcher, a project will take extra time because of the need to collect and analyse both quantitative research and the flexibility of qualitative inquiry. The limitation include the need for extensive data collection, the time intensive nature of analysing both text and numeric data, and the requirement for the researcher to be familiar with both quantitative and qualitative forms of research.*

### **1.10 Operational Definitions of Key Terms**

**Preparatory school:** A school which is designed to enable students (Grades 11 and 12) to choose subjects or areas of training prepare them adequately for higher education at a university or college and for the world of work (MOE, 1995:42).

**Teaching strategy:** Part of a method of teaching and it is a plan for someone else's learning. It encompasses the presentations which the teacher might make, the exercises and activities designed for the students, materials which will be supplied or suggested for students to work with, and ways in which evidence of their growing, understanding and capability will be collected (Toohey,1999:152).

**Dominance:** Power and influence over the other. It is control or the state of being wielded over others (Webster Dictionary, 2011).

### **1.11 Research Design**

This study follows a mixed-method approach. Chapter 4 is dedicated to detailing and substantiating the methods chosen for this approach.

### **1.12 Organisation of the Study**

This research report was planned seven chapters briefly exposed as follows:

Chapter 1: This chapter outlines the introduction, background and problem of teacher-dominated pedagogy in the teaching and learning of Geography and describes the purposes and significant

of the study. The chapter also identifies the research questions, research aim, scope and certain limitations of the study.

Chapter 2: In this chapter relevant theories that guide the study were explained.

Chapter 3: This chapter deals with different bodies of relevant literature of the study. In this chapter both classical and contemporary literatures were highlighted to demonstrate the complexity of the problem.

Chapter 4: This chapter outlines the methodological approaches and research design of the study. The data collection instruments and data analysis procedures were thoroughly explained.

Chapter 5: Deals with the analysis and presentation of data received from interviews and open-ended questionnaires.

Chapter 6: Explains the analysis and interpretation of data received from observation, documents and close-ended questionnaires. Moreover, the chapter presents the findings of the study.

Finally, Chapter 7: considers summary, contribution, conclusions, suggestions and recommendations of the study.

## CHAPTER 2

### THEORETICAL GROUNDING FOR THE STUDY

#### 2.1 Introduction

Theoretical framework is the bench mark for research work in general and educational research in particular. “There is nothing as practical as a good theory” (Lewin, 1992:35). Educational theory may be considered as the distilled experiences of others (Carlile, Jordan and Stack, 2004:4). “Theory matters education practices because without it education is just hit and miss (Webb, 1996:23). Thus, my research is based on constructivist theory because I critique the traditional approach to the teaching of Geography and advocate active learner participation in support of the fact that knowledge is socially constructed. Thus, this chapter presents the theoretical framework that is anchored on the constructivist teaching model designed with the aim of bringing changes in the approaches of teaching and learning processes of Geography education in the preparatory schools of Ethiopia.

#### 2.2 Philosophical Approaches to Learning

Literature indicates two major philosophical approaches in the construction of knowledge, first based on ideas and second based on experiences and enduring dichotomy in western thought. The three most influential theories in the western world are Behaviorism, Cognitivism and Constructivism. Each defines learning in different ways. For behaviorists, to learn is to demonstrate more or less permanent change in behaviour; for cognitivists, learning is developing strategies for thinking; and for constructivists, to learn is to see the meaning or significance of experience or concept (Carlile *et al*, 2004:4). Thus, there is no single agreed definition of learning depends on the theory being held. As indicated above, amongst these three theories, my study is based on the constructivists’ theory. I base my theoretical engagements on Kolb’s experiential learning theory as a model.

### **2.2.1 Constructivism**

Considering Brooks and Brooks (2006:59), Tsao (2006:79), Kolb (1984:38) and Freire (1972:45), constructivism is a kind of philosophy which claims that knowledge is constructed by the active engagement of the learners. Constructivism is a philosophy of learning founded on the premise that by reflecting our experiences, we construct our own understanding of the world we live in. Learning is a search for meaning. Thus, learning should start with issues around which students actively try to construct meaning.

Santiago and McKenzie in Asgedom, Desta, and Dufera (2006:6) claim that constructivists' active learning approaches require teachers to develop deep understanding of their practice and of the reforms that guide changes in that practice. Constructivists encourage students' thinking; accept the autonomy of students, and teachers act as facilitators or mediators. They help students to discover meaning and understanding, rather than simply to accumulate information. Some modern trends in learning which have been developed from constructivists' perspective include learner-centred learning which stresses the centrality of the learner and fostering independent learning through the use of negotiated learning strategies and learning contracts.

Constructivists claim that people construct their own meaning by building on their previous knowledge and experience. New ideas and experiences are matched against existing knowledge and the learner constructs new rules to make sense of the world. They believe in learning is desiring to find the meaning in situations and this meaning will be an individual one, since we have all had different experiences of being in the world (Carlile, *et al*, 2004:6). Moreover, Tsao (2006:62) asserts that constructivist-based learning methods offer alternative learning opportunities and provides learners with the opportunity to apply theory to real-life situations and bring concepts and theories to life, thereby enhancing learners' learning.

## **2.3 Theories of Constructive Learning**

Currently, constructivist theories are the cornerstone to practice education in general and practicing Geography education in particular. In line with this concept, Aydin (2011:277) is quoted as saying:

*In recent years constructivist learning theory has an important place in the fields of Geography education to educate students who play an active role of engaging in research for deep knowledge and use the information they have learnt rather than the students who play a passive recipient role in the information (Aydin, 2011:277).*

There are several theories that explain the role of individual autonomy on learning. The common constructivist theories relevant to the topic under study are Kolb's theory of experiential learning, Freire's theory of pedagogy of the oppressed, Race's ripples model of learning, Vygotsky's social learning theory, Gagne's conditions learning theory, Papert's theory of constructivism, Bruner's discovery learning theory, Novak's theory of human mind, Murray's achievement motivation theory, Piaget's cognitive adaptation theory, and Atkinson's and Shiffrin's information processing theory. Each of these theories is discussed subsequently with a purpose to help explain the constructivist theory that provides the foundation for this study.

### **2.3.1 Kolb's Experiential Learning Theory**

Kolb (1984:38) defines experiential learning as learning that relates to or results from experience. Kolb uses the term "experiential" as his theory is based more on reflection of experiences. Thus, Kolb calls this theory experiential learning since experience is the source of learning and development.

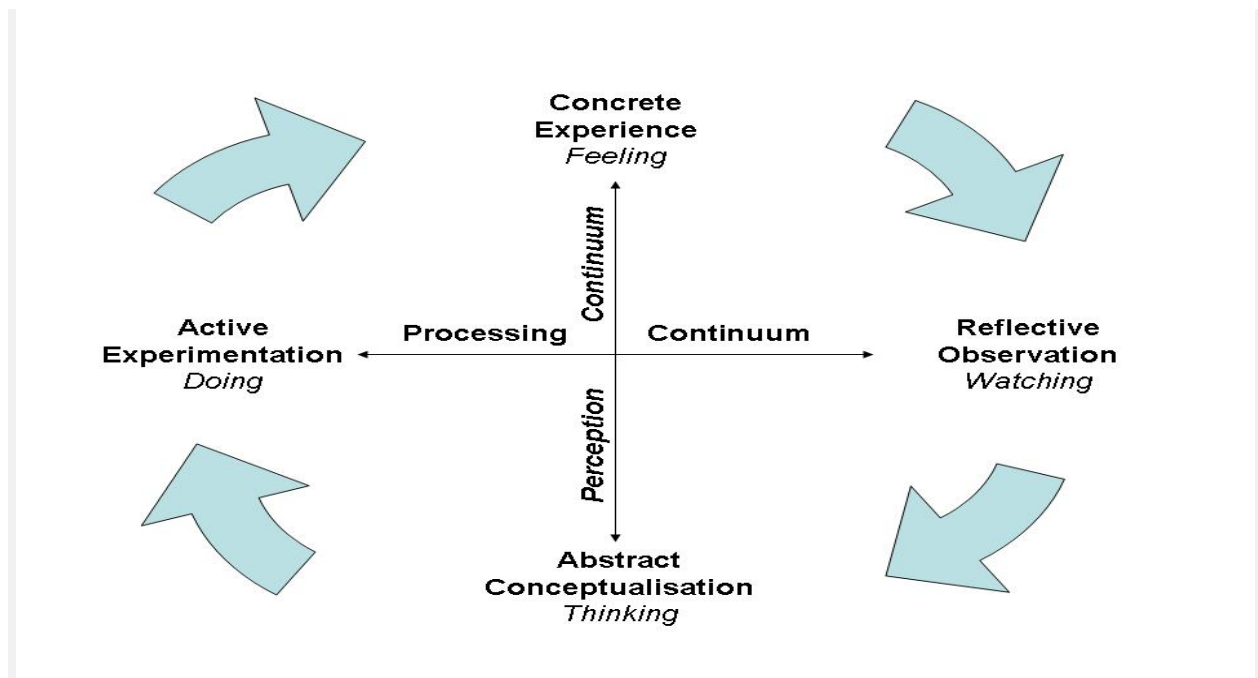
Experiential learning theory (Kolb, 1984:38) has influenced the work of teachers and trainers particularly those involved learners with 16 years and above. According to this theory, learning is the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping experience and transforming it (Kolb, 1984: 41).

Kolb has proposed six main characteristics of learning:

- Learning is best conceived as a process, not in terms of outcomes;
- Learning is a continuous process grounded in experience;
- Learning requires the resolution of conflicts between dialectically opposed modes of adaptation to the world (learning is by its very nature full of tension);
- Learning is a holistic process of adaptation to the world;
- Learning involves transactions between the person and the environment; and
- Learning is the process of creating knowledge that is the result of the transaction between social knowledge and personal knowledge.

This theory presents a way of structuring and sequencing the curriculum and indicates how a session or entire course may be taught to improve learners' learning. It suggests that learning is cyclical, involving four stages – experience, reflect, generalise and test. An important feature of this theory is the different stages which are associated with distinct learning styles and raising students' awareness of alternative approaches and helping them to be more flexible in meeting varied demands of learning situations.

Kolb's learning model is based on two continuums that form a quadrant. The first is processing continuum, which is approaching to a task, such as preferring to learn by doing or watching. The second is perception continuum, which is referring to the emotional response, such as preferring to learn by thinking or feeling. This model is displayed in figure 2.1 below:



**Figure 2.1: Kolb's learning theory (1984)**

Figure 2.1 reflects the following dimensions:

- Reflective observation (watching): looking for the meaning of the experience.
- Abstract conceptualisation (thinking): logical analysis of the experience.
- Active experimentation (doing): ability to move from the experience to action.
- Processing continuum: one's approach to learning (doing vs. watching)
- Perception Continuum: one's emotional response to learning (thinking vs. feeling).

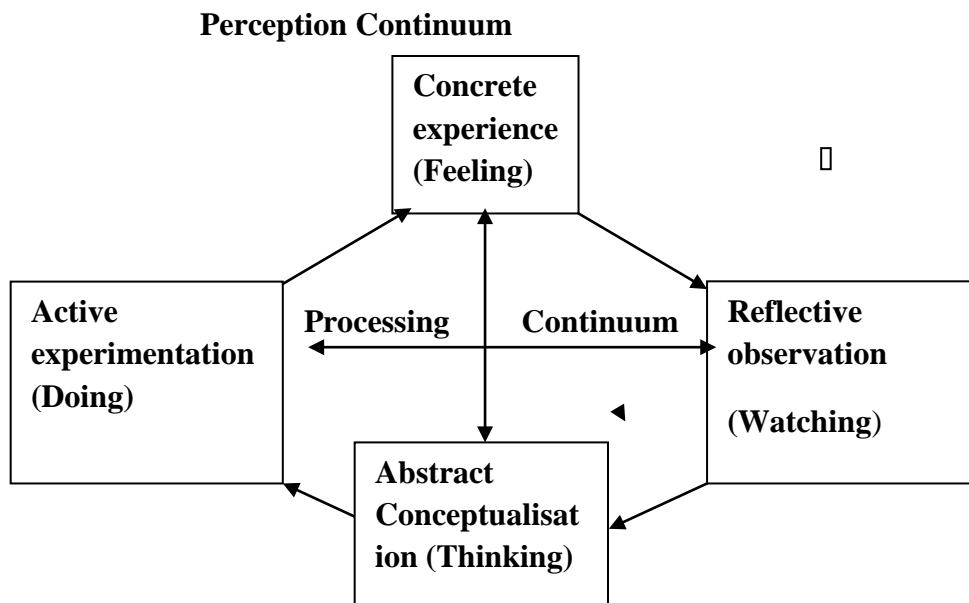
The core of Kolb's four stage model is a simple description of a learning cycle that shows how experience is translated through reflection concepts, which in turn used as guidance for active experimentation and the choice of new experiences. This model of learning is explained as follows:

- Action: The learner performs some type of activity related to the lesson or subject.



- Reflection: The learners reflect what s/he did and what happened as a result of her/his activity. This can be in one of several forms such as, free writing, journaling, or small or large group discussions.
- Knowledge/theory: The learner uses the results of the reflection to develop knowledge and theories, which helps further the learning process because the learner is conceptualising his/her own theories, not accepting the theory of the instructor.
- Planning: It is based on the learner's theories what to do next and anticipate the results of further activity. This process moves the learner into the higher levels of thinking than merely recall and recite facts.

Kolb's learning theory sets out four distinct learning styles, which are based on a four-stage learning cycle. In this respect, Kolb's model offers both a way to understand individual learning styles, which he named the "learning styles inventory," and also an explanation of a cycle of experiential learning that applies to all learners. It provides a learning cycle that involves four processes that must be present for learning to occur and displayed below:



**Figure 2.2: Kolb's learning cycle (Source: Kolb, 1984)**

The learning cycle is explained as:

- Concrete experience (feeling): Learning from specific experiences and to people being sensitive to other's feelings.
- Reflective observation (watching): Observing before making judgment by viewing the environment from different perspectives. It looks for the meaning of things.
- Abstract conceptualisation (thinking): Logical analysis of ideas and acting on intellectual understanding of a situation.
- Active experimentation (doing): Ability to get things done by influencing people and events through action. It includes risk-taking.

Depending upon the situation or environment, the learners may enter the learning cycle at any point and will best learn the new task if they practice all four modes. Listed below are some examples:

Example 1: Learning to ride a bicycle:

- Reflective observation: Thinking about riding and watching another person ride a bike.
- Abstract conceptualisation: Understanding the theory and having a clear grasp of the biking concept.
- Concrete experience: Receiving practical tips and techniques from a biking expert.
- Active experimentation: Leaping on the bike and have a go at it.

Example 2: Learning a software program:

- Active experimentation: Jumping in and doing it.
- Reflective observation: Thinking about what you just performed.
- Abstract conceptualisation: Reading the manual to get a clearer grasp on what was performed.
- Concrete experience: Using the help feature to get some expert tips.

Example 3: Learning to coach:

- Concrete experience: Having a coach guide you in coaching someone else.

- Active experimentation: Using your people skills with what you have learned to achieve your own coaching style.
- Reflective observation: Observing how other people coach.
- Abstract conceptualisation: Reading articles to find out the pros and cons of different methods.

Kolb views the learning process as a context of people moving between the modes of concrete experience (CE), abstract conceptualization (AC), reflective observation (RO) and active experimentation (AE). Thus, the effectiveness of learning relies on the ability to balance these modes, which Kolb sees as opposite activities that best promote learning.

In addition, Kolb (1984:75) claims that concrete experience and abstract conceptualisation reflect right-brain and left-brain thinking respectively. Kolb theorised that the four combinations of perceiving and processing determine one of four learning styles of how people prefer to learn. Kolb believes that learning styles are not fixed personality traits, but relatively stable patterns of behavior based on their background and experiences. Thus, they can be taught of more as learning preferences, rather than styles. Learning styles are briefed as follows:

- Diverging (concrete, reflective): emphasises the innovative and imaginative approach to do things. It views concrete situations from many perspectives and adapts by observation rather than by action. It is interesting in people and tends to be feeling-oriented. Likes such activities as cooperative groups and brainstorming.
- Assimilating (abstract, reflective): pulls a number of different observations and taughts into an integrated whole. Like to reason inductively and create models and theories. It also likes to design projects and experiments.
- Converging (abstract, active): It emphasises the practical application of ideas and solving problems. It likes decision-making, problem-solving and practical application of ideas. It also prefers technical problems over interpersonal issues.
- Accommodating (concrete, active): uses trial and error rather than taught and reflection. It is good at adapting to changing circumstances; solves problems in an intuitive, trial-and-error manner, such as discovery learning. It also tends to be at ease with people.

Furthermore, Kolb (1984:48) focuses the role of experience and active learning. He suggests a cycle of learning begins with experience and progresses to reflection on that experience. The next stage of the cycle is that of conceptualisation or the acquisition of key ideas. These may arise from the reflective process or from established theory. This will lead on to the next stage. This stage states the synthesis of experience, reflection and theory lead to a modification of the learning cycle. The iteration of the learning cycle leads to a growth in knowledge, depth of understanding and improved practice.

This cycle has been influential in curriculum planning, in the popularity of active learning, and in the identification of the specific learning orientations of learners. Kolb's own instrument and that derived from it by the UK psychologists, Honey and Mumford (1992:97) seek to identify learners along the four dimensions identified above. Kolb's theory points to the diversity of learner styles and the importance of different learning strategies. Therefore, so as to satisfy individual learner's learning styles, teachers have to consider learners with their different learning styles and apply varied learning-teaching strategies.

As already mentioned above, Kolb's learning theory sets out four distinct learning styles based on a four-stage learning cycle. Thus, this theory is related to the teaching of Geography in which learners should get an opportunity to learn through a strategy that match with their learning styles because each learners has his/her learning style. Moreover, just like Kolb's view, I believe in that learning is best conceived as a process, not as outcomes aggregating the two continuums, processing continuum and perception continuum.

Therefore, learning by doing, learning by watching, learning thinking and learning by feeling are the main strategies of the theory and thus they are the main learning-teaching strategies of Geography teaching. Therefore, I appreciate and work in line with Kolb's experiential learning theory and I am encouraging the idea that teachers should provide opportunities to the learners so as to practice learner-centered learning-teaching strategies and encourage learners to be responsible for their learning. So Kolb's theory is the bench mark for my work.

### 2.3.2 Freire's Theory of Pedagogy of the Oppressed

Pedagogy of the oppressed is the most widely known philosophy, Freire's work. It proposes pedagogy with a new relationship between teacher, learners and society. Dedicated to what is called "the oppressed" and based on his own experience helping Brazilian adults to read and write. Freire had included a detailed Marxist class analysis in his exploration of the relationship between what he calls "the colonizer" and "the colonized." His book, *Pedagogy of the oppressed*, remains popular among philosophies all over the world and is one of the foundations of critical pedagogy. In the book Freire calls traditional pedagogy the "banking model" because it treats the learners as an empty vessel to be filled with knowledge, like a piggybank. However, he argues for pedagogy to treat the learner as a co-creator of knowledge.

The first part of his work explores how oppression has been justified and how it is overcome through a mutual process between the "oppressor" and the "oppressed" (oppressors-oppressed distinction). Examining how the balance of power between the colonizer and the colonised remains relatively stable, Freire admits that the powerless in society can be frightened of freedom. In this regard, Freire (1972:45) writes:

***Freedom is acquired by conquest, not by gift. It must be pursued constantly and responsibly. Freedom is not an ideal located outside of man; nor is it an idea which becomes myth. It is rather the indispensable condition for the quest for human completion (Freire, 1972:45).***

According to Freire, freedom will be the result of praxis-informed action — when a balance between theory and practice is achieved. His work examines the "banking" approach to education — a metaphor that he used to suggest that learners are considered empty bank accounts that should remain open to be deposited by the teachers. Freire rejects the "banking" approach, claiming its results in the dehumanisation of both the learners and the teachers. In addition, he argues that the banking approach stimulates oppressive attitudes and practices in society. Instead he advocates for a more world-mediated, mutual approach to education that considers people incomplete. According to Freire, this "authentic" approach to education must allow people to be aware of their incompleteness and strive to be more fully human. This attempt

to use education as a means of consciously shaping the person and the society is called conscientisation, a term first coined by Freire in his book cited above.

As indicated above, Freire's theory strongly criticises the banking approach of education; learners considered as empty bank accounts remain open to deposits made by the teacher. Thus, it implies that learners are considered as empty vessels waiting for the teacher to be filled and teachers are a fountain of knowledge. No chance is given to the learners to exercise their academic power to construct knowledge by themselves. There must be power balance between teachers and learners – teachers facilitate the instructional process and learners construct knowledge.

Therefore, I appreciate and work in line with the core idea of this theory which suggests mutual approach to education that considers people incomplete. Both learners and teachers are learners. Thus, to be complete human being, they should learn each other. As a result, learners get an opportunity to engage in the learning-teaching process and construct knowledge. Pedagogical freedom in the learning-teaching process in general and in Geography education in particular is the key factor to create opportunities to the learners so as to practice variety of learning strategies relevant to their learning styles. Therefore, this theory is the pillar of my work.

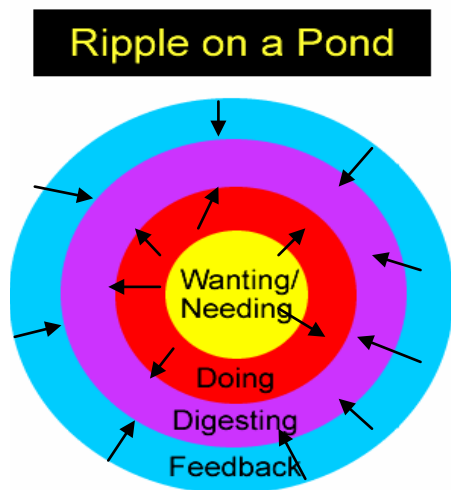
### **2.3.3 Race's Ripples Model of Learning**

Race (1993) in Ademe (2010:77) proposes a simpler and more “down-to-earth” model of learning which he feels practicing teachers and learners could relate to more easily. Race's model is based on the premise of experiential learning, learning by doing as he describes it. He agrees with Kolb and others experiential learning on the importance of receiving feedback on the success or otherwise of the learning process, often from other people, and on the importance of reflecting on one's learning experience and developing a sense of ownership. He departs from Kolb in identifying a new element in the learning process, the internal motivation that makes a person want to learn something in the first place.

Accordingly, Race (1993) in Ademe (2010:76) lists the four basic elements of his model as:

- Wanting: motivation;
- Doing: practice, trial and error;
- Digesting: making sense of it or gaining ownership; and
- Feedback: seeing the results; other student's reactions

As it was mentioned earlier, Race's model of learning is similar to that of Kolb in that it is based on experiential learning and that it is dynamic in nature. However, Race's model differs from Kolb in that various elements are not regarded as constituting a sequential cycle. Rather, they are regarded as constituting an integrated, interacting 'whole' – to use Race's words, "rather like intersecting systems of ripples on a pond" (Ademe, 2010:76). For further understanding, Race's model is diagrammatically displayed as follows:



**Figure 2.3: Race's ripples model of learning (Source: Ademe, 2010:76)**

Regarding Race's model of learning, Ademe (2010:76-77) explains:

*The model is active, in that, the 'wanting' element need to be all 'pervasive', so that 'doing' is wanted, opportunities for digesting are seized, 'feedback' is positively sought, and so on. Therefore, wanting is placed at the very heart of model, sending ripples of motivation out through the surrounding layers. Placing wanting at the centre of the schematic representation of the model also symbolises its internal origin within the learner. Similarly, 'feedback' is all-pervasive, sending sets of ripples into the model from the various sources that provide it (instructors, fellow learners, self-assessment questions, and so on). Placing of 'feedback' the outside of the model symbolises its mainly external origin. 'Doing' and 'digesting', on the other hand, are regarded as overlapping processes that are continuously influenced both by internally-generated 'wanting' and by externally-generated 'feedback' (Ademe, 2010:76-77).*

This theory is related to the teaching of Geography because wanting is the core of learning in general and Geography learning activities in particular. I believe in that knowledge is constructed by the learners through active participation in the learning-teaching process. In order to participate, learners have to develop wanting/motivation to learn. Motivation is the base of all fruitful learning-teaching activities in general and Geography learning-teaching activities in particular. Besides, feedback is also important factor to students' academic improvement because it increases their motivation to learn from their experiences and from their friends through learning by doing, demonstration, observation and field report. Thus, this theory is highly relevant to teaching in learner-centred approach in general and geography teaching in particular.

#### **2.3.4 Vygotsky's Social Learning Theory**

Vygotsky (1978:87) focuses on the impacts of social interaction on learning. Vygotsky maintains that peers, parents, teachers or other societies who interact with the learners play an important role in the learners' learning. Moreover, Vygotsky (1978:90) argues that there is a limit to which the individual can perform a given tasks alone. Beyond that limit his/her success depends on support from other people. Vygotsky refers to this limit as a zone of proximal development. This zone is



the boundary between what a learner can successfully perform without support and what he/she will be able to perform in the future as new skills are required.

The implication of Vygotsky's theory to the teaching and learning process is that learner's ability to reconstruct ideas is enhanced through interaction and exchange of ideas with other people. This theory recognises that learners can modify their preconceptions through social negotiation of ideas. Social negotiation of meaning implies exchanging of ideas, weighing alternative conceptions from multiple perspectives. Through negotiating meanings, learners identify the pitfalls of their preconceptions and modify them in the light of shared meaning.

Vygotsky's theory appreciates social interaction as the base of effective learning and teaching activities. Geography is an interactive discipline. Its domain, such as the physical aspects, political aspects, demographic aspects, economic aspects and biological aspects are highly conducive for social interaction. Thus, it has commonalities with my view because I believe in that learners construct knowledge from their experience, interacting with their mates, teachers, families and their environment where as teachers are facilitators.

When learners learn from each other, teachers may have not a chance to dominate learning and teaching activities or exercise more power to transfer knowledge rather they become facilitators. Learners' interaction is the main strategy for critical thinking, confidence, creativity, team work in any educational activities in general and Geography education in particular.

By and large, the theory encourages learner-centered activities; learners are knowledge constructors and teachers are facilitators. So I am working on learning and teaching strategies that make learners responsible to their own learning and teachers facilitate learners' learning activities. Geography by its nature is an interactive discipline. Geography learners interact with their friends, the surrounding community and their environment at large to construct their knowledge. Therefore, Vygotsky's theory supports the teaching of Geography through learner-centered methods.

### **2.3.5 Gagne's Conditions of Learning Theory**

Gagne's (1985:113) theory of the conditions of learning advocates that learning is influenced by internal and external conditions. Internal conditions of learning refer to the psychological state of the learners such as attention, motivation and recall. On the other hand, external conditions of learning refer to environmental factors that determine how learning events are arranged and the timing of stimulus events in any learning endeavor. Thus, these two factors jointly interact to account for differences in the ability to learn.

This theory provides a framework for analysing the place of problem-solving in learning. When learners confront with problems, they quickly recall previously learned rules in a bid to reach a solution to the problem. They test hypotheses to judge the applicability of new propositions. Moreover, Gagne further stressed that when individuals find the appropriate combination of rules that fit in to logical propositions they have not only solved the problem but also have learned something new. Conditions of learning theory identify problem-solving as consisting not only of the learning of rules but also the application of cognitive strategies in finding solutions to problems.

This theory encourages learner-centered learning strategies such as problem solving. Moreover, the theory advocates that learning is influenced by internal as well as external factors such as attention, motivation, recall, and timing of stimulus and arrangements of learning events. Thus, if learners are the center of learning, they have attention for their learning and teaching activities and the teacher acts as a facilitator; he/she should motivate learners' effort and participation. So when learners attend attentively they will recall what they have learned. As a result, learners increase their interest towards their learning and accept that as they are responsible for their learning. Therefore, knowledge is constructed by their active engagement to the learning and teaching activities.

Moreover, so as to solve problems, learners have to apply cognitive strategies (problem solving, discussion method, questioning technique) and previously learned rules. Here, what we understand that, the above mentioned strategies are the main learning and teaching strategies of Geography. In order to solve problems, learners have to recall the previous learning experiences. In order to recall the past learning experiences, learners have to learn through active learning strategies that develop learners' critical thinking capacities. So I am working on the learning and teaching strategies of Geography that motivate learners to learn by themselves via interacting with their mates, recall their experiences and interact with their environments by reducing the teachers' power to transmit information. Therefore, this theory is the corner stone to the teaching of geography or my work.

### **2.3.6 Papert's Theory of Constructivism**

In the theory of constructivism, Papert (1993:158) states that individuals learn by actively constructing or designing personal meaningful artifacts rather than by absorbing information transmitted to them by someone else. This theory stresses that knowledge is generated by experiencing the environment and sharing of ideas with other people. Its assumption is that Papert's doctrine has had a remarkable influence on education in recent times, and essentially in Geography education for its departing from the traditional view of learning that purports the learners as a tabula rasa, empty vessel to be filled with knowledge.

Crucial to Papert's constructivism is his revolution of the emphasis that the school places on abstract reasoning while little is done to promote learning from concrete experiences. This view is consistent with Piaget (1970:121) and Vygotsky (1978:86), who conceived learning as the construction of new knowledge. If we advocate that knowledge is constructed, therefore, instruction should aim at guiding the learners to modify their preconceptions rather than transmit knowledge to them. Thus, it is important for teachers to recognise the need of the learners to live the lesson that they learn.

### **2.3.7 Bruner's discovery Learning Theory**

Jerome Bruner's (1961:94) theory states that learners construct new ideas by selecting and transforming ideas, propounding tentative views, and by taking ownership of the learning process and outcomes. Thus, teaching should be concerned with the presentation of experiences and contexts that make the learners have a willing and able to learn through discovery of meaning. Moreover, Bruner (1966:17) had asserted that teaching should recognize the importance of the learning readiness and the way to organise and present learning activities in order for the ideas to make sense to the learners.

Bruner (1996:84; 1990:91; 1986:73) also argues that teaching should be designed in ways that promote the extrapolation of ideas. The extrapolation of ideas means shifting from information transmission to knowledge construction. Furthermore, Bruner (1966:62) has argued that individuals learn concepts by formulating and testing their ideas about the concepts. He conceives of learning as an active process that involves the construction of new ideas based up on prior and present experiences.

Generally, according to Bruner (1966:37) the importance of discovery in learning is reactivating the mental structures or schema that the learner has already constructed. Thus, apart from the reactivation of existing cognitive schema, discovery oriented activities facilitate the formation of the new mental structures as the learners make sense of their environment.

I also agree with Bruner's view; discovery learning is the main strategy in the educational process in general and Geography education in particular because it motivates the learners how to reason and think themselves. As a result, learning becomes unforgettable. Therefore, teachers have to create opportunities to the learners to learn by discovery method. Geography learners should learn and construct knowledge through active learning strategies such as discovery learning, fieldwork, activity-based learning, role-play, inquiry, discussion, demonstration etc (Olusegun, 2006:65). Therefore, Bruner's theory and my view are positively overlap because they encourage active learning and learners have to be the center of learning and knowledge constructors where as teachers should be facilitators the teaching process.

### **2.3.8 Novak's Theory of Human Mind**

Novak (1977:49-51) explains knowledge construction as high level of meaningful learning and propositions as building blocks to construct ideas. Knowledge construction is challenging process because it involves activity, thinking, and reflection. It is also exciting in the sense that the individual feels some sense of accomplishment and ease of tension when conceptual ambiguity is reconciled.

New concepts are learned as the individual constructs new mental patterns. According to Novak (2002:31; 1998:17; 1993:9; 1990:25) the construction of new knowledge requires that the individual should demonstrate commitment to persist in searching for new meanings. From the constructivist point of view, the central purpose of education is constructing and applying new knowledge. In this view, knowledge is not something that an individual transmits to another. Rather, individuals construct and reconstruct their own knowledge.

This theory highly emphasised on knowledge construction not knowledge transmitting. Thus, in order to construct knowledge, learners have to get a strategy that encourages their activity-based learning, critical thinking and reflection. Teachers should facilitate individual learner to learn through learning by doing, critical thinking and reflection and searching new meanings to apply new knowledge to solve problems. Therefore, since the emergence of the theory acknowledge construction, various active learning methods, difference in individual learning styles, difference in perception and experiences, it is strongly related with Geography education because nowadays, geographers advocate learner-centered approaches, differences in individual learning styles, differences in perception and experiences.

Moreover, I am working on the view that learners in general and Geography learners in particular have to get a learning strategies that encourage learners engagement, individual learner's learning style, individual learner's level of understanding and experiences. Therefore, Novak's theory of human mind has a strong linkage in Geography education in general and my research work in particular.

### **2.3.9 Murray's Achievement Motivation Theory**

The theory of Murray (1938:71) which is the theory of achievement motivation states that humans have the desire to manipulate and organise or overcome obstacles, attain a high standard to excel. Academic success demands cognitive engagement on the part of the learners. Cognitive engagement is the amount of effort spent in either studying or completing assignments.

According to McCombs and Marzano (1990:13), achievement outcomes are a function of skill and will. Skill is the ability while will is motivation. Individuals who have the skills and are more willing to learn are likely to excel than those who lack the will even if they have the skills. Willingness is not achieved through teacher-centered; passive learners instruction. Moreover, Tuckman (1999:53) points out that the extent to which individual's motivation to learn is influenced by the value and nature of the activity and the value of the outcomes.

This theory also acknowledges learners' engagement in the learning and teaching activities to construct knowledge. As stated in the theory, learners are active participants and the core of the learning and teaching processes. Moreover, the theory underlines that learners' willingness is affected by teacher-centered / passive learning instruction. Therefore, since Murray's theory acknowledge learner-centered approach and learners' willingness to learn, it is strongly linked with my work because I have been working my research on the strategies that provide opportunities to learners to engage in the learning and teaching activities and able to construct their own knowledge by themselves.

### **2.3.10 Piaget's Cognitive Adaptation Theory**

Piaget is one of the scholars whose work influences understanding of how humans construct knowledge. As Piaget (1972:37; 1970:23) maintains, the theory of cognitive adaptation explains the influence of direct or authentic experience with the environment on learning. Through authentic experience, individuals come to face to face with reality, scuffle with it, hypothesise about it, move on to search for further meaning to clarify thoughts and turn back to test if the initial propositions are tenable.

Moreover, Piaget (1966:115) recognises the role of social environment on learning and argues that human being is immersed in a social environment affects him as much as his physical environment. According to this theory, human beings are constantly learning or adapting as they interact with the environment. Learning is a process of adaptation to the new environments and making sense of new events with reference to existing knowledge. In other words, adaptation entails fitting new ideas in to an existing cognitive structure.

Furthermore, Piaget (1970:102) emphasises another cognitive process that is accommodation. Accommodation is the restructuring of existing mental schemes in order for them to be adapted to new situations. If new information cannot be made to fit into existing schemes, a new more appropriate structure must be developed to fit in it. Each individual is responsible for what he fits in to his/her schema; no one should fit in ideas into another's schema. Based on this notion, the teaching that emphasises the transmission of knowledge from teacher to learners is feeble/weak and unproductive in the sense that it attempts to fit the teacher's thoughts and beliefs into the learner's schema.

Most classroom teachers, though unintentionally, have denied the learners' opportunity to discover and invent ideas by doing what the learners themselves should do and thinking what the learners should have been allowed to think. Following the Piaget's view, Lorsch and Tobin (1992:45) state that instruction should provide the learners with opportunity to apply the senses in search for meaning. It is only through seeing, hearing, touching, smelling, and testing that an individual interacts with the environment and build a picture of the world.

Piaget's theory criticises teachers' dominance on the learners' learning and teaching activities. So I am doing on the teachers' dominance teaching and indicate strategies that reduce teacher dominance teaching and increase learners' opportunity to engage in the knowledge construction process. Therefore, Piaget's theory is also linked to my bench mark theory; Kolb's experiential learning theory.

### **2.3.11 Atkinson's and Shiffrin's Information Processing Theory**

Atkinson and Shiffrin (1968:78) use the information store model to illustrate how information is processed by individuals. The theory recognises that the learner is not empty vessel to be filled with ideas but rather an active organism that seeks and constructs meaning as he/she interacts with the environment. They likened knowledge construction to a library shelving system. Shelving is a hypothesis testing process. Shelving provides the opportunity for the review of meaning. Ideas cannot be shelved without being re-examined. Instructions that facilitate shelving are those that provide the opportunities for learner to review alternative conceptions.

One of the ways to facilitate the review alternative conception is learning by doing rather than transmission and absorption of factual knowledge. Through shelving the learner retrieves and reconstructs meaning. The shelving of meaning is not facilitated by the teacher-centered instruction. Knowledge transmission instruction is ineffective to activate the existing mental schemes to stimulate the shelving process. Instructions that facilitate shelving are those that recognize the learner as the meaning maker.

## **2.4 Application of the Afore-mentioned Theories in Geography Education**

The above theories are related to my work because I stood from the premise of incompatibility of education policy and actual practice in Geography education at preparatory secondary school in particular. The education policy advocates learner-centered approaches, considers individual differences in learning styles, capacity and experiences. However, in my experience and literatures reveal that in most Ethiopian preparatory schools learning and teaching activities of Geography is conducted through traditional teaching strategy, dominantly by lecture method.

Whereas the practice is teacher-centered approaches and does not acknowledge individual differences in learning styles and experiences. As a result, learners are dominated by teacher's activity/information. Therefore, the aforementioned theories are the key instruments to break this type of teacher's dominance teaching and to make learners active participant and knowledge constructors as well as to make teachers as facilitators of the teaching and learning process of Geography.



Thus, these theories are valid and plausible framework for my study because they provide a rationale for a variety of learner-centered learning and teaching strategies to make learners knowledge constructors such as field work/trip, independent learning, learning by doing, work-based learning and problem-based learning which recently received much attention in Geography education.

One of the particular strength of these theories is that they provide a theoretical rationale for ensuring effective links between policy and practice in Geography education because Geography is an outdoor, more practical and participatory discipline. Moreover, Geography by its nature is a real and practical subject and needs a down-to-earth approach and Geography is an interactive science so that ripple-pond effect is clearly observed. It means if there is learners' wanting/motivation there will be an active interaction among learners with their environment, with their mates, with the society and with their teachers in Geography teaching and learning process and construct Geographical knowledge. Thus, Geography learning and teaching strategies have a triples-pond effect, learners' readiness ripples other learning and teaching activities. In other word learners' wanting/motivation has an impact on learners' doing, digesting and feedbacks.

Generally, learner-centered methods have to be practiced to substitute a portion of conventional lectures in Geography education. Geography teaching should be designed in ways that promote the extrapolation of ideas; Geography learners shift from information receiver to knowledge constructor and Geography teachers also should shift their view from information transmitter to facilitator to learners' knowledge construction activities. Owing to reach mathematical analysis relevance to Geographical application like map reading, population and vegetation distribution variation in terms of attitude differences, tourism and other Geographical domains in which traditional teaching methods might have been found to be inadequate in the past.

Demonstration modules to be designed by learners using Kolb's model and multi-media presentations introduce a learner-centered learning environment in Geography education. These modules integrated into the subject produce several desirable outcomes. Feedback from the

learners will be obtained through a feedback sheet and learners' journals have discussed. Suggestions for further improvement of this activity have also provided. With some modification, this approach can become one of the most efficient ways of teaching Geography in the future.

## **2.5 Conclusion**

Generally, the chapter incorporated introduction, philosophical approaches, constructive theories of learning such as Kolb's experiential learning theory, Freire's theory of pedagogy of the oppressed, Race's ripples model of learning, Gagne's conditions learning theory, Papert's theory of constructivism, Bruner's discovery learning theory, Novak's theory of human mind, Murray's achievement motivation theory, Piaget's condition adaptation theory, Atkinson's and Shiffrin's information processing theory.

All the afore-mentioned theories advocate the view of constructivism and are related each other. Even though each theories has its own drawback, all the aforementioned theories have also contribution to my study; Geography education in line with constructivist point of view because Geography is an outdoor discipline and practiced in real object and phenomena and thus, it needs a learning and teaching strategies that encourage learners' engagement in the knowledge construction activities and make the learners responsible for their own Geography learning.

# CHAPTER 3

## METHODS OF TEACHING-LEARNING GEOGRAPHY

### 3.1 Introduction

Researchers need much reading to understand their work and methods to employ even though it is difficult to get on top of or make sense of it (Mengistu, 2011:35). This is confirmed by Fraenkel and Wallen (2000:71):

*Before planning the details of a study, researchers usually dig into the literature to find out what has been written about the topic they are interested in investigating (both the opinions of experts in the field and other research studies are of interest), such reading is referred to as a “review of literature (Fraenkel and Wallen, 2000:71).”*

Fraenkel and Wallen (2000:71) further state that literatures review are helpful for the researchers to glean the ideas of others interested in a particular research questions and let them to see what the results of others’ (similar, or related) studies related to the study under investigation. Researchers then weigh information from a literature review in light of their own concerns and situation. Thus, they need not only locate others work dealing with their intended area of study but also to be able to evaluate this work in terms of its relevance to the research questions of interest.

Therefore, so as to understand the degree of the problem internationally, regionally and locally researchers should read various relevant literatures to the topic they intend to investigate. Hence, this chapter indicates the main relevant scholarship surveyed about the topic under study. It does this by specifically surveying literature on the approaches of teaching, methods of teaching, teacher competence, and school efficiency and instructional media.

## **3.2 Approaches of teaching**

### **3.2.1 Teacher-centered Approach**

Teacher-centered approach is an approach which makes the teacher the center of the teaching-learning activities. Regarding this approach, Ademe (2010:85) states:

*In the traditional teacher-centered approach, the teacher imparts subject matter knowledge to a class of students. The classes normally take place at set times and last for a predetermined period, as indicated by timetable, while the teaching methods are almost invariably of the face-to-face type. The whole system is generally geared towards the smooth operation of the teaching institution, with little or no attempt being made to cater for the different learning styles and particular difficulties of individual students (Ademe, 2010:85).*

One of the main methods being blamed for the tradition of teacher dominance in teaching is the lecture method. Lecture method is the method which makes the teacher knowledge transmitter and learners passive receivers. To strengthen this claim, Olusegun (2006:68) argues:

*Lecture method is the oldest teaching method which is believed historically to be dated back antiquity. It is also referred to as expository method because it is teacher dominated and learners passived method. It is also known as talk-and-chalk method in a situation when the teacher decides to write the summary of the points s/he has taught on the board. In this method, the learners' involvement and participation is at low ebb because communication is often one way for most of the time during the teaching-learning process (Olusegun, 2006:68).*

Moreover, Young, Robinson and Alberts (2009) have depicted that maintaining students' concentration in lectures has long been a challenge for teachers. Pedagogical research consistently finds a drop in attention between 10 and 30 minutes into the lecture, which has been associated with the passive nature of the standard format and has consequences for learning

approaches and outcomes. However, undoubtedly, one of the reasons why the lecture has retained its dominant place in the educational and training scene is that the method appears to be highly cost-effective since it enables high teacher-students ratios to be achieved (Ademe, 2010:116).

In large class size, insufficient resources and scarcity of qualified teachers, the lecture method may be an appropriate teaching method in general and in Geography teaching in particular. Similarly, Olusegun (2006:68) merits the lecture method based on such constraints that teachers face.

Thus, in a large class of learners and in a situation where there is inadequate number of competent and qualified teachers coupled with insufficient instructional materials lecture method with note taking technique may be more effective than any other methods. In fact, in the Geography teaching lecture method will be more effective in a very large class situation in which the teacher combines the method with the effective use of instructional materials, questioning technique and other appropriate strategies.

Therefore, the main purpose of this study was to identify the reason why teachers resist a paradigm shift from teacher-centred to learner-centered approach in the Ethiopian schools context and give appropriate/relevant recommendation to the concerned bodies so as to encourage learners' engagement in their Geography learning-teaching processes.

### **3.2.2 Learner-centered Teaching Approaches**

According to Ademe (2010:89) while conventional approach is strongly dominated by the teacher and institutional constraints, learner-centered approach is designed to provide the learner with a highly flexible system of learning which is geared to individual life and learning styles. In such approach, the teacher and the institution play supportive rather than central roles. Nayak and Rao (2004:213) also claim that the teacher primarily becomes the facilitator who structures learning opportunities and encourages students to work together to build a common body of knowledge.

Thus, to make the teaching-learning process active, giving attention in the classroom to the student as the centre of learning is an important concern of teachers. Collaborative learning among students, between students and instructors, and between classes, independent learning and generative active learning techniques such as fieldwork, seminar, discussion, debate, group projects, case study, simulation, role playing exercises, sharing of solutions problems or answer for review questions for exams, collaborative compositions of essays, stories or research debates, and role play games.

Active learning requires that students are engaged and active in the learning process. The teacher is coach or facilitator, guiding students through activities but letting them to take control of the learning event itself (Brown & Duguid, 2000:133). The implementation of learner-centered learning and teaching approaches has its own principles and the main principles are indicated below.

### **3.2.2.1 Principles of Learner-centered Teaching**

Learner-centred teaching represents a fundamental shift from the teacher being the centre of attention in the classroom to the student as the centre of learning (Wiemer in Baker College, 2005:2). According to this author, learner-centered teaching follows seven principles stated as follows:

Principle 1: Teachers do learning tasks less, but learners do more of organising the content, generating the examples, asking the questions, answering the questions, summarising the discussion, solving problems, constructing diagrams.

Principle 2: Teachers do less telling but learners do more discovering, stop telling students everything and hold them accountable for knowing or asking.

Principle 3: Teachers do more design work based on effective assignments and activities, increase learners' skills, motivate learners' involvement and participation, designing work that is

related to the discipline/real world, and develop content knowledge, learning skills and awareness.

Principle 4: Faculty does more modeling for learners by demonstrating how an expert approaches a learning task.

Principle 5: Faculty does more to get learners' learning from and with each other through collaborative and cooperative groups for learning.

Principle 6: Faculty creates climates for learning and an environment of accountability.

Principle 7: Faculty does more with feedback, providing formative feedback separate from evaluation and grading.

Thus, from the afore-mentioned principles, it is possible to suggest that in the teaching-learning process learners are responsible for their learning and constructing knowledge by themselves through varied learning activities and active participation. Therefore, teachers should facilitate the teaching-learning activities by creating conducive teaching-learning atmosphere through varied teaching-learning strategies and motivate students' activity through immediate and constructive feedback.

The aforementioned principles of teaching should be integrated to the learner-centred curriculum and practiced in the real learning and teaching activities of Geography education via varied methods of teaching. Thus, the nature of learner-centered curriculum is discussed below.

### 3.2.2.2 Learner-centered Curriculum Structures

Good (1973:157) defines curriculum as a general overall plan of courses and learning experiences offered to students under the guidance of the school. Curriculum planning and development focuses the main components such as themes, units, objectives, contents, teaching methods, instructional materials and evaluation techniques. It also explains the arrangements of topics from the learners' immediate environments to the other parts of the country (Olusegun, 2006:35). Research on educational practices and projections about future needs in society contributes to the current understanding of the structure of school curriculum in general and in Geography curriculum in particular.

It is argued that learner-centered approach should be integrated with curriculum in general and Geography curriculum in particular (Gardner, 2011, Wikipedia, the free encyclopedia). Gardner (2011:2 Wikipedia, the free encyclopedia) also provides reasons why learner-centered approach should be integrated with the curriculum; it strengthens learners' motivation, promotes peer communication, builds teachers and learners relationships, promotes discovery/active learning and gives responsibility for one's own learning.

Thus, so as to provide relevant contents, objectives, methods, teachers' role and students' activities in the curriculum, the curriculum designers should consider the unique nature of each discipline. Therefore, Geography as a discipline has its unique nature that curriculum designers should take in to consideration. Regarding the nature of Geography, Olusegun (2006) quoted as:

*Geography is versatile, expressive, creative, problem-solving, practical and intellectually stimulating school subject. The distinctive characteristics of Geography, i.e. central concepts, logical internal structure, methodology, integrative nature and transparent interdisciplinary effects make it an integral part of any worthwhile school curriculum (Olusegun, 2006:28).*

Supporting the above claim, Demirci, Kesler and Kaya (2010:53-54) explain that Geography curriculum has to be revised and encourage teachers to implement many different activities in



their lessons by utilising new methods and techniques. Demirci, Kesler and Kaya (2010:59) also posit that the development of a new secondary school Geography curriculum is a milestone which not only carries many new concepts and methods in to Geography lessons, but also triggers a big debate about text books. Debates such as the content organisation based on learners' experience and in line with the three domains, content integration (vertical and horizontal), activities that stimulate learners' engagement, teachers' role as a facilitator, appropriate media, appropriate time allocation and tools of measurement and evaluation are reflected in the curriculum development process.

Therefore, both Geography curriculum and Geography textbook should incorporate identical contents in line with the three domains; cognitive, psychomotor and affective. In the same vein, Glathorn and Jailall (2000:53) also explain that curriculum should emphasise deep rather than broad coverage of important areas of knowledge, authentic and contextualised problems of study, and problem-solving that stresses skills development as well as knowledge acquisition. It is argued, therefore, that like other disciplines' curriculum, Geography curriculum should also consider individual differences, closely coordinate and selectively integrate subject matter, and focus on results or standards and targets for student learning. Gibbs (in Ramsden, 1992:21) indicates that curriculum must aim to stimulate inquiry, analytical and creative approach encouraging independent judgment and critical self-awareness.

In the same vein, Olusegun (2006:29) expresses that the senior secondary school Geography curriculum developers have elected from the outset to emphasise among others a conceptual approach. This is based on the belief that a conceptual approach to senior secondary school Geography, supported by compatible problem-solving procedures and appropriate instructional resources, tempered by the good sense of an enthusiastic and patient Geography teacher, should assist the pupils to learn Geography more efficiently and effectively. Therefore, for its proper implementation, the development of Geography curriculum for the senior secondary school should pass through many stages, such as general objectives, rationale, evaluation and recommendations for the implementation.

Since Geography curriculum is the benchmark for its implementation, it should be developed in line with learner-centered approaches. Unless, it will be difficult to practice varied learner-centred strategies and continuous assessment techniques as well. As a result, lecture method will be the dominant learning-teaching method and summative assessment will be dominant assessment tool as well.

Thus, Geography curriculum should be developed in line with the learning strategies that encourage learners' engagement, indicate utilisation of resources and guides the teachers how they facilitate the learning-teaching processes, how to assess their students' progress and these paved the way to practice learner-centered approaches in the teaching- process of Geography. Therefore, different methods of teaching that teachers practice in learningtheir learning and teaching process in general and in Geography learning and teaching process in particular are briefed below.

### **3.3 Methods of Teaching**

Methods are general ways in the implementation process that answers the question of how. The methods to be employed depend on the objectives and content of the lesson (Adem, 2010:371). In a good lesson a variety of strategies are used to create a range of learning opportunities suited to the need of all learners (Fisher, 1998:37). The different ways that the teacher uses to impart knowledge, skill, values and attitudes to the students during the teaching-learning process are referred to as teaching methods. Such methods include discussion method, project method, inquiry method, lecture method, questioning, activity-based method, field-trip and laboratory technique among others (Olusegun, 2006:65). Desta (1984:19-20) adds that the methods of teaching range from the traditional lecture to the present innovative ones like computer assisted instruction, the project study methods, laboratory demonstration method, simulation method, the role-play method, and the discussion method.

In spite of the presence of these varied methods of teaching, the choice and use of one or more of them by the teacher depends on certain variables. The objective of the lesson, the contents/subject, the particular knowledge skill or attitude to be developed, the size and nature

of the content to be taught and the skill and ability of the teacher in selecting and using the method are worthy to mention as variables. Thus, teachers should select methods that make learners active participants. Such methods are more elaborated below.

### **3.3.1 Active-Learning Methods**

#### **3.3.1.1 The concept of Active Learning**

According to Simons (1993:19), all learning is active in a certain sense, but some kinds of learning are more active than others. Here, active learning is defined in one sense to mean that the learner uses opportunities to decide about aspects of the learning process. A second definition of active learning connects it to mental activity in another sense. It refers to the extent to which the learner is challenged to use his or her mental abilities while learning. Thus, active learning on the one hand has to do with decisions about learning and on the other hand making active use of thinking. Fisher (1998:53) defines active learning as:

*Active-learning refers to an activity where learners are given a marked degree of autonomy and control over the organisation conduct and direction of the learning activity, and used to improve level of motivation, recognise inter-disciplinary nature of real-life situations as well as improve the level of students' understanding (Fisher, 1998:53).*

Ademe (2010:208-209) writes that active learning methods are strategies which make learners active participants during the teaching-learning process. Thus, Ademe (2010:209) and Aydin (2010:277) mention the common types of active learning techniques that are effective for Geography teaching – questioning, group learning, problem-solving, field visits, cooperative learning, project-based learning, action oriented and others. Scardamalia and Bereiter (2006) claim in this case that the 20<sup>th</sup> century has been a prolonged attempted shift from didactic knowledge transfer approaches to learning such as Stenhouse's (1975:68-72) objective-led education, to approaches which rely on active learning. These authors argue that active-learning is a process where activities are learner-driven through their own interest, resulting in the generation of knowledge and competences which come through the students' own interaction

with the learning focus. This suggests that active learning is any process whereby students develop an understanding through their own investigation, rather than acting as passive recipients of information. This is further emphasised by Stein (2005:37) who argues that active learning is directly linked to active participation of motor areas in memory networks inside the brain. He therefore states:

***Children made to sit and listen passively to teacher without active involvement in teaching themselves have consistently been shown to lag behind children who are encouraged to actively find out things for themselves (Stein, 2005:37).***

In learner-centered approach the student has an opportunity to pose problems, asking questions, collecting information, finding solutions to problems and answering questions through his/her effort/activity (Nayak & Rao, 2004:109-110). At this stage, the teacher has to encourage the child's participation in the above process through activities. The whole process of teaching-learning is geared towards the development of the learner's creativity and thinking. Therefore, student engagement represents a key component of student success. Engagement is defined here as the extent to which students are contributing to activities such as active learning, involvement in enriching educational activities, seeking guidance from staff or working collaboratively with other students (Coutes, 2005:26).

The concept of approach describes a qualitative aspect of learning. It is about how people experience and organise the subject matter of a learning task; it is about 'what' and 'how' they learn rather than how much' they remember (Ramsden, 1992:40). To support this assertion, Fisher (1998:132) and Desta (1984:19-20) elaborate that the chalk-and-talk method of teaching curriculum contents where the teacher talks and the students listen is gradually being changed to learning by doing and discovery method. In these methods, the teacher creates opportunities for the students to find out knowledge for themselves through different activities.

Trad in Fisher (1998:28) is quoted as saying:

***You can lead a horse to water, but you can't make it drink.***

***You can send a kid to college, but you can't make him think.***

Therefore, as many scholars mentioned, the learner-centered approaches create opportunities for the learners to engage in the teaching-learning process based on their experiences and learning styles. Nevertheless, many teachers perceive teaching is simply the transformation of information to the students by forgetting the experience and individual differences as well as engagement of learners. In the same vein, Desta (2004:77) confirms:

***Knowledge of the subject matter is considered as the sole determinant factor for effective teaching. For many staff, teaching means, in the main, the act of the teacher and the main requirement for teaching is knowledge of the subject matter...But considering teaching as merely as a matter of knowledge of the content is fallacious. Such understanding excludes the central person, a student who is in reality the main actor. Unless teachers understand and appreciate this, it will be difficult to make the teaching-learning process student-centered and to encourage the deep approach to learning (Desta, 2004:77).***

Active learning strategies in Geography curriculum and letting learners to learn by doing and the positive attitude of Geography teachers towards active learning strategies are decisive factors for effective Geography lessons (Demirci, Kesler & Kaya, 2010:61-62). Similarly, Aydin (2011:278) writes that Geography teaching should take place in the active participation of students in the process of holistic and meaningful relationships, while processing topics and multi-dimensional thinking skills. Thus, Geography has a rich history of developing and utilising a wide range of learning approaches which reflect many of the principles of active learning, such as teachers do learning tasks less, teachers do less telling, teachers do more design work, faculty does more modeling, faculty does more to get learners learning from and with each other use collaborative and cooperative groups for learning, faculty works to create climates for learning

create an environment of learner accountability, and faculty does more with feedback provide formative feedback separate from evaluation and grading. This may well be the direct consequence of a subject attempts to help students understand the complexity of the world around them.

Active learning in social studies in general and in Geography courses in particular involve providing the opportunities for students to participate meaningfully by talking, writing, reading and reflecting on the content, ideas, issues and concerns of an academic subject (Abdelraheem & Al-Rabane, 2005:2). Unfortunately, many classrooms continue to be dominated by a single medium and this is usually the printed textbooks. This dominance prevents teachers from reaching all students. Instead, it forces them to cater to those who find the texts accessible and this creates barriers for those who do not. There are further consequences in the sense, even though students are able to access the text; there are certain learning elements that are missing. Some missed elements include media that are more suitable for communicating particular kinds of learning materials are not readily available and shortage of media and tools relevant to students' preferences and proclivities that play an important role in deepening and enhancing students' engagement and learning experiences.

### **3.3.1.2 Why Active Learning?**

Why is there so much attention to active learning nowadays? Simons (1993:21) states that many reasons have been forward for greater emphasis on active-learning as opposed to more passive forms of learning. These reasons have to do with learners, teachers, schools and society at large. Active learning can be more attractive for learners than passive forms of learning because learners can be more motivated and interested when they have a say in their own learning and when their mental activity is challenged. Being involved in the decisions about learning, learners can connect to their prior knowledge and their own needs and interests. In finding out things independently, they can follow their own interests and motivation. In the process they can learn to make decisions and take responsibility about and for their learning.

Active learning is important to provide opportunities for learners to learn. Learners can learn how to learn by thinking how to do it. Giving them responsibility for parts of the decisions that can or should be made is one way to teach them how to learn. In earlier times one thought that learning to learn and active learning were for the elite. Only the best students were expected to learn actively. For the weaker students highly structured forms of teaching were to be preferred, so was the conventional wisdom. Palincsar and Brown in Simons (1993:21) argued as:

*However, in the "learning economy" this picture has changed. Several empirical studies have found that active learning and learning to think are especially important for the weaker students. When the weakest students learned how to think, their learning performance improved drastically (Palincsar and Brown in Simons 1993:21).*

Moreover, Simons (1993:21) states that active learning is also important for teachers. Motivational and burn out problems of teachers may disappear when students are more motivated and more active learners. Besides, teaching will become more intellectually challenging when students are learning actively and independently. Thus, the importance of active-learning methods in the teaching-learning process of Geography is discussed below.

### **3.3.2 Active learning Methods in the Teaching of Geography**

In any pedagogical practice, the teacher engineers the learning environment through his/her skill, tactical and technical ways of imparting knowledge, skill, values and attitudes in learners (Olusegun, 2006:64). These ways are christened teaching methods. Therefore, teachers as the facilitators and motivators of instructional communication process and should carefully select appropriate teaching methods or strategies which are suit for effective teaching-learning process. According to Olusegun (2006:68-101), the major teaching methods that are relevant to the teaching-learning process of Geography and make students active participants include discussion, project method, inquiry method, questioning method, problem solving method, simulation, role-play, field work, map reading, activity method/learning by doing, laboratory technique are among others.

### **3.3.2.1 Types of Active Learning Methods in Teaching Geography**

#### **3.3.2.1.1 Fieldwork method in Geography Teaching**

Fields are any places where supervised learning can take place via first-hand experience outside the constraints of the four-wall classroom setting (Lonergan & Andresen, 1988:64). Fieldwork consists of planned and organised educational tour or visit or journey or excursion to a particular place or point of interest outside the classroom or even outside the school, such as factories, universities, museums, the real environment/geographical locations, etc (Brown *et al*, Lawton and Gordon in Ademe, 2010:254). It should be considered that the range of fieldwork delivery methods and styles varies considerably within Geography has changed rapidly since the 1950s (Lonergan & Andresen, 1988:64-66). Foskett cited in Oladimeji (2011:468) suggests that acquisition of ‘real’ geographical knowledge takes place in the field is through interaction of physical, mental and emotional experiences.

Fieldwork is vital method of Geography teaching, yet the problems and difficulties of organising and running an effective field course are increasing at the present time (Clark, 1996; Gardiner, 1996; in Kent, Gilberson & Hunt, 1997:327). Olusegun (2006:94) supports this idea thus:

*In the teaching of Geography, fieldwork has been observed as a “sine qua non” aspect of the Geography teaching because it fosters and even enhances observational skills and critical thinking ability in the learners. Therefore, the importance of fieldwork, types of fieldwork, organisation of fieldwork and learning outcomes in fieldwork are important points and should be considered (Olusegun, 2006:94).*



Yet Oladimeji (2011:467) states:

*In philosophy, Geography education is aimed at understanding the dimensions of man environment relationships. This can best be understood through experience and observation. Thus, fieldwork method of teaching in Geography education is enhancing the continuous comprehension of the changes in our environment to initiate practical understanding and permanent learning processes of geographical changes (Oladimeji, 2011:467).*

Fieldwork method of teaching enhances pupils' learning outcomes through experimental learning (Foskett & Lidstone in Oladimeji, 2011:468). Though studies have shown that due to the introduction of subjects like Social Studies, fieldwork is being suppressed; its relevance is being valued in some countries, especially developed countries (Oladimeji, 2011:468). Elsewhere like Nigeria the importance of fieldwork method of teaching in the curriculum is much less well established in the secondary education. In the USA and many states in Europe the role of fieldwork has been marginal. In most less developed countries resource constraints have made fieldwork development very low (Oladimeji, 2011:468-469).

Kent *et al* (1997:320) postulate that fieldwork is widely regarded as an essential method of Geography education and teachers generally agree that it represents one of the most effective and enjoyable forms of teaching and learning for teachers and learners. Field studies provide the opportunity to experiment with a wide variety of different modes of content delivery and have a valuable role as a vehicle for the integration of many theoretical and practical concepts taught in Geography. Similarly, Wiley and Humphreys (1985:126-127) and Kern and Carpenter (1986:182-183) claim that abstract topics and higher level concepts are easier to teach in the field than in class.

Regarding the importance of outdoor learning-teaching strategies, O'Mahony (2000:12) is quoted as stating:

*Fieldwork is a necessary and basic part of teaching Geography, and we should be familiar with all existing school policies regarding these activities, or assist in drawing up new and useful policies that can facilitate such teaching techniques (O'Mahony, 2000:12).*

Geography fieldwork involves the study of geographical phenomenon in the actual site of the occurrence of the phenomena (Olusegun, 2006:95). It entails actual geographical study or work carried out in the field. It is usually any outdoor lesson which enables the learners the opportunity to observe physically and practically what they might have learnt in-door. Olusegun (2006:95) further gives stress about fieldwork as:

*In Geography teaching emphasis is now on problem solving rather than the prescriptive and expository, hence, the development of such skills like observation, recording, data analysis and the use of information to solve problems are very crucial indeed. In fieldwork, all these will be developed (Olusegun, 2006:95).*

Geographers must be able to address issues concerning the value of fieldwork and enhancing the process of teaching and learning through fieldwork (Oladimeji, 2011:469). This helps in arriving at the general cognitive and affective relevance of fieldwork in Geography and the need to allocate precious time and resources to it at the secondary level to promote environmental education for sustainable development.

### **3.3.2.1.2 Types of Fieldwork Activity**

According to Kent, Gilbertson and Hunt (1997), in practice there are many types of activities available in the field characterised by different forms and levels of involvement of students and teachers. However, according to Olusegun (2006:95) there are three major types of fieldwork, field observation, field teaching and field research. From the students' pointview all field

activities can be placed somewhere on two continua: between observation and participation; between dependency and autonomy.

#### **3.3.2.1.2.1 Observational Fieldwork**

As Olusegun (2006:95) explains that field observation takes place in the form of field trips or excursion and it affords learners the opportunity to observe the phenomena that they have learnt in the classroom, or it enables them to physically and practically learn new things the teacher introduces. It enhances the development of learners' ability to observe vividly and to familiarise with the events or phenomena within their immediate environment.

Observational fieldwork is an important way of sharing staff experiences and ideas which is comparatively easy to organise (Kent, Gilbertson & Hunt, 1997:315). The principal problem with observational field-work is that students are only required to be there with the result, their attention may actually be elsewhere, especially if the experience is protracted (Kent, Gilbertson & Hunt, 1997:315).

The simplest and most traditional form of observational field-work is Cook's Tour or look-see field visit. It is a rapid but extensive tour or survey of anything. This approach is based on observation and description and very dependent on lecturers lecturing in the field with a minimum of student participation. Starting around 1950-1970 field-work was largely the traditional 'look see' or 'Cook's Tour'. Students often describe this type of activity as boring, since they are not deeply engaged in the field-work process (Brown in Kent *et al.*, 1997:320), but it can be useful at the start of a field course, to give a first overview of unfamiliar landscape.

Kent *et al* (1997:325) argue that carefully directed observation can be a useful learning method, especially if reinforced by on-site tutorial style discussion. Students become more engaged, typically, if the tour is on foot and they have the opportunity to converse with staff rather than being lectured at (Gold in Kent *et al.*, 1997:325). This format allows students to make some observations independently and to follow up informal issues they find interesting with staff.

Unfortunately, during observational field-work, if unprompted, students often miss key features, and if prompted, have a tendency to reproduce the staff viewpoint.

Moreover, Olusegun (2006:95) captures the importance of fieldwork as:

*Field observation usually takes the form of field trip or excursions. It affords the learners opportunity to observe physically the phenomena they have learnt in the classroom. Field observation enhances the development of the learners' ability to observe vividly and to familiarise with the events or phenomena within their immediate environment (Olusegun, 2006:95).*

#### **3.3.2.1.2.2 Field Teaching**

As Olusegun (2006:95) points out that field teaching involves the actual teaching of an aspect of Geography at the site examples can be found. For instance, if a teacher wants to teach a topic, such as local industries; pottery, she/he can take the learners to the place where pots are being produced, i.e. pottery, so that learners can observe and even collect necessary first-hand information about pottery from the potters or pot-makers. It makes teaching practical, concrete and simple because learners will be able to see things themselves.

#### **3.3.2.1.2.3 Field Research**

According to Olusegun (2006:96), field research is usually being carried out for experimentation or testing so also for data collection. It is usually being organised on the assumption of possible explanation for a given problem under study. Field research is a testing ground or a laboratory for teaching ideas or concepts. Thus, learners should be properly informed the phenomena under study is being observed and studied for a purpose illustration of more general idea, law or concept.

#### **3.3.2.1.2.4 Advantages of Fieldwork**

Fieldwork has many advantages in education in general and in the teaching of Geography in particular. Thus, Olusegun (2006:98), Ademe (2010:254) and Oladimeji (2011:328) mention the following benefits that the lessons will draw from a carefully and properly planned fieldwork;

- Learners are being trained in the crucial skills of keen observation, data collection and analysis through fieldwork, which are difficult to develop in the classroom;
- Learners are acquainted with real life situations, problems and potentials of their environment, thus they become more familiar with and have better appreciation of their environment;
- Learners get to begin to study and interpret what is relevant to their lives;
- Learners develop a concrete understanding of what they have learnt in the classroom, having also observed them in their actual form;
- Learners are relieved of the boredom of classroom work as field work stimulates them and makes the lesson more practical and realistic;
- Learners are motivated to learn and develop a more positive attitude towards their environment; and
- Learners are encouraged to develop logical and critical thinking and which helps the learners to develop interest in the study of geography as a discipline.

However, effective learning cannot be expected just because students are taking into the field (Lonergan & Andreson, 1988:70). Fieldwork should be efficient and viable within time and budgetary constraints. Debriefing of students is a critical but often neglected part of fieldwork (Pearson & Smith in Kent et al., 1997:322). This is because fieldwork is often so complex and time-limited, there is insufficient time for students to relate theoretical concepts to what they actually experience (Lonergan & Andresen in Kent *et al.*, 1997:322).

#### **3.3.2.1.2 Enquiry-based Learning**

In the inquiry method of learning students inquire into the nature of the problem with a view of finding some answers why the problem exists (Ademe, 2010:153). Moreover, Joyce and Weil in Ademe (2010:153) claim that inquiry method of teaching-learning can be seen as a process for

investigating, searching, explaining, interpreting of unusual, unknown, or problematic situations. Dunkin and Brown et.al in Ademe (2010:154) declare thus:

*In the real situation, the inquiry method can be employed, by the presentation of puzzling situation, such as “why the number of female students is so small at Adama University? Teacher and students then engage in a Socratic – type dialogue in which together they derive a list of potentially relevant causes, analyse or formulate alternative hypotheses/ suggested solutions, test the hypotheses by collecting data, draw conclusions, and apply the conclusions in new situations to new data and develop meaningful generalization (Ademe, 2010:154).*

The inquiry method of teaching can be employed to any subject area at higher institutions and secondary schools (Ademe, 2010:155). Furthermore, Olusegun (2006:67) depicts that inquiry method involves probing, inquiring, investigating, analysing, discovering, evaluating, questioning, thinking, searching, exploring, experimenting, collecting with a view of acquiring, updating or validating knowledge and information in Geography. It is simply a method of finding out something (Olusegun, 2006: 67).

To give stress to the significance of inquiry method, Olusegun (2006) quoted that:

*Meanwhile, in the Geography teaching, the use of inquiry method arises out of the curiosity or inquisitiveness of the user. Therefore, the children in elementary schools have little or no problem with this problem because they are full of curiosity already. However, in the post primary school institutions, the teacher has to put in greater effort in imparting the skill of how to find out and think through the regular use of the inquiry method (Olusegun, 2006: 68).*

Five steps can be adapted during the process of inquiry method. These include problem identification, information and data collection, data analysis, solution is derived from the analysed data or information and generalization is made from derived solutions (Olusegun,

2006:68). The success or failure of inquiry method depends on the competence, enthusiasm and confidence of the teacher. Like other methods of teaching, inquiry has both good and bad qualities (Ademe, 2010:155). Thus, Dunkin and Brown *et al* in Ademe (2010:155) summarise the advantages inquiry method are:

- It tends to generate enthusiasm and interest in the learners.
- It enhances critical thinking and skills of scientific investigation.
- It facilitates the how of finding answers to problematic situations.
- It permits teachers to model the values and attitudes essential to an inquiry mind such as in reasoning skills (observing, collecting and organising data, identifying and controlling variables, formulating and testing hypotheses), learning autonomy, verbal expressiveness, tolerance for ambiguity and persistence.

Olusegun (2006:67) has explained that the main benefit of inquiry method is to motivate learners on how to reason and think themselves. Therefore, the acquisition of these skills are very crucial and in fact important for the learners of today and the future who will face a myriad of unprecedented socio-political and economic problems to which they will have to find solutions to with a credible creativity. However, inquiry method is time consuming and more suitable for intuitive and creative learners (Ademe, 2010: 155).

No method is absolutely advantageous; each method has its own drawback. Therefore, though inquiry method is time consuming, it has great advantage to produce active and creative learners. Therefore, Geography teachers better to tolerate the time constraint and practice inquiry method to make learners responsible on their own learning and become problem solvers.

### **3.3.2.1.3 Discussion Method**

According to Olusegun (2006:66), discussion method is one of the most comprehensive methods of teaching in the sense that every teacher is daily involved in one form of discussion or the other either within or outside the school. Moreover, Olusegun (2006:66) discusses the method as:

*Although, the unconscious use of discussion methods permeate all the other teaching methods with perhaps the exception of the ideal lecture method. However, what is required is the deliberately planned and systematic use of the discussion method. Discussion can take various forms in the teaching of geography. It can be between and among small or large group of learners during which they contribute, share examine, question, accept or reject ideas or opinions (Olusegun, 2006:66).*

Furthermore, Olusegun (2006:66) explains that the usefulness and effectiveness of the varieties of discussion methods can be considerably enhanced if adequate instructional materials are effectively utilised with the adoption of the methods. For instance, to examine, share, clarify, simplify, accept or reject ideas easily, may use relevant instructional materials. However, the teacher's role in the discussions is facilitating, guiding, assisting, moderating, contributing and aiding the discussion.

#### **3.3.2.1.4 Project Method**

Olusegun (2006:66) depicts that project method involves doing something practical, concrete and realistic which is self-motivated, self-generated and self-directed by the learners themselves. The role of the teacher is to inspire and guide the learners in the process of carrying out the project. The teacher should try to encourage learners on projects that help to clarify concepts in Geography. According to Olusegun (2006:67), the following are examples where projects can be carried out:

- Interpreting and making or drawing maps;
- Constructing, model, drawing, painting, label, identifying, observing, etc.;
- Collecting rocks, fruits, materials and specimens of geographical interest;
- Visiting factories, market places, zoos, museums, etc and reporting one's experiences; and
- Excursion or field trip to geographical interesting places.

Olusegun (2006:67) also lists the benefits of project method as:



- It enables the learners to make use of their total experience;
- It involves the use of initiative and responsible thinking by the learners;
- It provides for the manipulation of and experimentation of ideas by the learners;
- It gives the learners the opportunity for satisfaction from seeing the product of their efforts;
- It makes learning practical, realistic and pragmatic;
- It encourages spirit of cooperation, leadership and dignity of labour in the learners.

However, if the project method is not meaningfully and properly executed it may lead to time loss, energy wasted, and in fact financial loss. Therefore, this method needs proper planning and scrupulous execution for a worthwhile feedback (Olusegun, 2006:67).

#### **3.3.2.1.5 Questioning Method**

Olusegun (2006:68) asserts that questioning method is one of the most superficially used methods in teaching and in fact, badly employed. It is a principal technique of teaching which can possibly be referred to as versatile (Ademe, 2010:210). Moreover, Olusegun (2006:68-69) points out that many teachers seldom use this method but they encourage questioning by the learners to cover up their inadequacies particularly concerning their knowledge of the subject matter. Nevertheless, at all levels of educational system and in all subjects, a whole lesson could be taught from the inception to the end through questioning method. This may not exclude any other appropriate and suitable methods that can be combined with the questioning technique. However, the following important factors should be considered in utilising this method (Olusegun, 2006:69):

- The questions should deal with important areas of the subject matter;
- The questions must be of the learners' interest;
- The questions must not be too difficult or easy for the learners to answer;
- The questions should be logically expressed and structured;
- The development of the habit of critical thinking in the learners should be encouraged through the questioning;
- Questioning should encourage both teachers and learners in the preparation for every lesson;
- It should be able to enhance both the teacher's and learners' performance.

### **3.3.2.1.6 Activity Method**

Olusegun (2006:69) has elaborated that activity method enables learners to learn by doing, to imitate and be engaged in self directed activity; to study at site, to observe and recognise, to imagine and create etc. The method also serves as the link between the classroom learning and the outside world. That is, learners are in constant touch with the outside world through this method. It is akin to project method, field trip and laboratory techniques.

Moreover, according to Olusegun (2006:69), in the Geography teaching the following can be embarked on during activity method:

- Map drawing and interpretation;
- Modeling of object, physical features, e.g. with paper machine;
- Collection of materials, e.g. sample of rocks, crops, soil, minerals, etc.;
- Watching Films on geographical interesting topics or documentations;
- Writing reports on visited places during field trips or excursions;
- Visiting places of geographical interest;
- Gathering information through interview on interesting topics, e.g. market survey or prices of commodities.

According to Olusegun (2006:69-70), it can be deduced that in any classroom situation it is advisable to employ eclectic methods of teaching to make teaching-learning activities more effective and exciting to the learners. For example, project method is combined with activity, discussion, questioning, inquiry methods, etc. However, Olusegun (2006:70) mentions the following factors which should be considered while selecting the teaching methods to be adopted:

- The subject matter or topic to be taught;
- Learner's characteristics, such as age, ability levels, gender, etc.;
- The instructional objectives;
- The instructional materials available;
- The time and place of the lesson.

### **3.3.2.1.7 Simulation Method**

Olusegun (2006:89) has depicted that simulation method is the creation of a model of real world in which participants assume different roles to make decisions about the issues raised as well as the difficulties encountered. It is usually designed to be mirror of the existing or inherited problems of man in the society. Therefore, simulation generally creates opportunities for exploration, experimentation, commitment and decision making aimed at resolving important issues and problems affecting man in his environment.

Thus, Olusegun (2006:89) further strengthened that if simulation method is effectively used in teaching Geography, learners will derive the following benefits:

- Develop insight in to the issues and problems of the society;
- Experience the outside world in a lively, interesting and realistic manner;
- Become more actively involved in the teaching-learning process;
- Give free expression to their creative abilities without any inhibitions;
- Direct and manage their own affairs by themselves;
- Learn to be flexible in their thinking approach to the situation;
- Interact closely with one another;
- Develop internal motivation for school work;
- Understand the nature and value of decision making in the daily lives of individuals and nations;
- Demonstrate and develop their qualities of leadership.

Furthermore, Olusegun (2006:90) has indicated the three types of simulation that can be employed in the teaching of Geography:

1. Historical simulation: It involves past events and real people who have lived in the past. It resembles role-playing except that such simulations are patterned to resemble as closely as possible what happened in the past. It serves as a model of what actually happened.
2. Simulation activities: These are students playing roles in the classroom except that such roles focus on current events in the society. Such activities present certain basic social,

economic or political operations which learners study and learn through direct experiences and practices.

3. Simulation games: They are also called operational games. They are with a define structure and procedure which try to stimulate some real environmental process or situation in their playing. Generally, such games attempt to reveal certain basic structures in the environment by simplifying them so that attention could be paid to them. In the teaching of Geography, many of these have been developed and produced commercially. For example, the jigsaws puzzle game on Maps. This game is highly educative for primary and secondary school learners particularly in teaching them the states and capitals. The states of certain continental maps will be dismantled and then the learners will be asked to fix them one by one at their correct locations.

However, the following considerations should be taken cognisance when using either locally or commercially produced simulation games in the classroom situations (Olusegun, 2006:90-91).

Simulation games:

- Clarify the statement of the objectives for the simulation;
- Properly explain the requirements of simulation in terms of skills, knowledge and responsibilities to the learners;
- The roles to be played should be determined, identified as well as purposefully distributed among the learners;
- The rules should be observed by the participants and should be simple, straightforward and very few;
- The procedure to be followed from the beginning to the end should be borne in mind, in that too detailed operating procedure is bound to lead to loss of simplicity and easy manipulations by the participants, concentration on the achievement of accuracy at the expense of play ability, loss of freedom to explore possibilities by the participants;
- The teacher should always play the role of a guardian or facilitator throughout the game;
- The major concepts to be incorporated into the play for teaching-learning purpose should guide the design of the games;

- The materials used for the game should be simple, handy, harmless and easy to improvise and manipulate;
- The time allocated for the play should be reasonable and sufficient;
- Opportunity should be given to the participants to criticize any aspect of the game and to proffer useful suggestions;
- Evaluation of the games or play should be done at the end of the play to determine the achievement level and the reflection of the real world situation.

### **3.3.2.1.8 Role-play Method**

It is a spontaneous dramatisation of the contextual life or total personality of the persons or posts whose roles are being played and it involves initiating, acting, imagining and emotional display (Olusegun, 2006:91). Olusegun (2006:91) considers the following benefits learners can derive from role-playing method in the teaching of Geography:

- It enables the learners to appreciate the fact that the demands of a role as well as the situational characteristics of the environment within the role played often make people to behave the way they do;
- It gives learners the opportunity to express their thoughts and feelings freely;
- It helps to develop cooperative attitudes and the desirable social behaviors as well as the consequences of doing otherwise in the learners;
- It is also used to resolve conflicts and settle problems as well as to teach certain feelings of emotion which might be difficult for the teacher to express or demonstrate by him/her.

Finally, Olusegun (2006:92) claims that the relevant of role-play method too many Geography contents as:

*In the Geography teaching, there is a good number of problems that could be treated through the use of role-playing method most especially in the teaching of human geography. Such problems include agricultural problems, population problems, rural-urban migration problems, industrial problems, etc. However, both the teacher and the learners should prepare properly for the effectiveness*

*of the methods in the teaching of geography or in general teaching-learning process (Olusegun, 2006:92).*

### **3.3.2.1.9 Map work Method**

Olusegun (2006:100) asserts that map is a “sine qua non” tool of geographers. It is even christened the short-hand language of the geographers. Through maps, geographers are able to capture and abstract a great deal of detail. Maps are indispensable tools to Geography teachers. Therefore, map work is considered to be a very important aspect of Geography teaching at the secondary school level.

Moreover, Summer in Olusegun (2006:100) posits that the teaching of map work particularly map reading in the secondary school is very important because it is argued that 99% of geographical information could be put on map. Furthermore, Thower in Olusegun (2006:101) has depicted that in all human endeavors, maps are very useful tool that every literate person should be able to recognise and appreciate the facts that a map conveys and reading a map as easily as a book, without consciousness of the reading process should be therefore highly desired.

Map work skills and competences required in Geography teaching. Olusegun, (2006:101) explains that all maps specialised visual language is used to pass across the information to the users. This visual language is known as conventional signs or symbols or key or legend. It is this first language that the learners should begin to learn so as to comprehend and interprets the map. Learners or map users should also be able to select information because each map is peculiar with its own degree of complexity.

In the same vein, Egunjobi in Olusegun (2006:101) declares:

*Skills that are also essential for acquisition by the learners in map work include the ability to perceive three-dimensional features depicted as two dimensional on*

*maps and the ability to give description of human activities of the area covered by the map in a simple form.*

Therefore, So as to provide appropriate skills for Geography learners, Geography teachers better to get continuous professional improvement and refresher trainings.

### **3.4 Ongoing Professional Development of Geography Teachers**

Professional development is useful for all teachers in general and Geography teachers in particular. It provides up-to-date information to the teachers particularly in teaching methodology. In other words, professional development courses refresh and motivate teachers to their teaching profession.

In the same vein, Darling-Hammond and Bransford (2005:3) view that professional development can overcome shortcomings that may have been part of teachers' pre-service education and keep teachers abreast of new knowledge and practices in the field. Teachers need to develop practices that provide the flexibility for experimentation and innovation in the classroom so that they become adaptive experts. It is important for Geography teachers to think and attend about training of methodology which relates the science of Geography (O'Mahony, 2000:12). Geography teachers should be encouraged from time to time and sponsored for refresher courses to keep in touching with current trends in their field (Oladimeji, 2011:471).

Regarding this, Craig, Kraft and Plessis (1998:75) argue that ongoing training for teachers can have a direct impact on learners' academic achievement. Case studies from Bangladesh, Botswana, Guatemala, Namibia and Pakistan have provided evidence that ongoing professional development, especially in the early years after initial preparation and then continuing throughout a career contribute significantly to student learning and retention.

Effective professional development may take many forms. It should not be limited to formal off-site kinds of programs. Dialogue and reflections with colleagues, peer and supervisor observations and keeping journals are all effective ways for teachers to advance their knowledge.

A program in Kenya, the Mombasa School Improvement Project, built on this approach to professional development, showed that teachers supported with in-service as well as external workshop training improved significantly in their abilities to use child-centred teaching and learning behaviors (Anderson, 2000:27). In India, an effective program used interactive video technology to reach a large number of teachers who sought professional development. This program found that training using interactive video technology led to improved conceptual understanding of pedagogical issues for a large number of geographically dispersed teachers (Maheshwari & Raina in United Nation Children's Fund, 2000:15).

Teacher education, both pre-service and in-service, should help teachers develop teaching methods and skills that take new understandings of how children learn into account. Just curriculum should be child-centred and relevant, so should instructional methods. The limited view of teaching as presentation of knowledge no longer fits with current understandings of how and what students learn. Instead, instruction should help students build on prior knowledge to develop attitudes, beliefs and cognitive skills as well as expand their knowledge base. Teaching styles in many places, however, remain traditional, teacher-centred and fairly rigid or even authoritarian (Carron & Chau in UNICEF, 2000:15).

According to Asgedom et al (2006:30-31), when Ethiopian teachers were interviewed about the degree to which their teaching practices were learner-centred and relevant to students' lives, about half said they link lessons to the daily life of pupils at least once a week. Almost two-thirds, however, said they never or rarely ask pupils what their interests are, or what they would like to learn. Greater understanding of student-centred learning can be encouraged through programs, such as the Bangladeshi project on "Multiple Ways of Teaching and Learning." Begun in 1994, the projects improve teachers' skills by integrating brain research and multiple intelligences theory as the foundation for understanding children's needs.

Teaching methods that facilitate active student learning rather than promote passivity and rote memorisation represent a new paradigm for many teachers. Ethiopian government acknowledges the key role that teachers play in education quality and places teachers at the core of its quality



improvement strategies. The recently initiated Teacher Education System Overhaul Program of the Ministry of Education guides teacher education in Ethiopia (Ministry of Education 2005b:18-19).

Supporting the afore-mentioned concept; teachers' paradigm shift and effort, Sallis (1993:49) points out that the more people built capacity the more they can perform. Since teachers are crucial, educational policy makers should get a clear picture of who their teachers are, how they view their role in the system and the type of incentives, regulations, training that will increase their effort and capacity to improve the teaching-learning process.

In addition to Sallis, Mona and Tesfaye (2000:3) point out that among other problems, the quality of teachers is most crucial because quality personnel in the future should not only have knowledge; more important, they should be devoted and faithful to their tasks. The influence on students by the teacher's own personality cannot be replaced by any teaching material. Moreover, Meyer and Gayle (1996:43), Deer (1996:16), Carnoy (1999:83-84) and Minguan (1989:89) have pointed out that teachers' motivation influences the quality of education. Demotivated teachers were found to be the cause for the poor quality of teaching (Noah & Morrison, 1997:134).

Geography teachers should be motivated by means of special remuneration (Olusegun, 2006:33). So as to deliver quality of education, quality of teaching and teacher effort is essential. The highest quality teachers, those most capable of helping their students learn, have deep mastery of knowledge in their subject matter and pedagogy (Darling-Hammond in UNICEF, 2000:13). Moreover, Asgedom *et al* (2006) have confirmed the positive impact of teachers' subject matter knowledge, pedagogical skill, resources, conducive work environment and access of training to the quality of education.

***Quality of teaching can take place only when teachers have the necessary qualifications, support from the school management, teaching/learning***

*resources, a conducive work environment, and regular teacher improvement opportunities (Asgedom et al, 2006:10).*

The preparation that teachers receive before beginning their work in the classroom, however, varies significantly around the world and even within the least developed countries. In Cape Verde, Togo and Uganda, for example, 35% to 50% of students have teachers who had no teacher training. Yet in Benin, Bhutan, Equatorial Guinea, Madagascar and Nepal, over 90% of students do have teachers with some form of teacher training. In these latter countries, most teachers have, at least, lower secondary education; this contrasts sharply with Cape Verde and Tanzania where over 60% of students have teachers with only a primary education (Postlewaithe in UNICEF, 2000:17).

Perhaps as a consequence of too little preparation before entering the profession, a number of teachers in China, Guinea, India and Mexico were observed to master neither the subject matter they taught nor the pedagogical skills required for good presentation of the material. This affects educational quality since student achievement, especially beyond basic skills, depends largely on teachers' command of subject matter and their ability to use that knowledge to help students learning (Carron & Chau in UNICEF, 2000:14). Besides other factors, teachers' incentives affect education quality because they are one form of motivation.

Regarding teachers' incentive and motivation, Noah and Morrison (1997:134) express that demotivated teachers were found to be the cause for poor quality teaching. It is possible to say that better motivated teachers provide better methodology of teaching and other services. The UNESCO (1966) identified salary as the main factor affecting the interest of teachers' particular importance. In addition to sufficient preparation and incentive, teacher competence and school efficiency are significant factors to bring the intended education quality. Thus, more is discussed below about the positive impact of teacher competency and school efficiency on learners' achievement.

### **3.5 Teachers' Competence and School Efficiency**

Whether a teacher uses traditional or more current methods of instruction, efficient use of school time has a significant impact on students' learning. Regarding this, Carron and Chau and Fuller *et al* in UNICEF (2000:14) discuss that teachers' presence in the classroom represents the starting point. Many teachers face transportation and housing obstacles that hinder them from getting to school on time and staying until school hours are over. Many teachers must hold second jobs, which may detract from the time and energy they expend in the classroom. They may miss school altogether.

A study in China, Guinea, India and Mexico found that nearly half of teachers interviewed reported being absent at some point during the previous month requiring other teachers to compensate for them or leaving students without instruction for the day. Next, when teachers are present, learning occurs when teachers engage students in instructional activities rather than attending to administrative or other non-instructional processes (UNICEF, 2000:38).

The opportunity to learn and the time on task have been shown in many international studies to be critical for educational quality. Finally, some schools that have been able to organise their schedules according to children's work and family obligations have seen greater success in student persistence and achievement. The quality of a school and teaching of the individual teacher is higher in schools that are able to make more efficient use of the available time of its teachers and pupils. Under teacher competence and school efficiency, diversity of processes and facilities are considerable parts. Thus, more elaboration is indicated below about the significant of diversity of processes and facilities for the implementation of learner-centred approach in Geography lesson.

#### **3.5.1 Diversity of Processes and Facilities**

According to Nayak and Rao (2004:213), virtual classroom is an environment that facilitates student-centred learning. Moreover, Fisher (1998:39) confirm that resources are any devices that assist the teaching and learning Geography and to develop skills, attitudes and knowledge,

understanding and application to a learner, Thus, major resources in the teaching of Geography include the world at first hand as well as charts, drawings, pictures, film, model, book, machines, maps, globes, school facilities and buildings intended to facilitate learning.

Thus, school facilities are important resources for effective curriculum implementation in general and Geography curriculum in particular. Moreover, Carron and Chau (1996:73) explain that the presence and heterogeneous uses of resource in schools are one manifestation of how school organisations can become more diversified to meet the needs, interests, experiences and realities of individuals and groups, i.e. how schools can become more student-centred. However, most Ethiopian preparatory schools lack resources.

As a result, it is difficult to carry out active and live teaching-learning process in geography session. It is difficult to demonstrate and substantiate classroom lessons in rural secondary schools of Ethiopia that do not have enough or no laboratory, teaching aids and reference materials (Wolyie, 2006:11).

Therefore, Geography is one of the subjects offered in the school and its quality may be affected by a shortage of resources and facilities.

### **3.5.2 Instructional Media**

According to Olusegun (2006:78), instructional media are no doubt the information carriers that facilitate teaching-learning process. However, the selection and utilisation of these media should be based on certain criteria such as learners' characteristics, instructional objectives, suitability, technicality, practicability, and the teacher's capability among others. Maps, Globes, charts, models, meteorological instruments, etc, should be employed in the teaching of Geography to facilitate and make learning more effective and interesting.

It is well known among educators that utilising educational experiences and concrete examples in the learning-teaching process raises learners' active participation. The teaching of Social Sciences course in general and Geography courses in particular have always been based on a

limited knowledge base and as a result, the utilisation of instructional media among teachers often relied on traditional applications of technology (Abdelraheem & Al-Rabane, 2005:1). There is, however, a tremendous potential for technology to be fostered as a tool that can overcome the traditional isolation classroom setting, provide access to expensive resources and improve overall productivity (Abdelraheem & Al-Rabane, 2005:1).

To achieve the desired outcomes with the utilisation of technology the teaching of the Social Studies courses must focus not only on making teachers competent at using such technology, but at the same time, promote strategies that enable the integration of technology that enhances teaching and learning. Bolick *et al* (in Abdelraheem & Al-Rabane, 2005:1) point to the precarious relationship between teaching of Social Studies and utilisation of technology. Moreover, Bolick *et al* (in Abdelraheem & Al-Rabane, 2005:1) argue that “...while some educators have been fascinated by the potential of technology to enhance teaching and learning, many schools have lagged behind in assimilating technology and instruction.” Other scholars like Berson & Shaver (in Abdelraheem & Al-Rabane, 2005:1) express doubt that technology will ever incite instructional reform in the Social Studies. It is stated that this conflict “... has led some researchers to conclude Social Studies in general and Geography in particular has not appreciably changed as a result of technology” (Martorella, 1997; White, 1997).

### **3.5.3 Availability of Instructional Media**

Olusegun (2006:74) indicates that teachers should be sure if the materials to be used for the media production are available locally or are commercially produced, or if they are available in the school or they have to be loaned from other school or pedagogical resource centre in the locality. Sometimes the teacher can improvise them. Unavailability of instructional media has an adverse effect on the quality of education. The shortage of reading materials (textbooks, reference books, journals, etc.) and other pedagogical resources such as maps, charts, graphs, globes, etc discourages teachers from carrying out their duties effectively (Doll, 1989:51). Similarly, Olusegun (2006) further argues that:

*Federal and state governments should provide adequate funding to schools so that Geography as a core subject should have the basic equipment and materials that would enhance its teaching. Geography contents can be effectively taught with basic equipment and materials which necessarily call for setting up a Geography laboratory in every school. The laboratory should be equipped with furniture designed for practical learning and storage of materials like maps, rock specimens, models, tapes, surveying chains, prismatic compass, etc (Olusegun, 2006:32).*

Fisher (1998:42) and Olusegun (2006:73-74) also depict that an inventory of the basic teaching aids and their sources including improvised types should be made available to schools in appropriate places. This indicates that the success of curriculum implementation in general and Geography curriculum implementation in particular is often depended on the availability of equipments and instructional media in the school. Scarcity of instructional media as the main problem is enormously wide spread in many developing countries while it seems insignificant in developed countries.

Many studies have shown that among other things, education system in the developing countries is characterised by the in availability and in adequacy of instructional materials. Supporting this idea, Chapman and Mahlak (1997:13) state that the inadequacy of instructional materials jeopardises the ability of developing countries to provide quality education. Thus, many schools in developing countries today face critical shortage of instructional materials and consequently the quality teaching and learning continues to be low.

As the preceding discussion has shown, instructional materials are required for successful curriculum implementation. Particularly for the learning activity of young children, the availability of tangible instructional materials such as models, real objects, maps, charts, graphs etc, have paramount importance. In spite of this fact, in developing countries like Ethiopia these requirements are often unmet. As a result, in developing countries curriculum implementation in

general and Geography curriculum implementation in particular is seriously hindered by the shortage of instructional materials.

Moreover, Asgedom (1999:64) strongly argues that in the Ethiopian situation there is a strong deficiency in preparation, provision and utilisation of instructional materials. The system seems to have given more attention to other quality aspects of education such as preparation of teachers, classrooms, class size, etc. In most schools students have been observed to learn in a passive way. The teachers have identified a shortage of materials for instruction as the most critical problem. It is however, observed that limited effort is made to address this problem at the school level.

#### **3.5.4 Instructional Media in Geography Teaching**

Instructional media are all forms of materials with which students and teacher interact for the purpose of teaching and learning Geography. The materials can be concrete; models, specimens, simulators, objects which allow physical involvement of learners; or abstract which allow imaginative involvement of learners with minimum effect of physical involvement or sensory involvement (Asgedom, 1999:53). Instructional media are the information carriers used in any teaching-learning process to facilitate the rate of learning in the learners and to enhance the teacher's presentation (Olusegun, 2006:72). Olusegun (2006:73) mentions the reasons why instructional media should be used in Geography teaching-learning process:

*Instructional media are useful to focus learners' attention, motivate learners' interest, reinforce verbal and visual messages, elucidate verbal concepts, save teacher's time for presentation, provide source of information and authority, provide experience, make learning more practical, exciting and lively, for easy evaluation of the learning outcomes, to make the learning more permanent and real in the learners' mind (Olusegun, 2006:73).*

Generally, Olusegun (2006:74-75) argues that instructional media are no doubt the information carriers that facilitate teaching-learning process. However, the selection and utilisation of these

media should be based on certain criteria such as learners' characteristics, instructional objectives, availability, suitability, technicality, practicability of media and the teacher's capability to utilize are among others.

### **3.5.5. Types of Instructional Media for use in Geography Teaching**

Olusegun (2006:76) has selected world globe, maps, models, charts, diagrams, pictures, realia/real objects, meteorological instruments, projected media, chalkboard and printed media as the media for utilisation in the teaching of Geography. Published materials such as textbooks, journals, activity packs and photo cable resource sheets; audio-visual materials such as video and television programmes, slides and music, models, artifacts and collected materials are the main resources that teachers use to support their teaching to help pupils' learning in Geography (Lambert & Balderstone in Abdelraheem & Al-Rabane, 2005:3). A major part of school Geography is about what can be seen in the world and Geography teachers rely heavily the visual material to bring reality in the classroom (Rubinson, 1987:37).

## **3.6 Conclusion**

Review literatures are the corner stone to understand the problem globally and locally. Therefore, I have gone through different literatures which were done in different corners of the world and in the Ethiopian context which are directly related to my topic under study. Thus, the literatures reviewed in this text are factors that directly affect the practice of learner-centred approaches in the teaching of Geography. Hence, this chapter included introduction, approaches of teaching (teacher-centred approach and learner-centred approach), learner-centred curriculum structure, methods of learning, active learning methods in learning Geography, advantages and disadvantages of active learning of Geography teaching, ongoing professional development of Geography teachers, teachers competence and school efficiency, instructional media in teaching Geography and instructional media to be used in Geography teaching.



## **CHAPTER 4**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **4.1 Introduction**

As Kothari, (2004:31) defines that a research design is the arrangement of conditions for the collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. In fact, the research design is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data. As such the design includes an outline of what the researcher will do from writing the hypothesis and its operational implications to the final analysis of data.

Thus, this chapter presents variables of the study, the design of the study; the methods of data collection and strategies, population, samples and sampling techniques, data collection instruments, data collection procedures, reliability and validity of data, ethical protocol of the study and conclusion of the study.

#### **4.2 Independent and Dependent Variables of the Study**

Independent variables for this study were lecture methods of teaching, resources, learners' interest to learn through learner-centred methods, the school syllabus, teachers resistant for paradigm change from teacher-centred to learner-centred approach, assessment techniques. And dependent variable of this study was constructivsts' approaches of instruction. It includes learner-centred methods, learners' engagement, and continuous assessment techniques as well as facilitators commitment.

### Independent Variables

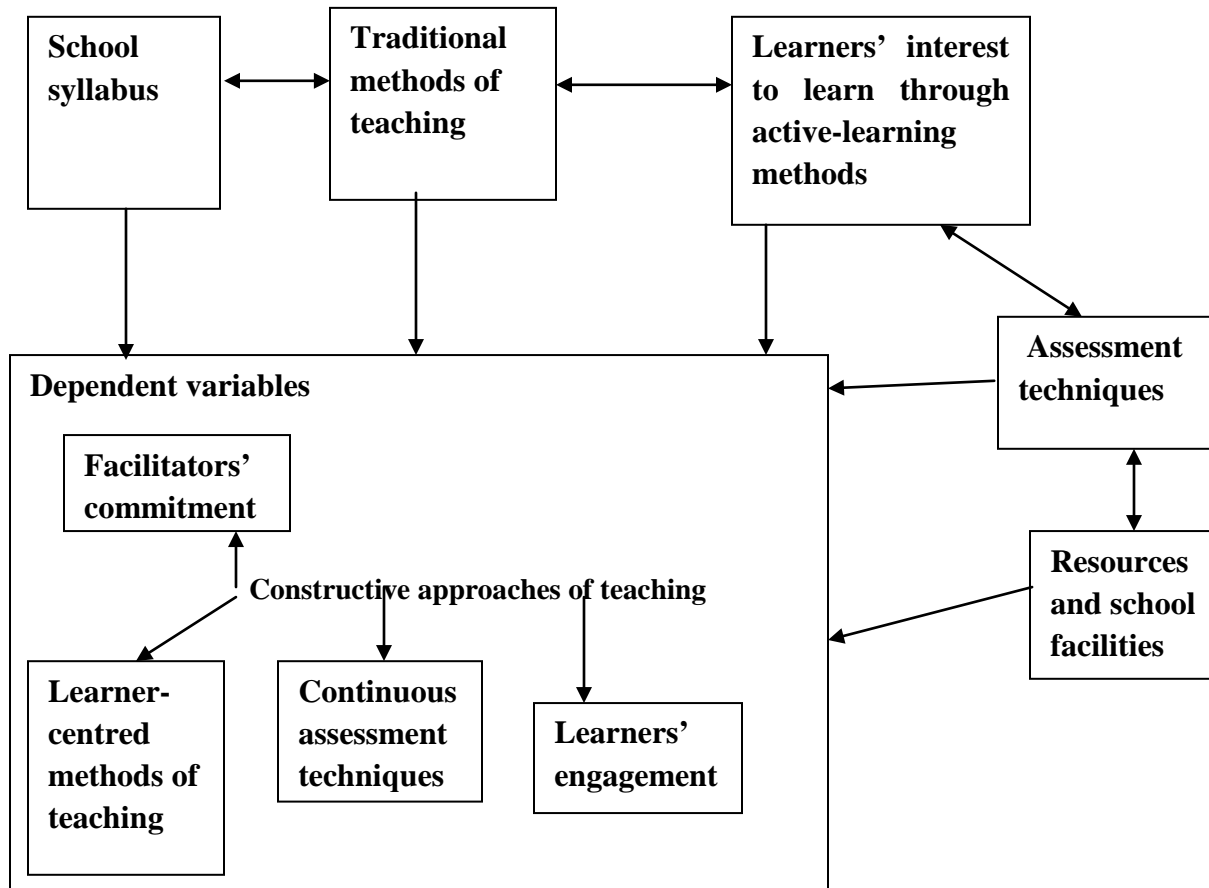


Fig 4.1: Conceptual frame work

### 4.3 Research Design

Since the main purpose of this study was to identify the reasons of incompatibility between Ethiopian education policy and the practice of learner-centred approaches in Geography education in higher education preparatory secondary schools of Ethiopia, a descriptive survey research design was used. This design helped to reveal factors that hinder the practice of learner-centred approaches in Geography education in general and in higher education preparatory secondary schools Geography education in particular.

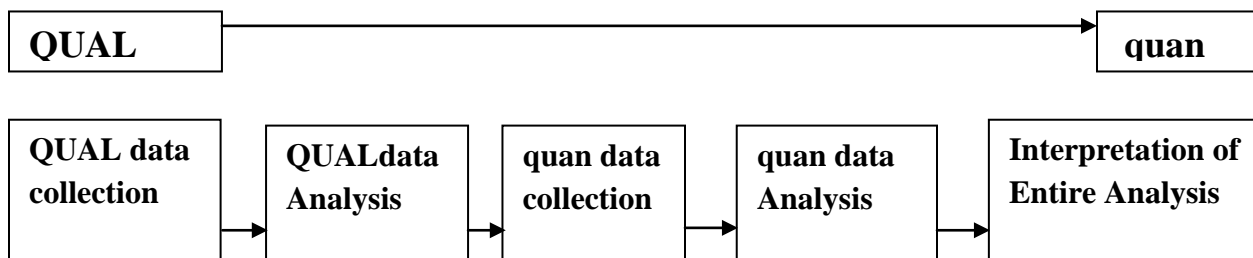
Thus, this study employed a mixed-method approach. Therefore, to get empirical evidences and in-depth insights from participants' perspective as well as to establish the validity and reliability of data, Qual-quant approach was used. Qualitative method was applied first to collect data from

small samples (teachers and departmental heads) through interviews as well as first-hand information through observation and evidences from technical documents/rosters and analysed these data through narration.

Whereas quantitative method was used next to qualitative method and the data was collected from large number of sampled learners. And these data were analysed through descriptive statistics such as frequency, percentage and mean. As Creswell (2009:211) explains, this type of strategy of mixed design is known as sequential exploratory strategy.

*Sequential exploratory strategy involves a first phase of qualitative data collection and analysis, followed by a second phase of quantitative data collection and analysis that builds on the results of the first qualitative phase. Weight is generally placed on the first phase, and the data are mixed through being connected between the qualitative data analysis and the quantitative data collection. At the basic level, the purpose of this strategy is to use quantitative data and results to assist in the interpretation of qualitative findings (Creswell, 2009:211).*

Generally, I have chosen the mixed approach with the notion that any inherent weaknesses of the qualitative method would be offset / counterbalance by the quantitative method and vice versa. One main advantage of the mixed approach is that it draws conclusion based on corroborated evidences. Thus, by using multiple methods of data collection and techniques of data analysis I offered opportunity to confirm, cross-validate and corroborate qualitative evidences with quantitative evidences.



**Figure 4.2: Sequential exploratory strategy of mixed method design (Source: Creswell, 2009:209)**

Capitalisation in figure 4.2 indicates a weight or priority on the qualitative or quantitative data, analysis and interpretation in the study. Thus, in my case (QUAL/quan) notation implies that the quantitative methods are embedded within qualitative design.

Supporting the aforementioned approach, Vanderstoep and Johnston (2009:179) indicate that researchers are bridging the gap between qualitative and quantitative methods in numerous ways. A qualitative report might acknowledge a small size sample but attempt to prove that the sample is representative of similar people within the population from which it was drawn.

Similarly, we see studies that employ a triangulation of methods (i.e., using more than one methodology to address the same question) to establish the validity and reliability of the data; for example, a quantitative survey combined with qualitative interviews. Moreover, we see qualitative studies that employ both quantitative and qualitative analyses of data, such as the reporting of descriptive statistics for particular themes or patterns discovered in narrative data. Therefore, mixed methods can secure both qualitative and quantitative data so as to maximize the accuracy of research findings.

Regarding the values of mixed methods design, Vanderstoep and Johnston (2009:179) declare:

*Thankfully, new scholars are being trained in both qualitative and quantitative methods. Despite the political minefield of scholarly argument over which approach is more rigorous and worthy, the best approach is to learn the procedures and processes of both quantitative and qualitative approaches. It makes sense that a mix of methodologies, maximizing the benefits of both approaches, will provide the richest and most complete understanding of the phenomenon under study. It also makes sense that the research question should dictate the mode of inquiry. Some questions lend themselves to quantitative approaches, other questions lend themselves to qualitative approaches, and some questions call for an integration of both qualitative and quantitative methods (Vanderstoep & Johnston, 2009:179).*

Denzin and Lincoln (2003:12) and Kothari (2004:5) explain that qualitative research is concerned with qualitative phenomenon, i.e. phenomenon relating to involving qualities of entities and studies things in their natural setting, seeing things through the informants' perspective favoring interviews as well as open-ended questionnaire. Quantitative research on the other hand is based on the measurement of quantity or amount. It is applicable to phenomena that can be expressed in terms of quantity or amount and favors close-ended questionnaires as well as structured interview.

In general, quantitative research specifies numerical assignment to the phenomenon under study, whereas qualitative research produces narrative or textual descriptions of the phenomenon under study.

#### **4.3.1 Data Collection Methods and Strategies**

The term data refers to the kinds of information researchers obtain on the subjects of their research (Fraenkel & Wallen, 2000:127). Kothari (2004:95) explains that the task of data collection begins after a research problem has been defined and research design plan chalked out. While deciding about the method of data collection to be used for the study, the researcher should keep in mind two types of data viz., primary and secondary.

Thus, researcher would have to decide which sort of data he/she would be used for his/her study and accordingly he/she will have to select one or the other method of data collection. The methods of collecting primary and secondary data differ since primary data are to be originally collected, while in case of secondary data the nature of data collection work is merely that of compilation.

Data sources are compulsory so as to get pertinent and reliable information for the study. Thus, the data sources for this study were both primary and secondary sources. Primary data was collected from department heads, teachers and students through interviews, questionnaires and from observation of class room teaching and school resources. But secondary data was collected from technical documents: rosters and national examination results. Therefore, teachers dominated teaching strategies were explored via semi-structured interview with teachers and

departmental heads as well as through questionnaires with learners, through observation and documents (learners' results/roster).

Supporting the above data gathering strategy, Kothari (2004:95-96) depicts that primary data can be obtained either through observation or through direct communication with participants and through questionnaire with respondents. Moreover, Kothari (2004:111) has noted that secondary data may be either published data or unpublished data. Thus, relevant journals, books, research reports, documents, magazines and syllabus were used for this study.

Interview questions were developed, edited and finally administered to 12 participants (teachers and departmental heads) in a face-to-face contact. Moreover, an observation checklist was developed to gather data through observation. Then observation took place on the practice of teaching methods, on the utilisation of instructional media during the actual teaching activities and learners activities while the learning and teaching process was going on. Moreover, after the class room observation, the availability of resources in the class room and in the school was also observed. In addition to interview and observation, I gathered secondary data from technical documents, such as rosters and national examination results.

Furthermore, questionnaires were initially developed in view of the basic research questions of the study. Before they were administered to the respondents, a pretest was carried out in 01 higher education preparatory secondary school to ensure language clarity and appropriateness of items contained in the questionnaire (items validity) and the questionnaires' reliability was examined through Statistical Package for Social Sciences (SPSS). As a result, the reliability of the questionnaires was .77.

Thus, the questionnaire items were reliable. Moreover, experts of curriculum and English language from Wollo University and Dessie College of teachers' education were consulted and appropriate amendments were made in the questionnaire items. And additional revisions were made depending on the comments that were collected during the try-out. These questionnaires were set in their final forms and its' the objective was explained to the participants to maximize

the return of questionnaires. Finally, questionnaires were administered to 199 learners in the appropriate time after my supervisor gave me additional comments and gained consent from South Wollo education bureau.

#### **4.3.2 Population, Samples and Sampling Techniques**

A population is all items in any field inquiry and sample is the representative of the total population in order to produce a miniature cross-section (Kothari, 2004:4). A sample design is a definite plan for obtaining a sample from a given population. It refers to the technique or the procedure the researcher would adopt in selecting items for the sample. Sample design may as well lay down the number of items to be included in the sample, the size of the sample. There are many sample designs from which a researcher can choose. Some designs are relatively more precise and easier to apply than others. Researcher must select a sample design which should be reliable and appropriate to his/her research study (Kothari, 2004:58-60).

Accordingly, population of this study were all grade 11&12 social science learners (976) and their Geography teachers (6) as well as all (6) Geography departmental heads of the six sampled preparatory secondary schools under which the study was conducted. Thus, to determine the sample size from the population, I employed both probability sampling and non-probability sampling techniques for quantitative and qualitative data respectively. Therefore, 1 zone was selected through purposive sampling technique and 6 preparatory secondary schools were selected through simple random sampling technique.

Generally, I selected six higher education preparatory secondary schools out of twenty preparatory schools through simple random sampling technique. Moreover, the sampled learner participants were selected through simple random sampling technique. Thus, 20% (199 learners) out of 976 (the total number of learners) were randomly selected the sample of the study. From the total number of learners (976) 524 were males and 452 were females. To keep gender equitability/to avoid gender bias, proportional samples were taken from both groups of learners (males and females).

Accordingly, I took 107 samples from male learners (524) and 92 samples from female learners (452). The reason for using random sampling technique in determining the sample was to give equal chances for every higher education preparatory secondary schools and learners to be included under the study. Almost all the sampled learners were from Amhara ethnic group because the sampled schools and sampled populations were found in Amhara regional state of Ethiopia.

Since schools have different number of sections with different number of learners in each section, I employed quota sampling technique to take sample learners from each school, each grade levels and each section. Therefore, learners from each school were again selected through simple random sampling based on their ratio. Moreover, I took all Geography teachers and Geography departmental heads from the selected preparatory schools through purposive sampling technique because they were pertinent sources and their number was manageable for data analysis. Therefore, 12 participants were intentionally selected (6 Geography teachers and 6 Departmental Heads). Generally, the participants' distribution of the study is displayed in the following table.



**Table 4.1: Distribution of Participants**

No	Schools	Population in each sample school									Samples will be taken								
		Geo. Deptal heads			Learners			Geo. teachers			Geo. Deptal heads			S. Sc. Learners			Geo. teachers		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
1	School 01	1	0	1	127	178	305	1	0	1	1	0	1	26	36	62	1	0	1
2	School 02	1	0	1	88	59	147	1	0	1	1	0	1	18	12	30	1	0	1
3	School 03	1	0	1	124	81	205	1	0	1	1	0	1	25	16	41	1	0	1
4	School 04	1	0	1	93	69	162	1	0	1	1	0	1	19	14	33	1	0	1
5	School 05	1	0	1	49	36	85	1	0	1	1	0	1	10	8	18	1	0	1
6	School 06	1	0	1	43	31	74	1	0	1	1	0	1	9	6	15	1	0	1
Total		6	0	6	524	452	976	6	0	6	6	0	6	107	92	199	6	0	6

These were the 6 higher education preparatory secondary schools in south Wollo Zone of Amhara state of Ethiopia in which the study was conducted.

### 4.3.3 Data Collection Instruments

Fraenkel and Wallen (2000:127) have explained that the collection of data is an extremely important part of all research endeavors; the conclusions of a study are based on what the data

reveal. As a result, the kind(s) of data to be collected, the method(s) of collection to be used and the scoring of the data need to be considered with care.

In order to triangulate the data and to fill the drawback of each tool, I employed varied data gathering instruments, such as interview, observation sheet and document analysis sheet and questionnaire. Using varied tools is useful to fill the limitation of one tool by the other and to triangulate the responses of each tool. Triangulation refers to the use of multiple instruments of data collection (Denzin in Mouton & Marais, 1988:91).

#### **4.3.3.1 Interview**

Semi-structured interview was employed to collect in-depth insights from teachers and Department Heads concerning the suitability of the designed teaching methods in Geography syllabus to learner-centred learning, availability of resources for Geography education, the dominance teaching methods practiced by Geography teachers, the awareness and interest of Geography teachers to use learner-centred methods of teaching, the utilisation of instructional media by the teacher, the awareness and interest of the learners to learn through learner-centred methods and the compatibility of education policy with actual practice. A semi-structured interview approach is particularly well suited to uncovering the meaning structures that participants use to organise their experiences and make sense of their worlds (Hatch, 2002:94).

#### **4.3.3.2 Observation**

Open and uncontrolled observation were conducted to gather first-hand information about the compatibility of education policy and actual practice of Geography education, the availability of school resources, the methods of teaching practiced by Geography teachers, the utilisation of instructional media by Geography teachers and learners' rate of participation. In open observation I noted down key points about actual classroom interaction, classroom facilities, textbook distribution, library facilities, Geography laboratory, and Geography room with its facilities, Geography departmental room and pedagogical centre with its Geography resources/teaching materials on their natural setting.

Many researchers perceive observational data as a vital set of data in the study of curriculum implementation. For instance, Gesten and Carrin as cited in Tekilu (2005:25) explains that despite the widespread use of interview techniques to assess and measure levels of an educational practice, the most valid way is direct observation. Moreover, Merriam (1988:102) cited in Kothari (2004) also contends observational data gives a first-hand account of the situation under study and when it combined with interviewing and document analysis, show a holistic interpretation of the phenomenon being studied. Furthermore, Kothari (2004:96) indicates the merits of observation as:

*Under the observation method, the information is sought by way of investigator's own direct observation without asking the respondent. For instance, in a study relating to consumer behavior, the investigator instead of asking the brand of wrist watch used by the respondent, may himself look at the watch. The main advantage of this method is that subjective bias is eliminated, if observation is done accurately. Besides, the information obtained under this method relates to what is currently happening; it is not complicated by either the past behavior or future intentions or attitudes. Furthermore, this method is independent of respondents' willingness to respond and as such is relatively less demanding of active cooperation on the part of respondents as happens to be the case in the interview or the questionnaire method (Kothari, 2004:96).*

#### **4.3.3.3 Document Analysis**

I also analysed technical documents such as education policies and curriculum materials (syllabus, teacher's guides) to address the questions regarding the designed teaching methods and identified resources the teaching of Geography, the assessment techniques and the education policy with the Geography curriculum implementation and rosters of grade11 and 12 learners' result to understand the influence of the problem on learners' academic performance and to compare learners' school examination result with Ethiopian University Entrance Examination (EUEE), national examination result to understand learners' academic status at national standard.

#### **4.3.3.4 Questionnaire**

Moreover, I employed close and open-ended questionnaires to collect data from large number of learners' participants (199). Questionnaires are appropriate to secure data from large samples at a time and give freedom for the participants to express their ideas and opinions freely without interviewer's bias and answers are in participants' own words (Kothari, 2004:100-101). Thus, questionnaires were employed to address questions regarding learner-centred approaches, the utilisation of instructional media, availability of school resources, the teaching methods dominantly practiced by Geography teachers and its suitability for the learners learning and evaluation tools utilised by Geography teachers.

Accordingly 54 questions were prepared (51 close-ended and 3 open-ended questions). The answer continuum of the questionnaire was on a Likert scale ranging from 1 to 5. After the reliability was tested via SPSS in the pilot test and certain comments and amendments were made by 2 lecturers of English language department and 2 lecturers of pedagogical science department of Wollo University and Dessie College of Teachers' Education as well as constructive comments of my supervisor were incorporated.

#### **4.4 Data Collection Procedures**

The data gathering instruments were prepared from different sources, works and by reviewing different literatures. When data gathering instruments were prepared, I secured instruments' validity and reliability. Validity is the appropriateness, meaningfulness and usefulness of the inferences researchers make based on the data they collect. Reliability refers to the consistency of scores or answers from one instrument to another and from one set of items to another (Fraenkel & Wallen, 2000:169).

Thus, to secure the validity of the questionnaire, critical comments were taken about the concept and grammatical construction of the questionnaires and interview questions from experienced lecturers of Wollo University and Dessie College of Teachers' Education who are from the department of education and English language. Accordingly 2 English language experts and 2 curriculum experts went through the questionnaires and gave me constructive comments. As

result, 7 questions were canceled out and the close ended questions were reduced from 58 to 51 and 5 open-ended questions were reduced in to 3. Moreover, they corrected grammatical errors on 5 questions and an amendment was made. Furthermore, they gave me comments on the grammatical constructions on 3 structured interviews questions.

Likewise, to secure questionnaires reliability, a pilot test was conducted in school 01 Preparatory Secondary School before the actual study was conducted. Thus, the questionnaires were distributed to 62 learners to be filled. Then the questionnaire papers were collected and organised for reliability test. At last and SPSS was employed and computed the reliability of the items. The reliability of the questionnaire was tested using Cronbach's Alpha. And, the test result indicated the reliability is .77. Some amendments were made on some items; the number of items was modified, items with similar message were merged, language clarity was edited and difficult words were avoided. Finally, after I incorporated my supervisor's constructive comments and suggestions, the questions were administered to the sampled learners. After administration, the questionnaires were reserved and attached at appendix part.

#### **4.5 Data Analysis**

According to Kothari (2004:122) data analysis is referring to the computation of certain measures along with searching for the patterns of relationship that exist among data groups. Analysis of data in a general way involves a number of closely related operations which are performed with the purpose of summarising the collected data and organising in such a manner that they are answering the research question(s). It is a systematic search for meaning (Hatch, 2002:148).

Data that were gathered through interviews, open-ended questionnaire (recorded in tape recorder) and observation were analysed inductively using narrations and descriptions through words, phrases and statements. However, data that were gathered through documents were organised in the form of tables and analysed deductively by units via percentage. Whereas, data that had been gathered from the respondents through close-ended questionnaire were edited,

coded, classified, tabulated, organised in the form of tables and analysed through frequency, percentage and mean.

#### **4.6 Reliability and Validity**

Validity is the appropriateness, meaningfulness and usefulness of the inferences researchers make based on the data they collect. Reliability refers to the consistency of scores or answers from one instrument to another and from one set of item to another (Fraenkel & Wallen, 2000:169).

Thus, I ensured the validity and reliability of this research through multiple methods, adequate representative samples from the population, using, multiple data gathering instruments and by preparing adequate number of samples of items or questions represent the content to be measured and appropriate formatting of instruments by keeping clarity of printing, clarity of direction, size and type of items, adequacy of work space, using appropriate language and placing of checkmark.

#### **4.7 Ethical Protocol**

Ethics refers to a question of right or wrong (Fraenkel & Wallen, 2000:41). It deals with how those who participate in the research are being treated and how data are handled after being collected (Vanderstoep & Johnston, 2009:12-13). Thus, I recognised participants' consent through:

- Clear explanation about the details and the purpose of the study to the participants.
- Informing participants as they have the right to withdraw from the study at any time.
- Made it clear to the participants that no incentives will be offered or granted due to lack of sufficient funds.

Then I submitted a thorough plan for data collection and sample of any instruments that I administered to participants. And to protect plagiarism, I acknowledged the idea and data of others from whom, when and where it was taken.

Moreover, so as to protect participants from harm or risk, I removed their names from all data collection forms. This was done by substituting number or letter to each subject instead of their names. Thus, all participants were remained anonymous and confidential. In this study, participants' identity also protected through the use of aliases for all participants referring their names (assigning cod for their identity).

To strengthen the above ethical concept, Fraenkel and Wallen (2000:42-43) and Belmont (1979) in Vanderstoep and Johnston (2009:12) explain that the three very important issues that every researcher should address are the protection of participants from harm, ensuring of confidentiality of research data and the question of deception of subjects. Protecting participants from harm is the most important ethical consideration of all. Thus, it is fundamental responsibility of every researcher to do all his/her power to ensure that participants are protected from physical or psychological harm, discomfort, or danger that may arise due to research procedures.

Regarding confidentiality, Fraenkel and Wallen (2000:43) have also argued that the names of the subjects should be removed from all data collection forms. This can be done by assigning a number or letter to each subject can be asked to furnish information anonymously.

## **4.8 Conclusion**

Research design and methodology are the core steps of the research process because all research activities are carrying out in line with the chosen research design and methodology. Thus, researchers should select appropriate research design and methodology relevant to their research topic, epistemology/paradigm and research approaches.

Accordingly, this study employed mixed method; qualitative and quantitative research approach. The qualitative design was employed to gather pertinent data from teachers and Departmental Heads through interview as well as observation. But quantitative design was employed to gather pertinent data from learners and from documents such as learners' rosters. This chapter also indicated that the population of the study was all social science learners, Geography teachers and

Geography departmental heads of the six sampled higher education preparatory secondary schools.

It was also mentioned that to take samples from the population both purposive and random sampling techniques were employed. Thus, data gathering instruments that I employed were interview, observation, documents and questionnaires. Furthermore, the chapter elaborates the different activities in the data collection procedure. Finally, the validity and reliability of data were tested by curriculum and language experts and pilot test respectively. And in the ethics part of the research varieties of strategies were identified that I followed to secure the participants from risk/danger or harm.



## **CHAPTER 5**

# **PRESENTATION OF RESULTS FROM INTERVIEWS AND OPEN-ENDED QUESTIONNAIRES**

### **5.1 Introduction**

This chapter presents the finding of qualitative qualitative data analysis of the study. As Kothari (2004:122) defines the term analysis refers to the computation of certain measures along with searching for patterns of relationship that exist among data-groups. Hatch (2002:148) states:

*“Data analysis is a systematic search for meaning. It is a way to process qualitative data so that what has been learned can be communicated to others. . . .Researchers always engage their own intellectual capacities to make sense of qualitative data. . . . Only the intelligence, creativity and reflexivity of the human mind can bring meaning to those data.(Hatch, 2002:148).”*

Analysis of data in a general way involves a number of closely related operations which are performed with the purpose of summarising the collected data and organising these in such a manner that they answer the research questions. The analysis procedure of this study started from qualitative data and end with quantitative data. Therefore, in this chapter the data gathered through qualitative tools such as interviews and open-ended questionnaires were recorded in short scripts and were analysed inductively through narration, description of words, phrases and statements. Here the direct words of participants were quoted. Generally, the chapter deals with the analysis of data collected from Geography departmental heads and Geography teachers through interviews and learners’ responses of open-ended questionnaires. Finally, based on these analysed data the results were presented.

## 5.2 Analysis of Interview Data

### 5.2.1 Characteristics of participants

The distribution of samples of teachers and Departmental Heads are displayed in the following table in terms of their sex, experience and qualification.

**Table 5.1: Background of participants**

No	Respondents	Sex		Experience in years			Qualification			
		M	F ..	Total	1-5	11-15	16-20	Diploma	BA	M Ed
1.	Teachers	6	–	6	2	4	–	–	5	1
2.	Departmental Heads	6	–	6	3	1	2	–	6	–
Total		12	–	12	5	5	2	–	11	1

Table 5.1 indicates that all of the participants in this study were male. The table also shows the experience distribution of participants in the sampled schools. Seven participants had above 11 years work experience. But only 5 participants had below 5 years work experience. From this data, we can understand and conclude that the majority of the participants had reasonable work experience in the teaching of Geography. Thus, they have been supposed that they had sufficient professional knowledge and skill to teach and facilitate the learning activities of preparatory secondary school Geography education.

Furthermore, the table shows the participants' level of qualification and thereby majority (11) of them is BA holders and one is an M.Ed holder. There was no diploma holder at the time of investigation. Therefore, all participants were BA and MA holders. Thus, it is possible to understand and infer that Geography teaching staff is better qualified and experienced to the

level of preparatory secondary school and seemed to have a better subject matter knowledge and pedagogical skill to practice learner-centred methods in the teaching of Geography.

## **5.2.2 Analysis of teachers' and Departmental Heads' responses to interview questions**

### **5.2.2.1 Teachers' responses to interview questions**

I raised 16 open-ended interview questions to the Geography teachers. In the open-ended interview, the exact wording and sequence of questions have been determined. Questions were ordered in a complete open-ended format. All interviewees have been asked the same basic questions in the same order. The responses of interview questions were analysed subsequently.

#### **5.2.2.1.1 Teachers' experiences regarding the teaching and learning process of Geography**

It was collected from the responses that most teachers teach Geography traditionally through lecture method. Teachers have continued transmitting already organised information and learners passively receive the information being transmitted by the teacher. Thus, both teachers and learners have been practicing their past trends of traditional lecture method in the current Geography teaching and learning processes. A respondent from School 05 explained as follows:

*I had learnt all subjects through teacher-centred method of teaching when I was elementary, secondary and university student. So I continued my past experience when I am teacher (WODA).*

Most Geography teachers complained that learners are disappointed when teachers assign them to learn by themselves either in group or individually through learner-centred methods. Whereas few respondents mentioned that there is shortage of time to practice learner-centred methods of teaching. As a result, they rushed out large portion of contents through lecturing.

Thus, it is possible to conclude that both learners and teachers resist the practice of learner-centred methods such as field work, map work, project work, discussion, role-play, simulation, drama and others. Therefore, teachers are continuing the practice of traditional lecture method of teaching in the teaching of Geography.

#### **5.2.2.1.2 The unique nature of Geography and teaching-learning strategies it requires**

The respondents confirmed the uniqueness of Geography and that its contents are aggregated from both social and natural sciences. Thus, Geography is a bridge science and most of its contents are found outside the classroom and need practical activities as well as invites learners to engage actively in the teaching process. Moreover, respondents stated that field work, learning by doing, presentation, group discussion, experimentation are significant strategies to teach Geography effectively. For instance, one respondent from School 03 asserted as:

*Most Geography contents are unique; its domains are found in the social and natural science disciplines and reflect the real world. And thus, they are comfortable for practical teaching strategies such as field observation, experiment and demonstration. In addition, Geography contents need unique teaching materials like Globes, Maps, films, rock and mineral samples (BOAR).*

Another respondent from School 02 explained:

*Geography contents uniquely need learner-centered teaching strategies such as project work, Map work, field work, group work and presentation which are useful for the learners to share ideas, to process information, knowledge, to help each other, to improve drawing skill, speaking skill and to develop self confidence (HADAGN).*

With regard to the unique nature of Geography and supporting the respondents, NICED elaborated as:

*The acquisition of Geographical knowledge involves much more than the memorization of information. A well developed Geographical understanding can only result from a process of enquiry in which questions are asked, evidence is examined and conclusions have been reached (NICED, 1988 in Fisher, 1998, p. 21).*

Similarly, the authors of Grade 12 syllabus such as Asfaw, Sharma, Woldesemait and Weldelessie (2011: VI) elaborate on the unique nature of Geography as:

*Geography is primarily an observational science in its practical application in contrast, for example, to chemistry and other sciences whose practical work is primary conducted in laboratories. Due to this fact, Geography students must experience outdoor teaching methods, such as field trips and field work. For example, you might take them to a nearby area to look for various land forms made by both endogenic and exogenic forces. In addition to satisfying the requirement such practical experience, field trips and field work make the subject more realistic and increase students' interest (Asfaw et al, 2011:VI).*

The above assertions also confirm Olusegun's (2006:28) view regarding the unique nature of Geography, stated as follows:

*Geography is versatile, expressive, creative, problem-solving, practical and intellectually stimulating school subject. The distinctive characteristics of Geography, i.e. central concepts, logical internal structure, methodology, integrative nature and transparent interdisciplinary effects make it an integral part of any worthwhile school curriculum (Olusegun, 2006:28).*

Furthermore, Olusegun (2006:29) claims that senior secondary school Geography curriculum developers have to be chosen from the outset to emphasise among others a conceptual approach. This is based on the belief that a conceptual approach to senior secondary school Geography supported by compatible problem-solving procedures and appropriate instructional resources, tempered by the good sense of an enthusiastic and patient Geography teacher; should assist the pupils to learn Geography more efficiently and effectively.

In addition to Olusegun (2006), Demirci, Kesler and Kaya (2010:59) also posit that the development of a new secondary school Geography curriculum is a milestone which not only

carries many new concepts and methods in to Geography lessons, but also triggers a big debate about textbooks. Debates such as the content organisation, content integration, activities that stimulate learners' engagement, teachers' role as a facilitator, appropriate media, sufficient time allocation and tools of measurement and evaluation are reflected in the curriculum development process.

Therefore, both the respondents and the literature imply that Geography is unique discipline and needs its own practical and outdoor learning and teaching strategies, assessment techniques, resources, effective curriculum designers and practitioners. Thus, so as to incorporate relevant contents, objectives, methods, assessment techniques, teachers' role and learners' activities in the curriculum, the curriculum designers should consider the unique nature of Geography as a discipline.

#### **5.2.2.1.3 Teaching strategies designed in Geography syllabus**

Concerning this question, most respondents explained that the teaching strategies designed in higher education preparatory secondary school Geography syllabus are learner-centered, such as brainstorming, questioning, discussion, demonstration, explanation, harmonising, project work, documentation, guest speaker, field trips and field work.

A respondent from School 05 had this to say about teaching strategies:

*Appropriate learner-centred teaching strategies such as fieldwork, presentation, demonstration, exercises, activities, project work and discussion were identified in Geography syllabus (KEAR).*

To cross-check the responses, I consulted Grades 11 and 12 syllabi and found that the teaching strategies explained by the respondents were encapsulated in the syllabi. Thus, I am in a position to say that the design of the syllabi has no problem in promoting learner-centred approach to the teaching of Geography. The syllabi encourage learners to construct their own knowledge independently and thus present teachers with the opportunity to facilitate rather than only teach

the learners. Moreover, I have seen and understood that the evaluation strategies identified in the syllabi were continuous assessment technique and practiced while teaching-learning process is going on.

Based on literatures and responses, one can sum up that learner-centred methods, such as brainstorming, questioning, discussion, demonstration, explanation, harmonizing, documentation, project work, guest speaker, field trips and field work were properly identified in preparatory secondary school's Geography syllabus.

#### **5.2.2.1.4 Teaching methods teachers practice in the teaching of Geography**

In relation to this question, the majority of the participants responded that most of the time they practice lecture method of teaching in the implementation of preparatory secondary school Geography syllabus. They prefer lecture method to learner-centred methods of teaching due to shortage of time to cover the contents of the annual lesson, low interest of the learners to learn through learner-centred methods of teaching, learners' disturbance, few better achievers' dominance and shortage of resources in the school, shortage of budget to purchase instructional media and to facilitate fieldwork method of teaching.

For instance, a respondent from School 03 explained:

*Most of the time, I practice lecture method of teaching to cover the annual lesson in the schedule's time and to manage the class room discipline properly (BOAR).*

Moreover, another respondent from school 06 remarked:

*I employ lecture and note giving method of teaching because it is time saving and students want teacher's explanation and organised note. But other methods of teaching need much time otherwise the period will be ended before we perform the intended task. For instance, in group discussion the period may come an end even before we form the group itself (MEQYE).*

Though many scholars mentioned that learner-centred approaches create opportunities for the learners to engage in the teaching-learning process based on their experiences and learning styles, most respondents perceived that teaching is simply the transmission of information from the teacher to the learners and did not take into account their experience and individual differences as well as engagement of learners. For instance, Nayak and Rao (2004:213) claim that the teacher primarily becomes the facilitator who structures learning opportunities and encourages students to work together to build a common body of knowledge. Active learning requires that students are engaged and active in the learning process. Teacher serves coacher or facilitator, guiding students through activities but letting them to take control of the learning event itself (Brown & Duguid, 2000:133).

Supporting the aforementioned idea, Desta (2004:77) confirms:

*Knowledge of the subject matter is considered as the sole determinant factor for effective teaching. For many staff, teaching means, in the main, the act of the teacher and the main requirement for teaching is knowledge of the subject matter...But considering teaching as merely as a matter of knowledge of the content is fallacious. Such understanding excludes the central person, a student who is in reality the main actor. Unless teachers understand and appreciate this, it will be difficult to make the teaching-learning process student-centred and to encourage the deep approach to learning (Desta, 2004:77)*

Therefore, from the above literature and respondents' explanations one can understand and come to an end that most teachers were practicing traditional teacher-centred method of teaching. This implies that the teaching process was dominated by the teacher. As a result, learners could not get an opportunity to engage and participate in the teaching processes and they became passive receivers.



#### **5.2.2.1.5 The value of learner-centred methods in the teaching of Geography**

As far as the value of learner-centred methods of teaching is concerned, most respondents reported that learner-centred methods of teaching have an enormous value like encouraging learner participation and interaction with their mates, develop learners' creativity, develop critical thinking ability, self-confidence, learners' independent learning ability, learners' commitment and responsibility of their own learning. Moreover, respondents elaborated that learner-centred teaching methods are valuable for the learners to integrate theoretical classroom lesson with the outdoor practical learning. For instance, DEAK from School 01 stated that:

*Learner-centred strategies have advantages to teach Geography contents. For example, field work has its own great advantage for Geography teaching. There is a proverb people speak so many times, "seeing more leads to believing." Thus, through field work method of teaching it is possible to show students with their naked-eye what things look like in the environment and students can easily understand and internalize as well as can create permanent knowledge for their future life. But when we apply lecture method in the class, students have not a chance to see what physical features look like and what the reality is (AKAS).*

The above idea confirms Olusegun's (2006:94) assertion, that:

*In the teaching of Geography, fieldwork has been observed as a "sine qua non" aspect of the Geography teaching because it fosters and even enhances observational skills and critical thinking ability in the learners. Therefore, the importance of fieldwork, types of fieldwork, organisation of fieldwork and learning outcomes in fieldwork are important points and should be considered (Olusegun, 2006:94).*

In the same way, Johns, Wright et.al and Getaneh et.al (in Awulachew, 2010:91-92) discussed the merits of learner-centred i.e. learner-centred methods reduce teachers' burden in monitoring and giving the overall atmosphere of classroom, promote effective climate in the classroom, create learners' feel-at-home, develop learners' creativity, encourage learners to be involved and be

more concerned about the task and lead learners' participation. These scholars also generalised that learner-centred methods are the most effective techniques of teaching under the present circumstances to fulfill the purpose of modern education.

In learner-centred approach, the student has an opportunity to pose problems, ask questions, collect information, find solutions to problems and answer questions through his/her effort/activity (Nayak & Rao, 2004:109-110). In the learner-centred methods, the teacher should encourage the child's participation through activities. The whole process of teaching is geared towards the development of the learner's creativity and thinking. Therefore, learner engagement represents a key component of learner success.

Similarly, Fisher (1998:53) writes that in the learner-centred methods learners are given a marked degree of autonomy and direction of the learning activity and used to improve level of motivation, recognise the inter-disciplinary nature of real-life situations as well as improve the level of the learners' understanding.

Moreover, Ademe (2010:208-209), Demirci, Kesler and Kaya (2010:61-62) and Aydin (2011:278) discuss active learning strategies in the Geography curriculum that help learners to learn by doing. The positive attitude of Geography teachers towards active learning strategies is the decisive factor for effective Geography lessons and to develop learners' holistic and meaningful relationships as well as multi-dimensional thinking skills. O'Mahony (2000:12) recommends outdoor teaching strategies for Geography as follows:

***Fieldwork is a necessary and basic part of Geography teaching. And we should be familiar with all existing school policies regarding these activities, or assist in drawing up new and useful policies that can facilitate such teaching techniques (O'Mahony, 2000:12).***

Fieldwork in teaching Geography involves the study of geographical phenomenon in the actual site of the phenomena (Olusegun, 2006:95). Fieldwork entails the actual geographical study carried out in the field. It is usually any outdoor lesson which enables the learners to observe

physically and practically what they have learnt in-door. Olusegun (2006:95) further stresses fieldwork as follows:

*In Geography teaching, emphasis is now on problem solving rather than the prescriptive and expository methods. Hence, the development of skills like observation, recording, data analysis and the use of information to solve problems are very crucial indeed (Olusegun, 2006:95).*

Thus, both the respondents and the literature have asserted that learner-centred methods of teaching make teachers to do learning tasks less, do less telling, design more work, do more modeling, do more to get learners' learning from and with each other, use collaborative and cooperative groups for learning, work to create climates for learning, create an environment of accountability, do more with feedback and providing formative feedback.

Therefore, it is possible to conclude that learner-centred methods of teaching have an enormous value such as encouraging learner participation, learners' interaction with their mates, develop learners' creativity and develop their critical thinking ability and self-confidence, learners' independent learning ability, learners' commitment and responsibility of their own learning. Moreover, participants asserted that learner-centred methods of teaching are valuable for the learners to integrate theoretical classroom learning with outdoor practical lesson and make the instructional process active and live.

#### **5.2.2.1.6 Teachers' readiness to practice learner-centred methods of teaching**

Concerning teachers' readiness to practice learner-centred methods of teaching, most respondents explained that their readiness for the teaching profession in general and to implement learner-centred methods of teaching in particular is low due to lack of training about the advantage and the way how to practice learner-centred methods of teaching in preparatory secondary school Geography education, lack of interest for the teaching profession, lack of incentives for teachers motivation, shortage of time. Accordingly, responses indicated that teachers are loaded with extra work rather than teaching, insufficient supply of resources relevant

to preparatory secondary school Geography contents, learners' low interest to learn through learner-centred methods of teaching, learners' low motivation for learning, learners' disturbance and incapable for self-learning (the more capable learners joined natural science stream).

One respondent from School 03 explained the main problems related to the practice of learner-centred methods of teaching:

*...it is difficult to practice learner-centred methods of teaching due to lack of training, lack of comfortable school environment, lack of teaching materials, large class size and shortage of finance. As it is known field work method of teaching is best to teach Geography. However, due to shortage of finance we haven't been practicing it yet (BOAR).*

As far as teachers' contribution towards the effectiveness of teaching, Yayeh (2011:61) claim that schools without effective teachers are less likely to realise their mission of producing all rounded and competent citizens. At any level of educational programme, teachers play a decisive role to the success of national educational aims. Moreover, Tareke (2010:139) attributes teachers' low interest to their profession as follows:

*Teachers do not love the teaching profession due to unsatisfactory payment for their work and low respect from the society.*

Strengthening the afore-mentioned respondents' response and literature about the teachers' low interest in the teaching profession, David and Beriner (1992:302) state that the love of the teaching profession is one of the factors that affect academic performance of learners. Teachers who teach one thing with their lips and carry another in their heart must go through an inner training. The teacher who feels the importance of his/her profession should be a teacher first and a teacher last. Besides, Sallis (1993:49) points out that the more people build capacity the more they can perform. Since teachers are crucial, educational policy makers should get a clear picture of who their teachers are, how they view their role in the system and the type of incentives,

regulations, training that will increase their effort and capacity to improve the teaching and learning process.

Similarly, Omer (2010:62) points out that the commitment of teachers in South Wollo secondary schools was found to be low. Teachers themselves expressed that they are not motivated and not as concerned about improving the quality of education, and instructional leaders also asserted that it is hard to find a significant number of committed teachers in their schools. As most respondents remarked, Tareke (2010:141) also asserts that to raise teachers' readiness to the profession and improve the quality of education, the government should pay attention to the teaching profession, understand the needs of the teachers, improve teachers' salary and keeping teachers' benefit as well.

Furthermore, Mona and Tesfaye (2000:3) point out that among other problems, the quality of teachers is most crucial because quality personnel in the future should not only have knowledge; that more importantly they should be devoted and faithful to their tasks. The influence on learners by the teacher's own personality cannot be replaced by any teaching material. Generally, in relation to teachers' readiness, most respondents responded that teachers are not well prepared to practice learner-centred methods of teaching. These respondents explained the reasons why they are not ready to practice learner-centred methods of teaching. A reason, which has been cited sufficiently this far, is that learners are not interested to learn in general and learning through learner-centred methods of teaching. Moreover, few high achievers are disappointed to help low achievers. As a result, teaching and learning activities such as group discussion, assignments, project works and presentation are dominantly done by few high achievers, and the teaching and learning activities are affected by learners who have a desire to disturb the class room lesson.

The respondents also explained that they practice lecture method of teaching to cover large contents in short time and shortage of resources as well as absence of trainings about learner-centred methods of teaching. Moreover, learners resist learning by themselves and they considered the teachers ineffective and give low mark during evaluation to which they try to

practice learner-centred methods of teaching. As a result, most teachers prefer practice lecture method of teaching to varied learner-centred methods of teaching. The other reason why teachers are practicing lecture method of teaching is that most teachers resist changing their methods of teaching from lecture to learner-centred methods of teaching. Most respondents complain that no sufficient time and resources to practice learner-centred methods of teaching.

Therefore, both the respondents and literature asserted that teachers' readiness to practice learner-centred methods of teaching is low due to the absence of training concerning the practice of learner-centered methods of teaching in preparatory secondary school Geography education, teachers' low interest and commitment for the teaching profession, lack of incentives for teachers' motivation, shortage of time. Teachers are loaded with extra work other than teaching, have insufficient resources relevant to preparatory secondary school Geography. Learners' interest in learner-centred methods of teaching is low. For instance, MEQYE from School 06 complained that shortage of budget and material resources are the major constraints to practice learner-centred methods of teaching like field work.

#### **5.2.2.1.7 Teachers' roles in the implementation of Geography syllabus**

Regarding major teachers' roles, the respondents explained that teachers have diversified roles in the school, such as preparing annual and daily lesson plan, lecturing, preparing and providing the main notes of the lesson to the learners, giving tutorials for female learners, preparing and administering mid and final examinations, participating in co-curricular activities, attending the school and departmental meetings. For instance, a respondent from School 06 mentioned his role as:

*Preparing and facilitating materials to the students, providing detail explanation about the lesson, providing short and clear note to the students and participating in different school affairs are my major role while practicing the syllabus (MEQYE).*

From this point of view, it is possible to infer that teachers are busy with different roles and are thus faced with time constraints and even exhausted to practice variety methods of teaching. As a result, teachers have been diverting their methods to traditional lecture method of teaching.

Thus, it is possible to sum up that most Geography teachers recognise that traditional method of teaching, specifically the lecture method and summative assessment techniques are the main techniques of teaching activities; the learner-centred method of teaching like field work, project work, role-play, discussion, drama, demonstration and continuous assessment, such as class work, homework, assignment, quiz and test, were neglected. It means that teaching methods and assessment techniques, which encourage learners' engagement and participation, were ignored.

#### **5.2.2.1.8 Problems teachers encounter in the practice of learner-centred methods of Geography teaching**

The respondents mentioned the problems that affect the implementation of learner-centred methods of teaching: learners' resistance to learn through learner-centred methods of teaching, lack of awareness about the advantage and implementation of learner-centred teaching methods from the side of teachers and learners, dearth of resources in the school, shortage of time and lack of financial support from the school management for field work activities; majority of learners are less capable to learn by themselves and to take responsibilities about their own learning. Furthermore, the respondents explained that most activities are dominantly performed by few better achievers. As a result, the majority of the learners (low and medium achievers) are exposed for dependency.

With regard to the problems that teachers encounter while they practice learner-centred methods of teaching, a few respondents stated their cases as follows:

*KEARG* from School 05:

*.... Shortage of resources, large class size, uncomfortable seats for group discussion and other activities, lack of school management support, poor learners' English*

*language ability(learners are shy to speak and explain their idea) are the main constraints to practice learner-centred methods of teaching.*

MEQYE from School 06:

*Shortage of resources, lack of learners' interest for self-learning, low ability to discuss with their friends, shyness to explain their idea and learners' inability to understand the written text are the problems to practice learner-centred methods in the teaching of Geography.*

HADAGN from School 02:

*... lack of schools' management support, shortage of resources and lack of conducive class room environment; poor black board quality, shortage of appropriate seats, dusty class rooms, lack of students interest to learn and lack of sufficient text book (1:2 book-pupil ratio) are the major problems that I encounter while practicing Geography syllabus through learner-centred methods of teaching.*

The respondents' responses support the Ethiopian MOE (1998:4-9) assertion, which states that:

*...teaching through learner-centred methods has been neglected due to lack of convenient instructional materials, lack of motivation from the parts of the learners, lack of conducive classrooms, lack of smooth teacher-learner interaction and learners' anxiety.*

Similarly, Anyanwu (2008:209) indicates the importance of resources and sufficient time to implement learner-centred methods of teaching that more resources should be supplied to schools, that more time is required for learners to reflect on their own learning, and that teachers should implement the constructivist approach to teaching. Likewise, Asgedom *et al* (2006:10)



confirm the positive impact of teachers' subject matter knowledge, pedagogical skill, resources, conducive teaching environment and access of training to the quality of education, as they claim as:

*Quality of teaching can take place only when teachers have the necessary qualifications, support from the school management, teaching-learning resources, conducive school environment and regular teacher improvement opportunities.*

To indicate the negative impact of traditional method of teaching on learners' performance, Stein (2005:37) points out that:

*Children made to sit and listen passively to teacher without active involvement in teaching themselves have consistently been shown to lag behind children who are encouraged to actively find out things themselves.*

Therefore, it is possible to conclude that due to the shortage of resources, lack of motivation from learners and teachers, lack of well facilitated classes, shortage of time and lack of smooth teacher-learner relationship, teachers practice lecture rather than learner-centred methods of teaching. Thus, the lecture method of teaching negatively affects learners' creativity, critical thinking, and generation of new ideas and construction of knowledge.

#### **5.2.2.1.9 Availability of resources in the school relevant to Geography contents**

Regarding the availability of resources in the schools, most respondents responded that there is a great dearth of resources. As a result, Geography teachers encounter problems of resources to support the teaching activities with instructional media and to practice varied methods of teaching. Moreover, the respondents mentioned that the scarcity of resources negatively affect learners' participation in the teaching activities.

In relation to the shortage and unavailability of resources, a respondent from school 05 asserted as:

*Resources such as, Maps, Atlas, Globes, diagrams, charts and New paper are insufficiently available whereas resources such as, meteorological instruments, projectors, computers, slides, films, TV, Video, real objects, photographs, and LCD power point are totally unavailable in the school. As a result, it is difficult for teachers to practice participatory methods of teaching. This in turn affects students' academic achievement and quality of Geography education (KEAR).*

Another respondent also indicated the negative impact of the shortage of resources in the teaching of Geography through learner-centred methods as:

*There are no sufficient materials in the school. For instance, the class rooms have not comfort seats, black boards are too old to write and to draw a display diagram on them, no Geography room and Geography laboratory. As a result, it is difficult to teach practically like map reading activities and other geomorphologic activities (BOARE).*

In relation to this point, Olusegun (2006:74) indicates that teachers should ensure the locally or commercially produced, availability of materials to be used for the media production or whether the materials should be loaned from other schools or resource centre in the locality. The unavailability of instructional media has an adverse effect on the quality of education. The shortage of reading materials such as text books, reference books, journals, and so on, and other pedagogical resources such as maps, globes, charts, graphs, etc discourages teachers from carrying out their duties effectively (Doll, 1989:51). Olusegun (2006:32) further argues that:

*Federal and state governments should provide adequate funding to schools so that Geography as a core subject should have the basic equipment and materials that would enhance its teaching. Geography programme can be effectively taught with*

*basic equipment and materials which necessarily call for setting up a Geography laboratory in every school. The laboratory should be equipped with furniture designed for practical learning like maps, rock specimens, models, tapes, surveying chains, prismatic compass, etc.*

Fisher (1998:42) and Olusegun (2006:73-74) depict that an inventory of the basic teaching aids and their sources including improvised types should be available to schools in the appropriate places. This indicates that the success of curriculum implementation in general and Geography curriculum implementation in particular often depends on the availability of equipment and instructional media in the school. Scarcity of instructional media as the main problem is enormously wide spread in many developing countries while it seems insignificant in developed countries.

Many studies have shown that among other things, education systems in developing countries are characterised by the unavailability and inadequacy of instructional materials. Supporting this idea, Chapman and Mahlak (1997:13) state that the inadequacy of instructional materials jeopardises the ability of developing countries to provide quality education. Thus, many schools in developing countries today face the critical shortage of instructional materials and consequently the quality of teaching and learning continues to be low.

#### **5.2.2.1.10 Learners' activities in the process of teaching and learning**

Related to this issue, the majority of respondents responded that students have not been involved in the activities; students listen to the lectures and they take notes of the lesson. The respondents further elaborated that students are not interested and committed to learn by themselves and perform tasks independently because they came through the trends of teacher-centred methods of teaching, are shy to explain their idea, are afraid to ask questions, fear to speak in front of their friends due to lack of confidence in their English language, and their lack of subject matter knowledge.

Concerning the passiveness of learners in the teaching of Geography, a respondent from School 03 explained said:

*Learners have a desire to learn by teacher's lecture and want to get an organised note from the teacher. Most learners don't ask and answer questions while I teach in the class room. They are disappointed when I give individual and group tasks. Even they disturb when I give a group works in the class room (BOAR).*

Thus, from this point of view one can conclude that learners were passive in the classroom due to their past learning experience, shyness, frustration, lack of confidence, lack skills of English language and lack of subject matter knowledge. As a result, learners are passive and wait for teachers' lecture, while the teachers themselves have been practicing lecture method of teaching in line with learners' interest.

#### **5.2.2.1.11 Types of teaching methods frequently practiced by Geography teachers**

With regard to this question, except one respondent, the others mentioned that they practice lecture method of teaching in the implementation of Geography syllabus. They also elaborated on the main reasons why they practice lecture method of teaching frequently. Accordingly, lecture method is time saving, learners are passive while they are encouraged to respond in a certain group or individual task, are shy and afraid when they are assigned to learn through discussion and other self-learning methods, due to lack of self-confidence, as if they could not speak English fluently and this causes learners' resistance against learner-centred methods of teaching.

One respondent claimed that he practices lecture and discussion teaching methods frequently even I did not observe him do this during my actual class observation. Inversely, one respondent attempted to justify his lecture method as follows:

*I frequently practice lecture method of teaching in the implementation of Geography syllabus because learners resist learning through learner-centred method of teaching*

*due to their lecture method trend. As a result, they have been disturbing during group discussion and other active-learning methods. And it is difficult to cover the intended contents in the given period of time. Thus, I have been pushed to divert the practice of lecture method of teaching and keeping class room discipline (WORDA).*

Another respondent from school 06 justified his reason as follows:

*Most frequently, I employ lecture method of teaching because it is suitable for the students and to cover the contents within a given time (MEQYE).*

Similarly, Desta (2004:72-73) discusses that most teachers lack familiarity with individual differences among the learners and have no tendency of utilising different methods other than lecture. In this method a teacher views him/herself as the sole source of information whereas learners remain passive listeners to formal and structured presentations.

Furthermore, the majority of the respondents did not deny that they have not carried out activities outside the schools, such as field work due to lack of support from the schools' management, scarcity of resources and absence of budget allocation from the schools. I proved the truth of the afore-mentioned respondents' response during my actual class observation. Concerning the negative impact of budget in the practice of learner-centred methods of teaching such as field work, one respondent from school 01 remarked:

*Though field work is appropriate method in the teaching of Geography, we haven't been practicing it yet due to the absence of budget, absence of means of transport and lack of training about how to manage, organise, guide and practice the field work activities properly; among all, lack of finance is the most series problem to practice field work. Thus, I frequently practice lecture method of teaching (AKAS).*

Therefore, both the respondents' response and the literature assert that teachers frequently practice lecture method of teaching in the implementation of preparatory secondary schools

Geography syllabus due to the shortage of resources and of budget, lack of schools' administrative support, learners' resistance towards learner-centred teaching methods, low ability to speak English, lack of training of teachers about the practice of learner-centred methods of teaching, learners' experiences of the lecture method and shortage of time. Consequently, learners' creativity, involvement, confidence and self-learning effort were hindered by this teacher-dominance method of teaching.

#### **5.2.2.1.12 Dominant assessment techniques teachers practice to assess learners' academic achievement**

The majority of respondents mentioned that Geography teachers assess their learners' academic progress and achievement through class work, home-work, assignment, quiz, test, mid and final examination. For instance, a respondent from School 04 stated in this regard:

*I use tests, quizzes, class works, participation, assignments, home works, mid and final examination to assess students' academic performance (KEAR).*

However, I did not see teachers who practice continuous assessment techniques such as class work, home-work, quiz and other forms of class activities while I observed the actual teaching in class. As I observed, all the periods were characterised by teachers' lecture and note giving activities as learners were listening to the lecture and taking notes. Moreover, during my class observation I did not see marks given by teachers for the learners' class work, home-work and other exercises in learners' exercise book.

Therefore, I saw that Geography teachers didn't practice continuous assessment techniques while the teaching activities were going on. Learners' academic progress was not assessed in each period and continuously. Finally, it is possible to conclude that though continuous assessment is part and parcel of learner-centred methods of teaching and that respondents responded as if they were practicing it, it was practically neglected. The respondents may have not been responsible; they were afraid to tell me the truth because they seemed to fear that they would be questioned for

wrong doing or for going against the policy. In reality, teachers did not practice continuous assessment techniques, particularly class participation, class work, home-work, quiz and test.

I was informally informed that teachers give group assignments but it is done by one or two high achievers, not by the whole group members. Besides, if there is no high achiever in the group, the assignment will be done by another person out of the group member with payment. As a result, all the group members score the same results. Thus, individual learners' academic progress was not assessed regularly and continuously. As a result, learners' participation, creativity, critical thinking ability, confidence and independent learning were not regularly encouraged.

#### **5.2.2.1.13 Teachers' opinions about the negative impact of lecture method of teaching on learners' academic achievement**

The majority of the respondents responded that traditional lecture method makes learners dependent on the teacher's information and activities. This dependency deteriorates learners' confidence and motivation as well as responsibility to generate new ideas and construct knowledge. As a result, most learners expect every information and activities from their teachers; they hate independent work by partnering with their mates. Participants further explained that traditional teaching methods discourage learners' participation and engagement. A respondent from School 05 expressed the disadvantage of the traditional method as follows:

*In the traditional method of teaching, learners are silent to ask and answer questions concerning the concepts of their lesson. All tasks are performed by the teacher and learners expect all information and knowledge from the teacher and these make the teacher busy. As a result, learners depend on their teachers' information and note; they hate independent work, will be less confident, shy, less active and dependent (WODA).*

The above respondents' response support Fisher (1998:37), who views the traditional teaching methods as making learners passive and shallow minded and discouraged to show creativity in their learning. A variety of strategies should be used to create a range of learning opportunities

suitable to the need of all learners. Besides, Olusegun (2006:68) explains the demerits of lecture method as follows:

*Lecture method is the oldest teaching method which is believed historically to be dated back antiquity. It is also referred to as expository method because it is teacher-dominated and learners passive method. It is also known as talk-and-chalk method in a situation when the teacher decides to write the summary of the points s/he has taught on the board. In fact, in this method, the learners' involvement and participation is at low ebb because communication is often one way for most of the time during the teaching-learning process (Olusegun, 2006:68).*

Similarly, Freire (1972:45) explains that teachers consider education as banking in which they deposit knowledge in the learners' mind; consider themselves as knowledgeable bodies and learners as knowers of nothing. Positivists claimed that knowledge is a gift from knowledgeable teachers to know-nothing learners. But education must begin with the solution of the teacher-learner contradiction by reconciling the poles of the contradiction so that both are simultaneously teachers and learners (Freire, 1972:45).

To strengthen Freire's view, Desta (2004:72-73) and (Biswas, 2007:79) claim that the lecture method dominates the teaching and learning process. More than half of children failed to achieve Geography literacy. As teachers usually focus on giving lectures, learners depend primarily on lecture. Learners couldn't get the opportunity to construct knowledge and independent learning is not encouraged.

Therefore, both the respondents and literature revealed that traditional lecture method negatively affects the learners' confidence, commitment, responsibility, creativity, critical thinking, engagement, participation, interaction among themselves and independency. Thus, to solve this problem, Geography should be taught practically through varied teaching methods. The variety of teaching methods, which is used in a Geography course, is an important ingredient in creating a course with interest to learners and improves learners' academic achievement as well.



#### **5.2.2.1.14 Teachers' opinions about challenging factors in the practice of learner-centred methods of teaching in preparatory school Geography syllabus**

Regarding the main problems that the respondents encounter in the practice of learner-centred methods of teaching in Geography, most respondents explained that shortage of time, lack of learners' interest to learn through learner-centred methods of teaching, lack of awareness about the advantages of learner-centred methods of teaching on the part of the learners, shortage of teaching materials and learners' lack the English language competency to engage in lessons are the main constraints of learner-centred methods of teaching in the implementation of Geography syllabus. Though the policy encourages practicing learner-centred methods of teaching, due to these mentioned constraints, most teachers have continued practicing teacher-centred methods of teaching. In relation to these constraints, one respondent expressed that:

*...shortage of time, shortage of resources such as text books, reference books, teaching materials, students' disturbance, dependency of majority of students on few better achieved students, low interest of students to learn through learner-centred methods and majority of the students are less competent; high achievers join Natural science stream are the major factors that negatively affect the practice of learner-centred approaches in the implementation of Geography syllabus (WORDA).*

Concerning the scarcity of Geography reference books, another respondent from school 01 remarked:

*Scarcity of social science reference books in general and Geography reference books in particular is a series problem in the school to practice learner-centred methods teaching. Though students raised a question for school administrators as additional reference books are needed for social science students, no response is given yet. This has a negative impact on students' performance and to choose social science stream because it seems emphasis is not given for social science stream (AKAS).*

Supporting the above-mentioned remarks, Aydin (2011) points out that:

*Factors such as readiness level of the students to the issues and their learning styles, the techniques and methods the teacher prefers, the teaching materials and education services that the teacher uses and Geography curriculum are important variables in the teaching process of Geography (Aydin, 2011:298).*

Moreover, this respondent remarked about the main reasons why teachers do not practice learner-centred methods:

*...the first reason is students always claim when teachers facilitate learner-centred methods; they said that why teacher gives us note and discusses the lesson by himself unless why teachers are paid salary. This condition leads teachers' paradigm to continue teacher-centred method of teaching particularly lecture method. The second reason is most teachers came through teacher-centred teaching strategies. As a result, they are fixed with that trend when they become teachers and they are not considered and happy when they facilitate students' learning by themselves unless they teach through lecture method (AKAS).*

Therefore, it is possible to conclude that there is incompatibility between the education policy and the actual practice of learner-centred methods of teaching on the implementation of Geography syllabus particularly in the higher education preparatory secondary schools. Most of the respondents suggested relevant solutions to solve the problems such as creating awareness in both the teachers and learners about the advantage of learner-centred methods of teaching through training, allocate sufficient time to cover the contents through learner-centred methods of teaching, provide sufficient teaching materials and other resources.

#### **5.2.2.1.15 Problems teachers encounter while they implement the preparatory school Geography syllabus**

With regard to the problems teachers encounter while implementing the Geography syllabus, most of the respondents raised the issue of the shortage of resources such as Geography room, Geography laboratory, department room, reference books, textbooks and other instructional media, insufficient school facilities such as appropriate seats and comfortable classrooms, floor, less attractive and low learners' interest to learn are the problems teachers encounter while implementing preparatory school Geography syllabus.

Moreover, the respondents explained that learners' low interest in learning, teachers' low interest and low motivation to teaching profession, placement of low achievers in social science stream in general and Geography Department in particular, shortage of time to accomplish the designed contents, learners' disturbances, few high achievers' dominance and absence of plasma TV transmission due to the interruption of electrical energy are hindrances of the implementation of preparatory schools Geography syllabus. For instance, a respondent from school 02 explained the problem as follows:

*Large class size, shortage of time (period), shortage of resources, lack of students' acceptance of the learner-centred methods are the main problems to implement Geography syllabus through learner-centred methods of teaching. For instance, in grade 12 the class size is large and it is difficult to practice group work, pair work and other learner-centred methods of teaching (HADAGN).*

Therefore, it is possible to generalise that these listed problems are hindering the implementation of preparatory schools Geography syllabus through learner-centred methods of teaching.

#### **5.2.2.1.16 Problems affecting the quality of preparatory school Geography education**

Regarding the problems that affect the quality of Geography education in general and preparatory secondary school Geography education in particular, most respondents explained that the absence of resources such as, physical resources, class room facilities, shortage of

instructional media, shortage of sufficient Geography reference books, scarcity of budget, placement of incompetent learners in social science stream, learners low interest to learn through learner-centred teaching and learning methods, learners' low engagement in the teaching activities, low interest and commitment on the part of teachers and lack of teachers' professional training about how to practice a variety of teaching methods and how to employ continuous assessment techniques are the major problems affecting the quality of higher education preparatory secondary school Geography education. Concerning the negative impact of scarcity of resources on the quality of Geography education, a respondent complained that:

*In our school there is scarcity of resources; even no physical and political map of Ethiopia. But grade 12 Geography contents are talking about the physical and political aspects of Ethiopia and teachers have been teaching theoretically without these maps. As a result, this teaching strategy affects learners' understanding and quality of Geography education (AKAS).*

Moreover, another respondent stated that:

*Teachers' interest has a negative impact on the quality of Geography education; teachers were interested to join the teaching profession but later on they become less interested due to lack of incentives, low salary and low economic status in the society. Therefore, teachers have not been working with full interest and commitment and this in turn affects the quality of Geography education (AKAS).*

The above respondents' response confirm the claims of Meyer and Gayle (1996:43), Deer (1996:16), Carnoy (1999:83-84) and Minguan (1989:89) who point out that the quality of teacher affects the quality of education. Demotivated teachers were found to be the cause for the poor quality of teaching (Noah & Morrison, 1997:134). Geography teachers should be motivated by means of special remuneration (Olusegun, 2006:33). Quality of teaching and teachers' effort is essential so as to deliver quality of education. Moreover, Asgedom et.al (2006:10) confirm the

positive contribution of teachers' subject matter knowledge, pedagogical skill, resources, conducive work environment and access of training to the quality of education as:

*Quality of teaching can take place only when teachers have the necessary qualifications, support from the school management, teaching-learning resources, a conducive work environment and regular teacher improvement opportunities (Asgedom et.al, 2006:10)."*

Yayeh (2011:73) also asserts that teachers are overloaded, stressed and ineffective, and that the poor quality of teachers' professional development training and absence of well established system of induction for newly deployed teachers are the inhibiting factors for fostering of behaviors and attributes of effective teaching.

Therefore, the literature and respondents' response suggest a conclusion that these listed problems are the major constraints to bring quality Geography education in higher education preparatory secondary schools.

### **5.2.3 Analysis of Departmental Heads' responses to interview questions**

I conducted 16 semi-structured interview questions with Geography Departmental Heads just like Geography teachers. Responses in the open-ended interview questions were determined the exact wording and sequence of questions. All participants have been asked the same basic questions in the same order. Questions were ordered in a complete open-ended format. Therefore, both interview questions were analysed. The following sub-sections present the findings.

#### **5.2.3.1 Relevance of preparatory school Geography syllabus to Ethiopian education policy**

The respondents did not find any fault with preparatory secondary schools Geography syllabus compared to the Ethiopian education policy. According to the responses received, both the syllabus and the policy encourage learners' self-learning, creativity, participation and

confidence, as well as teachers as facilitators of the teaching process. Besides, a respondent from School 03 explained that:

*Geography syllabus was prepared based on the country's education policy. Thus like the policy, the syllabus also encourages students to be creative, active, problem solvers and rational decision makers. And teachers are also encouraged by the policy and the syllabus to be facilitators of the teaching process; they should motivate students to be active participant in the teaching process (DEBO).*

Therefore, from the respondents' responses, it is possible to understand that the syllabus was prepared based on the education policy and in line with the constructivists' methods of teaching; teachers facilitate learners' independent learning, creativity, critical thinking effort, commitment and responsibility for their own learning. Even though the syllabus encourages learner-centred methods of teaching in line with strategies identified in the education policy, teachers practice the syllabus through lecture method against to the strategies identified in the education policy. As a result, the practice of the preparatory secondary school Geography syllabus was incompatible with the education policy.

### **5.2.3.2 The unique nature of Geography compared with other disciplines**

Concerning this question, most respondents explained that Geography is a unique subject compared to other subjects because most Geography domains such as Physical Geography, Bio-Geography, Demography, Economic Geography, Map Reading and Map Projection are found outside the classroom, i.e. they are found in real contexts. Therefore, Geography needs the teaching strategies that initiate practical learning and learning by doing as well as assessment based on students' day-to-day practical activities. A respondent from School 04 asserted that:

*Even though disciplines have mutual relationship, Geography has its own unique nature; most of its contents are designed to be performed practically through learning by doing, fieldwork, map work and map projection. Moreover, Geography contents*

*need relevant teaching materials like Globbs, Maps, real objects, real samples and instruments (DEWO).*

In accordance with respondents' responses, Biswas (2007:79) contends that Geography is the subject more than any other enables people to comprehend the earth and its environment and to appreciate the delicate balances between the human and physical elements. Thus, based on respondents' responses and the literature, it can be concluded that though sciences have mutual co-existence and integrity, they have their own unique nature. Likewise, Geography has unique nature. Therefore, it needs its own well qualified teachers, relevant teaching strategies, its own resources and its own assessment techniques.

### **5.2.3.3 Feasibility of Geography syllabus**

With regard to this question, most participants agreed that the Geography syllabus can be easily implemented due to its lively nature; the contents are clear and are arranged from simple to complex and can be integrated vertically and horizontally; its language is simple and understandable; strategies to teach it have been identified; activities are recommended; contents are up to date; it suits learners' level of understanding and experience; and it is well attuned to learner-centred methods of learning.

A respondent from School 01 indicated that:

*The syllabus is fitting learners' experience and understanding, its contents are up-to-date, feasible because they are directly related with environmental and physical features. Moreover, the syllabus is comfortable to learner-centred methods of teaching such as field works, project works and others (DEAK).*

Another respondent also explained the suitability of the syllabus as:

*The syllabus is prepared well because the contents are up-to-date, feasible, related with students' daily life, provided with sufficient activities, contents are arranged from simple*

*to complex, the language is easily understandable, teaching strategies are suitable for active-learning and encouraging students interest (DEMEQ).*

However, most of the respondents explained that the allotted time is insufficient to cover the contents through learner-centred methods of teaching, shortage of instructional media and other facilities, as well as low teachers' and learners' interests in the learning-teaching process affect the feasibility of the Geography syllabus. Gibbs (in Ramsden, 1992:21) argues that curriculum must aim to stimulate an inquiry, analytical and creative approach encouraging independent judgment and critical self awareness.

Therefore, from participants' response and literature, it can be concluded that due to the insufficient time, scarcity of resources, low teachers' commitment and low learners' interest, the syllabus is designed not to be feasible and it does not have a negative impact on the practice of learner-centred methods of teaching.

#### **5.2.3.4 Teachers' readiness to practice learner-centred teaching methods**

The majority of respondents responded that teachers are not ready to practice learner-centred methods of teaching and gave the reasons why they are not ready. The trend that both teachers and learners were coming through was teacher-centred methods of teaching. Teachers did not receive training on learner-centered methods of teaching and how to practice these methods in the teaching-learning process.

Similarly, learners were not made aware about the advantage of learner-centered methods of learning. Learners are not happy when they are encouraged to practice learner-centered learning methods, such as group discussion, project work, inquiry, reflection and others. As a result, teachers are incapable to practice learner-centered methods of teaching relevant to the contents of the lesson. Thus, they are continuing the practice of lecture method of teaching. A respondent from School 06 expressed the reason why he is not ready to practice learner-centered methods while he teaches:



*Teachers didn't get training regarding the practice of learner-centered teaching methods; learners are not happy to learn by themselves because they came through lecturing and note taking teaching methods as well as learners disturb during group discussion (DEMEQ).*

Accordingly, Desta (2004:77) confirms the misunderstanding of teaching due to lack of training:

*For many staff, teaching means, in the main, the act of the teacher and the main requirement for teaching is knowledge of the subject matter...But considering teaching as merely as a matter of knowledge of the content is fallacious. Such understanding excludes the central person, a student who is in reality the main actor. Unless teachers understand and appreciate this, it will be difficult to make the teaching-learning process student-centered and to encourage the deep approach to learning (Desta, 2004:77).*

Generally, the majority of the respondents complain that low learners' interest, shortage of budget and material resources, lack of training that makes teachers ready for their profession, lack of interest on the part of teachers to teaching profession due to lack of incentives are the major constraints to practice learner-centered methods of teaching. As a result, the majority of teachers prefer to practice lecture method of teaching to learner-centered methods of teaching such as field work, map work and others.

In accordance with the afore-mentioned respondents' response regarding teachers' readiness, Yayeh et.al (2011:44-45) and Liyew, kebede and Enyew (2011:1) point out that the quality of education depends on the quality of teachers. Low teachers' pedagogical and subject matter knowledge competencies, shortage of supply of material inputs, teachers' autocratic managerial styles and unfair treatment to the learners, teachers' incompetency to practice a variety of teaching methods and continuous assessment techniques, lack of conducive school environment and learners' resistance are problems that hinder the implementation of educational programmes through active-learning methods.

In the same vein, Sallis (1993:49) claim that the more people know the more they can do. The better trained the staff, the better they will be able to perform quality investments/ quality education. It is the quality of the teacher that determines the quality of learning in the classroom (Deer, 1996:160). Secondary school teachers should be well trained and competent in their professional skills (Meyer & Gayle, 1996:43). Teachers are expected to thoroughly get prepared to carry out their teaching-learning process sufficiently; trained teachers use learner-centered teaching approaches in well-managed classrooms and skillful assessments to facilitate learning and improve quality of education (UNICEF, 2000 in ETA, 2006:45).

Similarly, E.T.A. (2006:33) remarked that:

*...Of all inputs required to carry out an educational activity, teachers are the major component in successfully accomplishing the task. Effective teaching is determined by individual teacher's knowledge of the subject matter and mastery of pedagogical skills, which create a strong positive effect on learners' achievement preparation. For this to happen, adequate preparation of teachers is required. This means that a teacher needs professional training to be able to understand the need of the learners and to assist them expertly in a more effective way (E.T.A., 2006:33).*

Therefore, both respondents and literature asserted that teachers' readiness is the basic factor to bring quality education in general and quality Geography education in particular. Thus, it is possible to sum up that lack of teachers' readiness affects the practice of learner-centred methods. This in turn negatively affects the quality of preparatory school Geography education.

#### **5.2.3.5 Teachers' role in the implementation of preparatory school Geography syllabus**

Most respondents explained that teachers have different roles both in and outside the classroom, such as preparing annual and daily lesson plans, carry out teaching activities, assess learners' performance, keep classroom discipline, distribute textbooks to the learners, give advice to the late comers, absents and low achievers, give tutorial for low achievers and female learners, call parents to have discussions about learners' academic progress and disciplinary conditions, attend

school, departmental meeting to discuss the general teaching activities and the quality of Geography education, participate in co-curricular activities, evaluate textbooks, read books, watch television and get involved in community activities.

*Teachers have different and many roles in the school such as teaching students, assess students by preparing tests and examinations, check and give feedback for the students, working roster, participating in the co-curricular activities, giving tutorials for female students and participating in the school as well as department meetings (DEHA).*

From this finding, it is understood that teachers are very busy as they carry out various activities in and outside the classroom. Thus, teachers do not have sufficient time for creativity and research work. Therefore, such busyness makes teachers more exhausted to perform even the regular teaching activities. During my observation, I noticed that there were no lunches and other recreational places or materials in the schools where teachers can refresh themselves when they are exhausted. Thus, teachers are incapable to carry out their duties properly especially after the third period of the lesson. Therefore, being busy and the absence of refreshment also make teachers feel uncomfortable to perform their duties properly in general and to practice learner-centered methods of teaching in particular.

#### **5.2.3.6 Availability of relevant resources to preparatory schools Geography contents**

In relation to resource availability, most respondents complained about minimal provision of resources. Physical resources such as Geography room, weather station, Geography display room and display field, map work room, pedagogical centre and launch were unavailable in all the sampled schools. But there were the library and departmental room. The library was the only resource available in all schools with limited books and facilities.

Moreover, concerning the availability of Geography material resources, such as boards, Maps, Globes, real objects, specimens, photographs, illustrations, films, Television, video, computers, charts, atlas, diagrams and pictures, most respondents responded that some are available but are

not sufficient. On the contrary, a few respondents lacked this equipment in their schools. A respondent from School 03 asserted that:

*In our school there is a great scarcity of resources. For instance, there is no department room, Geography room and pedagogical center; there are no sufficient reference books, Maps, Globes, Atlas, Charts, Diagrams, Meteorological instruments & Drawing instruments for map reading and no real objects. Therefore, teachers don't utilise the relevant teaching materials while they teach Geography (DEBO).*

The majority of respondents remarked that meteorological instruments such as Rain-gauge, wind vane, Thermometer, anemometer, barometer and hygrometer were unavailable in their schools. Printed media such as textbooks, reference books and newspapers were insufficiently available as well. Magazines, periodicals and reports were totally unavailable in the schools. DEMEQ explained in this regard, that:

*Absence of resources, such as laboratory, cartography room, GIS, computer, LCD, slides, films and projectors hinder the effectiveness of Geography teaching activities.*

Besides respondents' explanation I also cross-checked during my observation and noticed that most of the studied schools did not have sufficient resources and. Thus, this scarcity and unavailability of resources negatively affect the teaching and learning activities in general and the practice of learner-centered methods of teaching in Geography education in particular.

#### **5.2.3.7 Teaching methods frequently practiced by Geography teachers**

Most of the participants explained that lecture method is a method of teaching that is practiced frequently by Geography teachers. The reasons given for the lecture method were to cover large portions of the lessons in a short time, to cover lessons for the year schedule in the given time, to manage classroom discipline, to satisfy learners' interest. Furthermore, learners are not happy to process knowledge or to learn independently and in groups. Lastly, group work is dominated by few high achievers, while the low and medium achievers are not really active in groups.

Moreover, most learners are not well capable to work independently. This is the main reason why teachers have been practicing lecture method of teaching frequently rather than other methods such as group work, role-play, demonstration, project work and so on. But they explained the reasons why they did not practice learner-centered methods – fieldwork presented them with financial problems and time constraints.

A respondent from School 06 elaborated the reason why Geography teachers continue to practice lecture method of teaching:

*...based on their ability, students are divided in to three. However, in the social science stream, most students are almost in the same level of performance; most of them are low achievers because the education policy gives high emphases for Natural sciences stream and high achievers join natural science stream. And the remaining low achievers join social science stream. As a result, most students are disappointed to learn by themselves and to discuss the lesson with their friends because they are not capable enough to learn independently without the teachers' presentation. As a result, teachers shift their methods of teaching from learner-centered to the lecture method of teaching (DEMEQ).*

Therefore, from the respondents' responses it can be concluded that Geography teachers frequently practice lecture method of teaching due to the shortage of time to cover the contents in a given period of time, learners' low ability to participate in the teaching activities and to learn by on their own.

#### **5.2.3.8 Tools teachers frequently use to measure learners' academic achievement**

Concerning this question, majority of respondents explained that teachers measure learners' academic achievement through quiz, test, mid and final examination. But few participants elaborated that teachers measure learners' academic achievement through quiz, test, home-work, class activities and participation in addition to mid and final examination. Thus, from the respondents' responses it can be summed up that the majority teachers neglected most

continuous assessment techniques like class work, home work, class participation and assignment to measure learners' academic progress. DEKE from School 04 explained that:

***Most teachers frequently assess learners' academic performance through tests, mid and final examination based on the school's schedule (DEKE).***

Moreover, during my class room observation I did not see a teacher who gave class work, homework, assignment, quiz and test. Learners were not participating actively in the teaching process. As I observed, lessons were presented through teachers' lecture. As a result, the learners only listened to the teacher's lecture and took notes. Teachers gave 10% of marks for the learners' class participation simply by looking learners' attendance sheet.

Therefore, though there were some paradoxes between few respondents' response and my actual observation, I believe what I saw happen practically. Hence, most teachers neglected continuous assessment techniques such as class works, home works, assignments, presentation and project work to measure learners' academic progress due to the dominance of the lecture method of teaching and summative assessment techniques. Thus, learners' day-to-day academic progress was not assessed continuously.

#### **5.2.3.9 Learners' activities while the learning and teaching process is going on**

Regarding this question, most respondents explained that most learners figure out things or the lesson through listening to the teacher's lecture and only few of them figure out the lesson through working together in groups. Moreover, respondents explained that most learners have a desire to learn through the teacher's lecture and supervision rather than by themselves. As a result, teachers are more inclined to lecturing and giving notes. *DeH* asserted that:

***Learners' activities are low in the class room because most of them are medium and low achievers due to their frustration; they have low language skills and knowledge. Therefore, they prefer listening teachers' lecture to perform different activities by themselves.***

From this point of view, one can understand that most of the learners resist learning through variety of learner-centered methods. As a result, teachers are discouraged to practice learner-centred methods of teaching. Generally, teachers are inclined to traditional teaching methods to satisfy learners' desires. As a result, teachers become autonomous in the teaching activities and learners became passive recipients of knowledge.

Moreover, in relation to the negative impact of traditional methods of teaching on the learners' academic achievement, Freire (1972:45) claimed that teacher-student relationship at any level, inside or outside the school reveals its fundamental narrative character. This relationship involves narrating subject (the teacher) and the patient; listening objects (the learners) that leads the learners to memorise the narrated content mechanically.

Therefore, both the respondents and the literature asserted that teacher's dominance methods of teaching make learners dependent, less confident, exposed for rote memory, shallow thinking and dependent learning, and finally they become academically incompetent. Thus, it is possible to mark that due to lack of awareness about learner-centered methods of teaching, learners make themselves as containers to be filled by the information transmitted by the teacher.

#### **5.2.3.10 Roles of Geography Departmental Heads in the implementation of preparatory school Geography syllabus**

Concerning this question, the majority of respondents revealed almost similar roles. They carry out the teaching activities, check and evaluate annual and daily lesson plans, evaluate textbooks, prepare and lead staff meetings, attend the school meetings, participate in co-curricular activities, evaluate teaching methods and assessment techniques through classroom supervision, facilitate the needed materials to the departments, solve contradictions of teachers and learners and communicate with parents and discuss about learners' academic and discipline matters.

A respondent from School 01 responded as follows:

*I have performed Variety of roles in the teaching of Geography syllabus. For instance, teaching Geography for Grade 12 students, giving tutorials for female & low achiever students, preparing & submitting reports to the school, preparing and administering examinations, supervising the teaching activities and giving feed backs, evaluating examinations prepared by Geography teachers, carrying out meetings in the department to evaluate the teaching and learning activities, participating in the co-curricular activities, in the school meetings and evaluate Geography teachers' work performance (DEAK).*

Therefore, it is possible to conclude that Departmental Heads cover the required roles and responsibilities to make the Geography teaching process effective. However, they are stressed by many activities and they encounter time constraints to follow up and supervise the classroom teaching and learning activities and practice varied learner-centered methods of teaching as well. Thus, this situation directly or indirectly hinders the practice of effective learner-centered methods and academic competency.

#### **5.2.3.11 Geography teachers' attitude towards their profession**

With regard to this question, the majority of the respondents responded that teachers show an interest in their profession and that is the reason why they chose the academic profession. However, respondents added that teachers are dissatisfied with their salary. For instance, DEAK from School 01 exclaimed:

*Teachers are not extra economic generators and their salary is low comparing with other offices' workers of the same level of education. As a result, they are found in lower economic status in the society and thus teachers are not doing to the extent the work is expecting to be worked. Therefore, though teachers have good attitude to be teacher, their low living condition negatively affects the teaching process (DEAK).*

To strengthen the afore-mentioned respondents' responses, Meyer and Gayle (1996:43), Deer (1996:16), Carnoy (1999:83-84) and Minguan (1989:89) have pointed out that the quality of



teacher affects the quality of education. Demotivated teachers found to be the cause for the poor quality of teaching (Noah & Morrison, 1997:134). Geography teachers should be motivated by means of remuneration (Olusegun, 2006:33).

Thus, from the participants' and literature point of view, it is generalized teachers' interest to their profession is affected by low salary and absence of incentives. This in turn negatively affects the quality of preparatory secondary schools Geography education.

#### **5.2.3.12 Types of questions Geography teachers frequently ask while they are teaching**

It was found that the majority of the respondents responded that most teachers frequently ask 'yes' or 'no' questions and rarely ask true or false, multiple choice, short answer, matching and essay questions. Few respondents responded that most teachers ask 'yes' or 'no', true or false, multiple choices questions rarely and short answer, matching and essay questions often.

However, there was a paradox nature between respondents' responses and what I observed in the actual classroom teaching. In my observation, except one Grade 11 teacher who asked one 'yes' or 'no' question, the majority of teachers did not ask any question throughout the whole period. Thus, I am in a position to say that almost all teachers did not ask questions and no questions were raised from the part of the learners. Teachers gave their lecture and learners passively received the information, and the communication was one way, i.e. from the teacher to the learners.

Therefore, it is possible to conclude that there was no interactive teaching process in the classroom. The teachers dominated the teaching activities and learners depended on the teachers' lectures. As a result, learners did not get an opportunity to be involved in the teaching process. This in turn negatively affected the learners' participation, creativity, confidence as well as responsibility of their independent learning.

### **5.2.3.13 Departmental Heads' opinion about the negative impact of traditional methods of teaching on learners' academic achievement**

Regarding the negative impact of traditional methods of teaching, the majority of respondents expressed that traditional method of teaching negatively affects learners' academic achievement in different ways: limits their participation, deteriorates their confidence, reduces their interaction with their mates, makes them shy to share ideas with their mates, and reduces their critical thinking skills and independent learning. For instance, a respondent from School 01 stated the disadvantage of lecture method of teaching:

*Lecture method of teaching makes students shy, less active, less confident, silent, dependent and careless in the teaching-learning process. And students to take notes with broken statements and abbreviations given by teachers during lecturing and these notes are difficult to understand when they study. Finally, they score low results in the examination due to jotting down broken concepts and dispersed information (DEAK).*

In supporting the respondents' responses, Olusegun (2006:68) and Ademe (2010:85) argue that the traditional teacher-centered method is the oldest method that teacher uses to deliver the subject matter to a class of learners. The classes normally take place at set times and last for a predetermined period as indicated in the timetable, while the teaching methods are almost invariably of the face-to-face and talk-and-chalk type. Furthermore, the whole system is generally geared towards the smooth operation of the teaching institution with little or no attempt being made to cater for the different learning styles and particular difficulties of individual learners. Thus, learners' involvement and participation is at low ebb because communication is often one way, from the teacher to the learners while the teaching-learning process goes on.

Thus, respondents' responses and literature indicated that a traditional lecture-method of teaching makes learners passive receivers and dependents of information provided by their teacher. Consequently, teachers are highly authorised on the teaching process and on the contrary learners are passive and dependent on the teacher's lecture. Therefore, the traditional teacher-centred method of teaching makes learners to be less competent, inefficient, less confident,

responsible, inactive and less creative in the preparatory secondary schools Geography teaching and learning process.

#### **5.2.3.14 Criterion of good quality Geography teachers**

Concerning Geography teachers' quality of teaching, most respondents explained that teachers' subject matter knowledge, pedagogical skill and classroom management skill, interest and commitment are good indicators of teachers' quality of teaching in general and Geography teachers quality of teaching in particular. In relation to good quality Geography teachers, a respondent expressed that:

*Punctuality for time, updating of knowledge by reading different materials supporting their lessons with teaching and learning materials, being model of their learners, being good leader of the classrooms and advising their learners are the major criterion of good qualities of Geography teachers (DEAK).*

Another respondent also explained the criteria of a good quality teacher as:

*First he/she should know how to teach his / her students; it means he/she should be qualified in Geography subject. Second he/she should know the general topography of his / her surroundings. Third he/she should deliver the subject matter to the students through simulation and other methods (DEHA).*

Furthermore, regarding teachers' quality, Darling-Hammond (in UNICEF, 2000:13) discussed that the highest quality teachers those most capable of helping their learners to learn, have deep mastery both in their subject matter knowledge and pedagogical skill. A teacher who makes the lesson easily understandable through practicing a variety of methods of teaching, utilizing different teaching materials, relating the classroom lesson to the reality through practical and field work methods of teaching, responding to learners' questions and treating them politely and following learners' progress through continuous assessment techniques and giving immediate

feedback, facilitate conducive teaching environment and create ample opportunity for the learners to participate and involve in the lesson are good indicators of teachers' quality.

Moreover, managing the classroom discipline, giving guidance and counseling service for the learners, love their learners, ready to learn from his/her learners and friends, has high intention to upgrade and update his/her knowledge through reading and training, keep schools' properties and resources, producing instructional media, conducting research to solve educational problems, respecting school's rules and regulation as well as respecting professional code of ethics are also implying teachers' quality.

These responses on teachers' quality support Sallis' (1993:49) assertion that the more people build capacity the more they can perform. Since teachers are crucial educational policy makers, they should be devoted and faithful to their tasks, get a clear picture of who their learners are, how they view their role in the system and the type of incentives, regulations, training that increase their effort and capacity to improve the teaching-learning process. The influence of learners by teacher's own personality cannot be replaced by any teaching material.

Thus, based on the respondents' responses and the consulted literature, it is difficult to admit that there are quality Geography teachers because I doubt that most teachers in general and Geography teachers in particular could not fulfill the criterion mentioned by the respondents and the literature. Therefore, it can be concluded that if Geography teachers have the above mentioned quality, they have a potential to perform effectively in the teaching process and through constructivists' methods of teaching.

#### **5.2.3.15 Factors that hinder the practice of learner-centred methods of teaching in the implementation of preparatory secondary school Geography syllabus**

Regarding this question, the majority of the respondents indicated that lack of teachers' and learners' awareness about the advantage and way of implementing learner-centered methods of teaching, shortage of resources and school facilities, un appropriate seats, lack of learners' interest in learner-centered methods of teaching, lack of teachers readiness to implement learner-

centered methods of teaching, placement of low capable learners in social science stream and shortage of time are the major constraints hindering the implementation of learner-centered methods of teaching in preparatory secondary school Geography education.

A respondent remarked as follows in this regard:

*Most teachers do not practice learner-centered teaching methods due to lack of interest from the part of the learners, shortage of resources in the school, low ability of the learners because high achievers placed in natural science stream and low achievers remained in social science stream (DEMEQ).*

Moreover, another respondent from School 06 stated that:

*Learners disliked learning by themselves and they considered the teachers ineffective and give low mark during teachers' performance evaluation if teachers try to practice learner-centered teaching methods (DEAK).*

Furthermore, another respondent also remarked as follows:

*Lack of management support; learners are disturbing while they are discussing with their mates, lack of learners' interest to learner-centered teaching methods, shortage of instructional media, shortage of time, lack of teachers' preparation for learner-centered teaching methods and un comfortable seats for learner-centered teaching methods are the main constraints to practice learner-centered methods of teaching in Geography education (DEWOR).*

In support of the respondents' remark, Anyanwu (2008:216) depicts that teachers inability to practice constructivists' methods of teaching in most effective way was due to dearth of resources, heavy work load and overcrowded curriculum. The portion of secondary school work schedule cannot be finished in the allotted time. As a result, insufficient time allotment could

affect the quality of education (E.T.A., 2006:65). Farrant (1980:169) suggests that due consideration should be given to classrooms in a way that encourages both teachers and learners in creating conducive environments for learning. Such a classroom situation is attractive for learners, which encourages them to exert great efforts in learning.

Therefore, based on the respondents' remarks and literature evidence, it is possible to conclude that lack of teachers' preparation for learner-centered teaching methods, lack of learners' interest to learn, low ability of the learners, disturbance and lack of confidence on the part of the learners, lack of management support, shortage of resources in the schools, uncomfortable seats for learner-centred teaching methods; no appropriate seats for the learners to practice learner-centered methods of teaching like group discussion and shortage of time are the major factors hindering the implementation of learner-centered methods of teaching in preparatory secondary schools Geography education.

#### **5.2.3.16 Factors affecting the quality of preparatory school Geography education**

The majority of the respondents discussed that low interest of the learners, shortage of instructional materials and other resources as well as school facilities such as shortage of department room, laboratory room, display room, pedagogical center, shortage of time to cover the intended contents at appropriate time, lack of teachers preparation and commitment for their profession, lack of incentives for teachers and learners' disturbance are the factors that affect the quality of education in general and Geography education in particular. For instance, one respondent remarked about the hindrances of quality of education as:

*Based on their ability, learners are divided in to three; high achievers, medium achievers and low achievers. But in social science stream there is one type of learners; low achievers because the policy gives high emphasis for Natural science stream and high achievers are encouraged to join Natural science stream. But the rest low achievers join the Social science stream. As a result, learners are in capable to learn independently and with their friends. Therefore, they prefer to learn by depending on*

*the teacher. And teachers have been encouraged to teach through lecture method with large and organised note (DEMEQ).*

Therefore, from the afore-mentioned respondents' response it is possible to conclude that low interest and ability of the learners, learners' disturbance, shortage of instructional materials, school facilities and unavailability of physical resources such as shortage of department room, laboratory room, display room, pedagogical center, shortage of time to cover the intended contents at appropriate time, lack of teachers preparation and commitment for their work, low salary and lack of incentives for teachers are the major factors that affect the quality of Geography education.

### **5.3 Analysis of learners' responses of open-ended questionnaires**

#### **5.3.1 Teaching methods that most learners prefer to learn Geography**

The majority of the respondents explained that the teaching method they like to learn Geography is learner-centered and participatory. Accordingly, these learners specified the methods that they discussion, question and answer, field work, presentation and project work. Moreover, respondents expressed their desire for learning through practical learning and learning with instructional media especially real objects. However, few respondents responded that they like lecture method of teaching. One respondent stated his liking as follows:

*I like discussion method, lecture method and presentation method of teaching. However, presentation is a teaching method I like very much because when I present the given task my fear is reduced and develop my confidence (L-6).*

The nature of learners' response was contrast with teachers and Departmental Heads responses. Teachers and Department Heads put their story as if learners' desire is the cause for the frequent practice of lecture method in the teaching process. However, the problem seems to lie in the teachers themselves, i.e. teachers did not facilitate the lessons properly and they did not make teaching attractive and they did not motivate the learners to learn by themselves and with their mates. What I observed is that teachers were careless to control the class discipline as well as to

promote learners' concentration in the teaching process. Therefore, teachers were the cause for the learners being less interested to learn in general and learning through learner-centered methods of teaching in particular.

### **5.3.2 Factors which affect learners' participation in Geography teaching process**

In relation to learners' participation, many respondents responded that the absence of practical teaching activities like field work and field visit, learning by doing, carrying out the teaching process without utilising instructional media like computer, films, television, video, meteorological instruments, projectors, maps, atlas, globes, guides, shortage of reference books, textbooks are factors negatively affect learners' participation.

Moreover, respondents also explained that physical resources like Geography room, laboratory room, teachers' desire to teach through lecture-method, students' low interest and motivation to learn, absence of classroom activities like class work, questions, answers and other classroom tasks, unpleasant relationship between teachers and students, teachers' negative attitude for the students, students' disturbance, shortage of text books, the frequent practice of lecture method of teaching, teachers give much note and the lesson is being boring, low teachers subject matter knowledge and pedagogical skill, lack of teaches' interest and motivation, lack of class room management skill on the part of the teachers, lack of understanding about students' learning style and needs on the part of the teacher and aggressive nature of the teacher are significant factors that negatively affect learners participation.

To assert the above findings, one respondent from School 01stated:

*I am not participating in the teaching-learning activity because the whole period is covered by the teacher through lecturing and note giving without practical work, without utilizing instructional media like computer, projectors; Geography needs field work but we didn't perform it, no guides and reference books and no Geography laboratory to practice an experiment (L-53).*

Moreover, another respondent also elaborated as:



*When I learn Geography lesson, I didn't visit historical places and real worlds of Geographical interest like castles, churches, mosques, lakes, mountains, rivers, volcanic areas, parks and areas of special economic activities. Besides, I learn through teacher's lecturing style without instructional media. Thus, I am being discouraged to participate in the learning-teaching process (L-38).*

Similarly, another learner also explained that:

*... the teacher doesn't utilise teaching and learning materials like graphs, maps and other materials. Consequently, I am not interesting to participate in the learning and teaching process (L-18).*

Likewise, another respondent from School 01 also elaborated about the problems that hinder his class room participation as:

*Shortage of materials, shortage of good teacher; a teacher who makes participatory learning-teaching process by asking questions, giving home works, lack of good school administration; an administration who gives award and reward for active participation and better achievement (L-42).*

Moreover, another respondent from School 01 has also indicated her obstacle of participation as:

*No mutual understanding between the teacher and the students, teacher gives high emphasis in giving note, stresses students by boring lecture and much note as well as autocrat behavior of the teacher hindered me from the participation of the teaching and learning process (L-39).*

In the same way, another respondent also explained teacher and learner relationship as:

*Due to lack of good relationship between teachers and students, lack of teachers' motivation to the students as well as teacher covers the whole period through lecturing I did not get an opportunity to participate in the teaching-learning process (L-9).*

Furthermore, another respondent noting that:

*Teachers are careless, hot tempered, autocrats; they don't know how to interact and treat students and they don't know about professional ethics. Thus, teachers better to take trainings about the way how to interact and treat students as well as taking training regarding ethics of teaching profession (L-22).*

Generally, these findings indicate that the dominant lecture method of teaching, the autocratic and aggressive teachers' behavior, teachers' low interest and motivation, absence of practical learning and teachers failed to utilise instructional media hinder learners' participation in the teaching-learning process. This in turn negatively affects learners' academic performance as well as the quality of Geography education.

### **5.3.3 Teaching strategies suitable for Geography learning**

According to most respondents, group discussion, field work, field visit, demonstration, technology-based learning like computer, GIs and TV, classroom activities, question-and-answer method, practical learning, formative assessment techniques and other participatory methods make the Geography lesson easily understandable and unforgettable. In general, respondents asserted that learner-centered methods of teaching are appropriate for effective Geography teaching process.

### **5.3.4 Learners' general comments and suggestions about Geography teaching process**

It is highly recommended by the learners that teachers should give more emphasis to learner-centered methods of teaching and for practical learning than theoretical learning. It has been also commented by learners that teachers need to work hard to raise learners' interest and motivation to learn Geography actively. Moreover, the school should provide necessary budget for practical learning so that teachers could make their lesson more participatory. Teachers also need to listen

to what learners feel and say; they should try to make learners be independent when it comes to learning. They should also give class works, homework, assignments, project works and field-work tasks and then assign learners to present and report in the classroom. In providing notes for students, teachers need to be clear and precise.

Moreover, the teaching process should be supported by instructional media and Geography reference books as well as other materials. Physical resources like Geography room, Geography laboratory should be available in the school and teachers should be democrats and should respect their learners.

Geography Departmental Heads should supervise the teaching process and give feedback as well as provide advice about the practice of learner-centered methods of teaching, learners' participation and class room management skills. Besides, the newly rolled-out textbooks should incorporate the required illustrations, definitions and explanations. Teachers should practice continuous assessment techniques like quizzes, tests, class works, home works, assignments and other tools continuously to measure learners' academic progress. Teachers should better prepare diversified item types of examination; they often prepare essay type item and this does not prepare the learners for EUEE/Ethiopian University Entrance Examination because it is prepared in multiple choice item types.

Furthermore, learners recommended that Geography teachers should consider the three types of learners; high achievers, medium achievers and low achievers while they construct Geography examination. Finally, learners strongly suggested that the government should raise learners' learning interest by creating job opportunities to the new graduates.

### **5.3.5 Summary of analysis of teachers and Departmental Heads interview questions as well as learners open-ended questionnaires**

#### **5.3.5.1 Summary of analysis of teachers' interview questions**

Respondents clearly discussed that Geography is unique from other discipline regarding to its contents, methods of teaching, resources, school and classroom facilities, instructional media and commitment of teachers and school managements.

Moreover, respondents reported that most Geography contents are not found in the school compound and in the class room. Therefore, Geography contents need practical activities and they are more comfortable for learner-centered methods of teaching than the traditional methods of teaching.

Besides, respondents asserted that learner-centered teaching strategies, such as brainstorming, questioning, discussion, demonstration, explanation, harmonising/ reorganising, documentation, project work, guest speaker, field trips and field work are identified in the higher education preparatory secondary school Geography syllabi. Thus, the design of the Geography syllabi has no problem in identifying the learning and teaching strategies and assessment techniques.

Furthermore, as far as the value of learner-centred methods of teaching is concerning, all respondents reported that learner-centered methods of teaching have enormous values, such as they encourage learners participation, interaction with their mates and share ideas, develop learners creativity, critical thinking skill, self confidence, learners independent learning ability, enable learners to integrate theoretical class room lesson with outdoor practical learning, develop learners' commitment and responsibility of their own learning.

Respondents did not only mention the value of learner-centered learning and teaching methods but also they depicted the demerit of traditional methods of teaching. Accordingly, majority of the respondents mentioned that traditional methods of teaching make learners dependent on teacher's activities deteriorate learners' creativity, critical thinking skill, participation, confidence, motivation and responsibility to generate their own ideas as well as to construct their own knowledge.

However, majority of the respondents (except one respondent) did not deny responding that majority of teachers frequently employ lecture method of teaching. And they prefer lecture method to learner-centred methods of teaching due to shortage of time to cover the contents of the annual lesson; teachers are busy by different activities in the school and faced time constraints and even exhausted to practice variety of teaching methods, lack of awareness about the advantages of learner-centered methods of teaching and continuous assessment techniques both on the part of the teachers and the learners, low interest of the learners to learn; learners are passive while they are encouraged to participate in a certain group or individual tasks, shy, afraid, while they assigned to learn through discussion and other self-learning activities due to lack of confidence on their ability as if they couldn't able to speak English language fluently and learners are incapable for self learning (the more capable learners joined natural science stream), learners' disturbance, few better achievers dominance, dearth of resources in the school, shortage of budget to purchase instructional media, and to facilitate fieldwork method of teaching.

Likewise, majority of the respondents explained that their readiness for the teaching profession in general and to implement learner-centred methods of teaching in particular is low due to lack of training about the advantage of learner-centered methods of teaching and the way how to implement them in secondary school Geography education, low interest for the teaching profession due to lack of incentives for the teachers as motivation, shortage of time; teachers are loaded with extra works rather than teaching.

In addition to teachers' readiness, teachers and learners experience negatively affect the practice of learner-centered methods of teaching. As majority of the respondents reported both teachers and learners came through teacher-centred method of teaching. As a result, learners resist the new constructivists' approaches of learning and teaching and teachers were not committed to bring a paradigm change and adopt learner-centered methods of teaching. Therefore, both teachers and learners contributed for the practice of traditional method of teaching permanently.

Finally, respondents mentioned that all Geography teachers employ continuous assessment technique, such as class work, home work, assignment, quiz, test, mid and final examination to measure the level of learners' academic progress and achievement. However, I did not trust the respondents' response particularly the continuous assessment techniques, such as class work, home work, quiz and other forms of learners' participation because I did not see a teacher who gave home work, class work, quiz and other forms of class activities to the learners while I observed the actual class room learning and teaching process. As I observed, the whole periods were covered by teacher's lecture and note giving activities and learners were busy by listening the lecture and taking the note.

Generally, participants briefed the main factors those negatively affect the practice and quality of higher education preparatory secondary school Geography education. Accordingly, the absence of resources, such as physical resources, class room facilities, shortage of instructional media, shortage of sufficient Geography reference books, scarcity of budget to practice field work method and other activities , placement of incompetent learners in social science stream, learners low interest to learn through learner-centered methods of teaching, learners' disturbance, shortage of time to cover the content, absence of plasma TV transmission due to the interruption of electrical energy, low interest and commitment on the part of the teachers and lack of teachers professional training regarding how to practice variety methods of teaching and how to employ continuous assessment techniques are the major problems that hinder the implementation of Preparatory secondary school Geography syllabus through constructivist approaches of teaching. As a result, this affects the quality of higher education preparatory secondary school Geography education.

At the end respondents forwarded remarks to solve the problems that affect the practice of learner-centered methods of teaching and to assure the quality of higher education preparatory secondary school Geography education.

Accordingly, so as to improve the practice of learner-centered methods of teaching and to assure the quality of higher education preparatory secondary school Geography education, the school

better to provide resources and instructional media through producing in the school and buying from market, fulfilling school and class room facilities, Providing Geography reference books, sufficient time for the contents, equal opportunity for all learners to be placed in a stream based on their interest, the schools provide budget, practicing variety methods of teaching, motivate teachers' interest and commitment through training and incentives, create awareness to the learners about the use of education in general and Geography education in particular, supervise and provide feedback to improve the learning and teaching process.

#### **5.3.5.2 Summary of Departmental Heads' interview questions**

Regarding the preparation of higher education preparatory secondary school Geography syllabus, all respondents responded that preparatory secondary school Geography syllabus was prepared in line with Ethiopian education policy and constructivists' methods of teaching. According to their response both the policy and the syllabus encourage learners' self-learning, creativity, participation, confidence, continuous assessment techniques as well as teachers have been encouraged being facilitator of the learning and teaching process.

Besides, majority of the respondents agreed that Geography syllabus is prepared to be practiced easily / feasible because the contents are clear and arranged from simple to complex, integrated vertically and horizontally, the language is simple and understandable, no more editing problems, strategies are identified, activities are recommended, contents are up to date, it fits learners' level of understanding and experience and it is suit to practice learner-centred methods of teaching.

Moreover, majority of respondents explained that Geography is unique subject from other subjects because most Geography domains such as Physical geography, Biogeography, Demography, Economic Geography, Map reading and map projection are found outside the class room; found in the real world. Therefore, Geography needs learning and teaching strategies that initiate practical learning and learning by doing as well as teachers who have good subject matter knowledge, pedagogical skill, class room management skill, interest and commitment to implement Geography syllabus through learner-centered methods of teaching.

However, most respondents explained that teachers frequently practice lecture method of teaching. As they discussed the reasons why teachers frequently practiced lecture method of teaching were to cover the annual lesson and to finish on the given time, to manage the class room discipline, to satisfy the majority of the learners' interest; learners are not happy to process knowledge by themselves or to learn by themselves independently and in group. The other reason was group work is dominated by few high achievers; the low and medium achievers are not active in the group work and thereby the whole activities have been covered and done by high achievers.

Majority of the learners are not well capable to work independently and weak participants in the group work. Thus, most of the learners figure out things or the lesson through listening of teacher's lecture. Therefore, learners' role is limited to listen teacher's lecture and taking the note. Moreover, lack of teachers' readiness was considered by most of the respondents as it is the main hindrance to practice learner-centred methods of teaching in preparatory secondary school Geography education. The main reasons why teachers do not have readiness are they did not get trainings to refresh their profession regarding learner-centred methods of teaching and continuous assessment techniques; the trend that most teachers were coming was teacher-centered methods of teaching. As a result, they are not happy and committed to practice learner-centered methods of teaching.

In addition to this, teachers and Departmental Heads are overloaded by different types of tasks both in the classroom and outside the class room. As a result, they exposed for time constraint to carry out effective learning and teaching activities.

Regarding teachers' interest for their profession, majority of the respondents explained that though teachers have good interest for their profession and they joined the profession based on their interest, they are dissatisfied by their salary and disappointed by the policy of 70:30 (the ratio of Natural Science and Social Science respectively) that means the policy encourages Natural Science teachers and learners and high achievers and majority learners are encouraged to



join the Natural Science and Geography teachers left with low achievers. As a result, they are demoralised being Social Science teachers in general and Geography teachers in particular.

Furthermore, respondents complained on the shortage of resources as a big constraint to practice learner-centred methods of teaching. Most resources are unavailable in the schools and few are insufficiently available. Accordingly, regarding physical resources like Geography room, weather station, Geography display room and display field, map work room and launch are completely unavailable. But Library is the only resource available in all schools with limited reference books and facilities and department room is available in one school with limited facilities. Moreover, disorganised pedagogical centers were available in the two sampled schools with few resources.

As far as concerning assessment techniques, majority of the respondents explained that teachers measure learners' academic achievement through quiz, test, mid and final examination. Moreover, respondents reported that most teachers ask yes or no questions frequently and true or false, multiple choice, short answer, matching and essay questions rarely while the learning and teaching process is going on. Thus, majority of the teachers ignored most continuous assessment techniques/ formative assessment techniques such as class work, home work, class participation and assignment to measure learners' academic achievement.

Moreover, during my observation I did not see a teacher who gave class work, home work, assignment, quiz, test; and no one learner participate in the learning-teaching process; the whole periods of the lesson were covered by teacher's lecture. And the learners were listening teacher's lecture and taking the note provided by the teacher. Besides, I informed through informal talk that teachers give 10% and more marks to the learners as class participation simply by looking learners' attendance sheet.

Furthermore, there was a paradox between informants' response and what I observed in the actual classroom; in my observation except one grade 11 teacher who asked one yes or no

question the other teachers didn't ask any question throughout the whole periods. And I believed what I observed rather than what I have been told me by others.

Finally, majority of the respondents reported that lack of teachers and learners awareness about the advantage and way of implementation of learner-centred methods of teaching, lack of awareness about the advantage and the way how to employ continuous assessment techniques, the over loaded of teachers and Department Heads by different tasks, shortage of Physical resources, shortage of instructional materials and other resources as well as school facilities, un appropriate type and arrangement of seats, absence of budget supply from the schools, shortage of time to cover the intended contents at a given period of time, lack of learners' interest to learn through learner-centred methods of teaching, lack of teachers readiness to implement learner-centered methods of teaching, un faire placement of learners in social science stream, learners are not able to learn by themselves and with their friends, lack of confidence on the part of the learners to learn independently and to reflect their own views and shortage of time are the major problems that hinder the practice of learner-centered methods of teaching and the quality of Geography education in higher education preparatory secondary schools.

At the end, respondents conclude their report by forwarding condensed remarks. Accordingly, so as to assure the quality of education in general and Geography education in particular, instructional materials, school facilities and other resources should be fulfilled, teachers should get long and short term trainings through in-service and pre service programs, learners' interest to education in general and Geography education in particular should be raised through certain motivation mechanisms and advices, teachers' interest and commitment to their profession should be raised through trainings, workshops as well as incentives, sufficient time should be allotted in the syllabus to cover the contents in the appropriate schedule, an awareness should be created on learners' mind about the advantages of learner-centered methods of teaching, learners should get advise not to disturb the teaching and learning process especially during learner-centred methods of teaching, sufficient text and reference books should be fulfilled, the school should provide budget for field work and other practical activities, teachers should practice variety methods of teaching to encourage learners understanding and participation, the

government should revise the policy of 70:30 ratio ( learners of Natural science stream and learners of Social science stream respectively) and should give equal attention and chances (50:50 ratio) with learners of mixed ability.

### **5.3.5.3 Summary of Learners' Responses on Open-ended Questionnaires**

Concerning the teaching methods that most learners prefer to learn Geography, majority of the respondents explained that learner-centered methods of teaching such as field work, group discussion, question and answer, presentation and project work are their favorite methods of teaching to learn their Geography lesson. Moreover, respondents expressed their desire for learning through practical learning and learning with instructional media especially real objects. However, few respondents responded that they like lecture method of teaching.

Thus, the nature of learners' response was contrast with teachers and Departmental Heads responses. Teachers and Departmental Heads put their story as if learners' desire is the cause for the frequent practice of lecture method of teaching in Geography education. However, learners responded that learner-centered methods of teaching are their preferences to learn Geography. Hence, the problem lies in the teachers themselves, i.e. teachers did not facilitate the lessons properly and they did not make teaching attractive and they did not motivate the learners to learn by themselves and with their mates. What I observed in the actual classroom teaching is that teachers were careless to control the class discipline as well as to promote learners' concentration in the teaching process. Therefore, teachers were one of the causes for the learners being less interested to learn through learner-centered methods of teaching.

With regard to the factors which affect learners' participation in Geography teaching process, many respondents responded that the absence of practical teaching activities like field work and field visit, learning by doing, teaching without instructional media (Computer, Films, Television, Video, Meteorological instruments, Projectors, Maps, Atlas, Globes, Guides, shortage of reference books and textbooks) are factors negatively affect learners participation.

Moreover, respondents also explained that physical resources like Geography room, laboratory room, teachers' desire to teach through lecture method, absence of classroom activities like class work, questions, answers and other classroom tasks, unpleasant relationship between teachers and learners, learners' disturbance, teachers give much note and the lesson is being boring, low teachers' subject matter knowledge and pedagogical skill, lack of teachers' interest and motivation, lack of class room management skill on the part of the teachers, lack of understanding about learners' learning styles and needs on the part of the teacher and aggressive behavior of the teacher are significant factors that negatively affect learners participation.

Generally, dominant lecture method of teaching, the autocrat and aggressive behavior of teachers, teachers' low interest and motivation, absence of practical learning and teachers failed to utilise instructional media are hindrances of learners' participation in the teaching-learning process. This in turn negatively affects learners' academic performance as well as the quality of Geography education.

Finally, learners strongly recommended that teachers should give more emphasis to learner-centered methods of teaching than theoretical learning. It has been also commented by learners that teachers need to work hard to raise learners' interest and motivation to learn Geography actively. Moreover, the school should provide necessary budget and facilities for practical learning so that teachers could make their lesson more participatory. Teachers also need to listen to what learners feel and say; they should try to make learners be independent thinkers when they come to learning.

Teachers should practice continuous assessment techniques like quizzes, tests, class works, home works, assignments, project works, field work tasks and other tools continuously to measure learners' academic progress. Teachers should also prepare diversified item types of examination; they often prepare essay type item and this does not prepare the learners for Ethiopian University Entrance Examination (EUEE) because it is prepared in multiple choice item types. In providing notes for learners, teachers need to be clear and precise.

Furthermore, the teaching process should be supported by Physical resources, instructional media and other materials and facilities as well as teachers should be democrats and should respect their learners. Besides, Geography Departmental Heads should supervise the teaching process and give feedback as well as provide advice about learner-centered methods of teaching, learners' participation and class room management skills. Geography teachers should consider the three types of learners; high achievers, medium achievers and low achievers while they construct Geography examination, the government should raise learners' learning interest by creating job opportunities to the new graduates.

### **5.3.6 Summary of analysis of interviews and open-ended questionnaires**

Regarding the unique nature of Geography, respondents clearly indicated that Geography is unique from other disciplines regarding its contents, teaching methods, resources, school and classroom facilities, instructional media as well as commitment of teachers and school managements. Thus, according to the majority respondents' responses, Geography is a unique subject from other subjects because most Geography domains such as Physical Geography, Biogeography, Demography, Economic Geography, Map Reading and Map Projection are found outside the classroom. Hence, Geography needs teaching strategies that initiate practical learning as well as teachers who have good subject matter knowledge, pedagogical skills, classroom management skill, interest and commitment to implement Geography syllabus through learner-centred methods of teaching.

Therefore, Geography content needs practical activities more suitable for learner-centered teaching than the traditional methods of teaching. Besides, respondents asserted that learner-centred methods of teaching strategies such as field work, brainstorming, questioning, discussion, demonstration, explanation, harmonising, documentation, project work and guest speaker are identified in the higher education preparatory secondary school Geography syllabi.

Concerning to the preparation of higher education preparatory secondary school Geography syllabus, most respondents responded that preparatory secondary school Geography syllabus was prepared in line with Ethiopian education policy and constructivists' methods of teaching. Thus,

both the policy and the syllabus encourage learners' confidence for self-learning, creativity, participation, continuous assessment techniques as well as teachers have been encouraged to be facilitator of the teaching and learning process.

Besides, respondents stated that Geography syllabus is prepared to be practiced easily / feasible because the contents are well integrated, clear and arranged from simple to complex, the language is simple and understandable, no more editing problems, strategies are identified, activities are recommended, contents are up to date, it fits learners' level of understanding and experience and it is suit to practice learner-centered methods of teaching. Thus, the design of the syllabi has no problem in identifying the teaching strategies and assessment techniques except the insufficient time allotted to practice learner-centered methods of teaching.

Furthermore, as far as the value of learner-centered methods of teaching is concerned, most respondents reported that learner-centered methods of teaching have enormous values, such as they encourage learners' participation, interaction with their mates and share ideas, develop learners' creativity, critical thinking skill, self confidence, learners independent learning ability, enable learners to integrate theoretical class room lesson with outdoor practical learning, make learners decision makers, develop learners' commitment and responsibility of their own learning.

Respondents did not only mention the value of learner-centered methods of teaching but also they complained the demerit of traditional methods of teaching. Accordingly, majority of respondents mentioned that traditional methods of teaching make learners dependent on teacher's activities deteriorate learners' creativity, critical thinking skill, participation, confidence, motivation and responsibility to generate their own ideas as well as to construct their own knowledge.

However, majority of the respondents did not deny responding as majority Geography teachers frequently employ lecture method of teaching. And they prefer lecture method to learner-centered methods of teaching due to shortage of time to cover the contents of the annual lesson; teachers are busy by different activities in the school and faced time constraints and exhausted to practice variety methods of teaching, lack of awareness about the advantages of learner-centered methods

and continuous assessment techniques due to lack of training both on the part of the teachers and the learners, low interest of the learners to learn through learner-centered methods of teaching; learners are passive while they are encouraged to participate in the group or individual tasks, shy, afraid, while they assigned to learn through discussion and other self-learning activities due to lack of confidence on their ability, lack of confidence on their English language skill and learners are incapable for self learning (poor back ground knowledge), learners' disturbance, few better achievers dominance during group discussion, dearth of resources in the school, shortage of budget to purchase instructional media and to facilitate fieldwork method of teaching.

Likewise, large part of respondents explained that teachers' readiness for the teaching profession and to implement learner-centered methods of teaching is low due to lack of training about the advantage of learner-centered methods of teaching and the way how to implement them in secondary school Geography education and low interest for the teaching profession due to lack of incentives for the teachers as motivation.

In addition to teachers' readiness, teachers and learners experience negatively affect the practice of learner-centered methods of teaching; majority respondents reported that both teachers and learners came through teacher-centered method of teaching. As a result, learners resist the new constructivists' approach of teaching and teachers were not committed to bring a paradigm change and adopt learner-centered methods of teaching. Therefore, both teachers and learners have a great contribution for the practice of traditional method of teaching dominantly and permanently in the teaching of preparatory secondary school Geography education.

Finally, respondents mentioned the assessment technique that teachers employ to measure the level of learners' academic progress and achievement. Accordingly, most respondents gave their witness as all Geography teachers employ continuous assessment techniques like class work, home work, assignment, quiz and test, mid and final examination. However, during my class room observation I did not see teachers who implement the continuous assessment techniques, such as class work, home work, quiz and other forms of learners' activities and participation.

As I observed, the whole periods were covered by teacher's lecture and note giving activities and learners were busy by listening the lecture and taking the note. Moreover, I did not see marks given by the teacher for learners' class works, home works and other exercises in learners' exercise books during my class room observation.

Generally, respondents briefed the main factors that hinder the practice of learner-centred methods and the quality of higher education preparatory secondary school Geography education. Accordingly, the absence of resources such as, physical resources, class room facilities, shortage of instructional media, scarcity of budget to practice field work method of teaching and other activities, learners' low learning interest, learners' low engagement in the teaching activities, learners' disturbance, shortage of time to cover the content, absence of plasma TV transmission due to the frequent interruption of electrical energy, low interest and commitment on the part of the teachers and lack of teachers professional training about how to practice variety methods of teaching and employing continuous assessment techniques were the major problems that hinder the implementation of higher education preparatory secondary school Geography syllabus through constructivists' approaches of teaching and this in turn affecting the quality of higher education preparatory secondary school Geography education.

At the end, respondents conclude their report by forwarding strong remarks to solve problems of practicing learner-centered methods of teaching and to assure the quality of higher education preparatory secondary school Geography education. Accordingly, so as to assure the quality of education in general and Geography education in particular, instructional materials, school facilities and other resources should be fulfilled, teachers should get long and short term trainings through in-service and pre service programs, raise learners' interest to education in general and Geography education in particular through different motivation mechanisms and advices, raise teachers' interest and commitment to their profession through trainings, workshops as well as incentives, sufficient time should be allotted to cover the contents at an appropriate schedule, an awareness should be created on learners' mind about the advantages of learner-centered methods of teaching, learners should get advise not to disturb the teaching and learning process especially during learner-centered methods of teaching, sufficient text and reference books should be fulfilled, the school should provide budget for field work and other activities, teachers should



practice variety of teaching methods to encourage learners' understanding and participation, Ethiopian MEO give high emphasis to facilitate and provide sufficient resources for social science stream in general and Geography education in particular, supervise and follow up the teaching activities and provide feedback to improve the quality of Geography education.

#### **5.4 Conclusion**

Data was gathered through interviews and open-ended questionnaires and then analysed finally identified the problems that hinder the practice of learner-centred methods of teaching in the implementation of Geography syllabus in higher education preparatory secondary schools. Accordingly, scarcity and unavailability of resources, teachers' past learning and teaching experience, lack of teachers' training, lack of teachers' commitment, learners' low interest to learn, shortage of time for learners' activity, low salary and absence of other incentives for teachers were identified as the main hindrances in the practice of constructivist methods of teaching in most effective way in the implementation of Geography syllabus.

Thus, Geography teachers are reluctant to drop the old tradition of teaching where knowledge is absorbed rather than reviewed and regurgitated rather than applied to solve problems. As a result, teaching activities are dominated by teacher-centered method of teaching and learners are dominated by teachers' information transmission process. Therefore, learners failed under teachers' dominance method of teaching and summative assessment techniques.

## **CHAPTER 6**

# **PRESENTATION OF RESULTS FROM OBSERVATION, DOCUMENTS AND CLOSE-ENDED QUESTIONNAIRE**

### **6.1 Introduction**

This chapter presents the results of the analysed data from observation, documents and the closed-ended questionnaires. Findings from the data gathered through observation are presented through narration, whereas those from data gathered through documents are presented as organised in tables, and those gathered through the questionnaire are presented through descriptive statistics, frequencies, percentages and mean.

### **6.2 Observation**

The observations were focused on a variety of issues such as the teaching methods practiced in the actual classroom of the teaching process, the type of assessment techniques, the utilisation of instructional media by Geography teachers, teachers' and learners' activities, classroom facilities (seats, blackboard and others), class size, availability of instructional media, availability of reference materials and availability of physical resources with their facilities, such as Geography room, Geography Laboratory, Geography Departmental room, library, pedagogical centre and teachers' and learners' refreshment rooms/lounges in the schools as well as infrastructure of the schools.

#### **6.2.1 Observation of classroom**

##### **6.2.1.1 Actual classroom teaching**

I observed all the sampled schools that I had chosen to be my research sites. Accordingly, in the observation a variety of issues was incorporated, such as the type of teaching methods, the teachers' and the learners' activities, the utilisation of the instructional media in the teaching process, the number and type of learners' seats, the class size, the quality and size of the

blackboard. Thus, I carried out the observation on the actual practice of Geography teaching process in each classroom and in each grade level.

Accordingly, I observed the classroom lessons in four consecutive sessions in different grade levels and sections. Thus, regarding the type of teaching methods dominantly practiced by Geography teachers was lecture method and writing notes on the blackboard. Learners were listening and receiving the information transmitted by the teacher and copying the teacher's notes from the blackboard. Therefore, learners considered the teacher as the fountain of knowledge and expected all things such as information, activities, knowledge and others from him. This lecture method of teaching has a negative impact on learners' participation and academic progress. Olusegun (2006:68) asserts that the lecture method is the oldest and expository teaching method because it is teacher-dominated and learners-passive method. It is also known as talk-and-chalk method in a situation the teacher decides to write the summary of the points he has taught on the board and communication is often one way during the teaching-learning process.

Concerning the utilisation of instructional media by the Geography teachers I observed in the four sessions, no one of them tried to utilise instructional media in the process of teaching Geography. The teaching process was dominantly talk-and-chalk. As a result, the lesson was not really understood by learners and was easily forgotten and it promoted rote memorisation. The observation data showed that most of Geography teachers were transmitting knowledge to learners rather than allowing learners to construct their own knowledge. Only one Grade 12 Geography teacher facilitated the lesson which was transmitted through the plasma TV by giving an introduction and conclusion of the lesson. However, learners were passive and the classroom communication was only from the teacher and the plasma TV to learners. This situation therefore made learners to be passive participants and thus performed unsatisfactorily in Geography.

The importances of instructional media have been heavily discussed by many researchers. For instance, Olusegun (2006:78) and Abdelraheem and Al-Rabane (2005:1) explain that instructional media are no doubt the information carriers that facilitate teaching process.

However, the selection and the utilisation of these media should be based on certain criteria such as learners' characteristics, instructional objectives, suitability, technicality, practicability and the teacher's capability among others. Maps, Globes, charts, models, meteorological instruments, Technologies, etc., should be employed in the teaching of Geography to facilitate and make learning more effective and interesting.

As far as learners' engagement is concerned, I saw that no learners participated either by carrying out activities, asking questions or giving suggestions and comments about the lesson. As mentioned above, learners were passive during the teaching sessions and the whole period was covered by the teacher providing the information.

I tried to check learners' Geography exercise books to identify whether the teacher gave class work, homework and assignment or not. There was none or other activities in the learners' exercise books and there was no teacher's signature and marks given to the learners' activities. Continuous assessment which is part and parcel of the teaching process and is encouraged by the education policy was neglected by most participating teachers in this study.

Thus, it can be concluded that these Geography teachers did not make any effort to promote constructive methods of teaching which encourage learners to think critically and learn by themselves. This approach to teaching only confirms the fact that traditional methods are not effective on learners' mental maturation and academic achievement in general as well as on the quality of Geography education in particular. Desta (2004:72-73) argues that lecture method dominates the teaching process.

As teachers usually focus on giving lectures, students depend primarily on lecture note and independent learning is not encouraged. Most teachers lack familiarity with individual differences among the learners. In contrast, Rambuda and Fraser (2004:10) write that the study of Geography in senior secondary preparatory schools provides opportunities for students to develop their intellectual capacity for life-long learning and skills such as critical thinking, information processing, problem solving, decision-making, etc. Similarly, Demirci, Kesler and

Kaya (2010:57) claim that Geography is a colourful subject for students in secondary school if lessons are invigorated with various in-and-out of school activities and students are placed at the centre of learning whilst encouraging teachers to guide learners during the teaching process as well as evaluating the types of in-and-out of school activities. Geography teachers facilitate and create opportunities to learners to engage in the knowledge construction activities. It is well known that educational experiences involving the students' actively participating in concrete examples are retained longer than abstract experiences (Abdelraheem & Al-Rabane, 2005:1).

In the traditional method the teacher views him/herself as the sole source of information whereas learners remain passive listeners to formal and structured presentations. Learners do not get the opportunities to understand their natural inclination, think critically, develop confidence, interact with their environment, enjoy with their mates and develop their communication skills. Learners should be more active than the teachers. The objectives of Geography syllabus should be learner-activity oriented, not teacher-activity dominated (Olusegun, 2006:61). On the contrary, most teachers practice traditional lecture method and make learners passive. In most Geography classrooms, learners have been learned geographical facts and concepts with minimal understanding (Rambuda, 1994:57).

Therefore, based on my observation and the research findings, it can be concluded that the practice of constructive methods of teaching and the utilisation of instructional media were neglected in most participating teachers in this study, and this was one of the major reasons for low quality of education in general and the learners' low achievement in Ethiopian University Entrance Examination (EUEE) in particular.

#### **6.2.1.2 Classroom facilities**

I saw that there were sufficient seats in the classrooms, but they were arranged straight in rows. As a result, learners were seated facing towards the blackboard. Thus, the seats could not be arranged in circular and horse shoe manner and thus could not encourage learner-centered teaching methods.

In relation to the size and quality of the blackboard, the sizes of the boards were not large enough and not sufficient to write notes, to draw pictures, diagrams and to discuss the lesson. The boards were of poor quality and not suitable to write and draw on them. Besides, in the two schools (School 03 and school 04) blackboards were very old and cracked and therefore it was difficult to write and draw on them. Teachers struggled to write notes on them. Moreover, I observed the number of the learners in the class (the class size) was not too much or too small in most sections and grade levels their size was between 30-45 learners.

Thus, in the Ethiopian context it is possible to say that the class size was optimum and was not an obstacle to practice learner-centred methods of teaching and continuous assessment techniques. Generally, there was a problem of size, quality and the oldness of the blackboard as well as the type and arrangement of seats. With regard to the quality of the classroom, most classrooms were below standard, were not corniced and the floors were not well cemented. As a result, learners and teachers were exposed to dust, cold and suffocation because schools were found on high lands and low lands.

### **6.2.1.3 Availability of physical resources**

My observation was focused on the availability of material resources, meteorological instruments, printed media, projected media and physical resources such as Geography room/laboratory, GIS room, map work and display room, departmental room, library, pedagogical centre and weather station. Material resources such as models, real objects, photographs, illustrations, films, TV, Video, graphs, transparencies, computers, charts, diagrams and pictures were unavailable in all the sampled schools except the old and low quality blackboards, few number of old maps and one Globe in some sampled schools. Moreover, meteorological instruments such as Rain-gauge, Wind-vane, Thermometer, Anemometer, Barometer and Hygrometer were unavailable in all sampled schools. Similarly, printed media, such as magazines, periodicals, reports and newspapers were unavailable in all the sampled schools except insufficient number of textbooks and reference books. Projected media such as slide projector, overhead projector, opaque projector, computer and power point/LCD were completely unavailable in the sampled schools as well. Physical resources such as Geography

room/laboratory, weather station, Geography display room, Geography display-field, map work room and Geography department room were totally unavailable except libraries with insufficient reference books in the sampled schools, disorganised pedagogical centres in two sampled schools (School 03 and School04) and Geography departmental room in one sampled School (school 04) with low facilities.

Thus, it can be concluded that there were no available instructional media and other resources in most sampled schools. As a result, learners encountered problems to learn by themselves. Therefore, it is possible to generalise that the shortage of instructional media and other resources negatively affect the implementation of learner-centred methods and the improvement of learners' creativity and performance. Desta (2004:72-73), Asgedom *et al* (2006:21-23) and Dufera (2008:9) state in this regard that teachers resist varied active learning methods due to lack of resource, time and support preventing teachers from employing enough number of activities in their lessons. As a result, the practice of learner-centered approaches is limited in Ethiopia.

Besides, regarding the importance of school facilities in general and the instructional media in particular, Carron and Chauin UNICEF (2000:17) explain that the presence and heterogeneous uses of resource in schools are one manifestation of how school organisation can become more diversified to meet the needs, interests, experiences and realities of individuals and groups, i.e., how schools can become more learner-centered. Moreover, regarding the negative impact of the shortage of instructional resources on the practice of active learning methods, Anyanwu (2008:216) states that teachers' inability to implement the constructivist methods of teaching in the most effective way is due to problems such as heavy workload, overcrowded curriculum and dearth of teaching and learning resources in the schools. Furthermore, Olusegun (2006:32) puts a strong recommendation concerning the importance of resources to the concerned bodies to give due attention as:

***Federal and state governments should provide adequate funding to schools so that Geography as a core subject should have the basic equipment and materials that would enhance its teaching. Geography program can be effectively taught with basic***

*equipment and materials which necessarily call for setting up a Geography laboratory in every school. The laboratory should be equipped with furniture designed for practical learning and storage of materials like maps, rock specimens, models, tapes, surveying chains, prismatic compass, etc (Olusegun, 2006:32).*

Finally, Asgedom (1999:64) and Wolyie (2006:11) strongly suggest that in the Ethiopian preparatory schools there is a strong deficiency in preparation, provision and utilisation of instructional materials. The system seems to have given more attention to other quality aspects of education, such as preparation of teachers, classrooms, class size, etc. In most schools students have been observed in learning in a passive way. The teachers have identified the shortage of materials for instruction as the most critical problem. It is however, observed that limited effort is made to address at the school level.

#### **6.2.1.4 Summary of the results of observed data analysis**

The results of observed data indicate that the classroom teaching was dominantly carried out through the lecture method. Learners were passive receivers of knowledge as the teacher dominated the stage. Teacher's did not afford time to the learners to construct their own ideas, and did not make use of sketches and diagrams in the process of clarifying the new concepts to the learners. Moreover, teachers did not draw examples from everyday life to help explain the new concepts to the learners. As a result, most learners were unable to provide some examples of their own concepts and unable to relate new concepts to what they had learnt previously.

Teachers did not give the class activities such as class work and other tasks. These teachers did not sign and give a mark on learners' exercise books. The schools did not have plasma TV transmission except in one school. There was no teacher who utilised instructional media while he was teaching Geography; the teaching was dominantly talk-and-chalk.

The seating arrangement was not suited to practice learner-centered teaching and for teachers to carryout supervision; seats were arranged strait in rows. Thus, it was difficult to let learners seat in a circle. Moreover, blackboards were too old to write on and the roofs of the classroom were



without cornices. Therefore, the classrooms were not conducive to carry out effective teaching in general and to practice learner-centered methods of teaching in particular.

There was lack of resources in the schools; most physical resources such as Geography room/laboratory, weather station, Geography display room and Geography display-field and map work room were completely unavailable except libraries with insufficient reference books in all the sampled schools, disorganised pedagogical centers in two sampled schools and Geography departmental room in one sampled school. The teacher dominated lecture method of teaching, scarcity of resources in the school, shortage of classroom facilities and teachers' neglect to utilise instructional media were the main problems hindering learner-centred methods of teaching in the preparatory secondary schools with reference to the Geography teaching.

### **6.3 Document Analyses**

Data were obtained from the examination rosters and national examination results from the preparatory secondary schools. The schools' rosters and national examination results are summarised by comparing learners' performance. Lastly, the Grades 11 and 12 syllabi are presented through narration.

**6.3.1 Grade 11 learners’ results of school prepared examination and Grade 12 learners’ Ethiopian University Entrance Examination (EUEE) results of the 6 sampled schools (01-06) in 2011-2012 academic years**

**6.3.1.1 Grade 11 learners’ results of school 01’s prepared examination of 2011-2012 academic years**

**Table 6.1: 01Preparatory Secondary School’s prepared examination results**

**Subject: Geography**

Grade	year	School’s examination result from 100 %						
		<50%	50-60	61-70	71-80	81-90	91-100	Total
11	2011	1	10	16	10	6	3	46
11	2012	12	22	12	4	1	–	51
<b>Total</b>		13	32	28	14	7	3	97
<b>In %</b>		13%	33%	29%	15%	7%	3%	100%

Table 6.1 indicates that 84 of 97 learners scored 50 and above and thereby they passed the school examination. Only 13 of 97 learners scored below 50% and thus they failed the examination. Therefore, it can be concluded that nearly 87% of the learners passed the examination and thereby they successfully achieved the intended objectives, but 13% of the learners failed the examination. Thus, it is possible to sum up that Geography educational objective at Preparatory Secondary School 01 was relatively well achieved.

### 6.3.1.2 Grade 12 learners' EUEE results of 2011-2012 academic years

**Table 6.2: 01Preparatory Secondary School's EUEE results**

**Subject: Geography**

Grade	year	EUEE result from 100%						Total
		<50	50-60	61-70	71-80	81-90	91-100	
12	2011	103	45	28	4	–	–	180
12	2012	111	52	22	2	–	–	187
<b>Total</b>		214	97	50	6	–	–	367
<b>In %</b>		58%	26%	14%	2%	–	–	100%

From the two consecutive years' results as indicated in Table 6.2, 153 of 367 learners scored 50% and above and 214 of 367 learners scored below 50%. Thus, it implies that only 42% of learners passed in the EUEE but the rest 58% of learners failed. When we compare these results with those of the school's prepared examination results of school 01, a great difference is observed, i.e. the learners' school prepared examination results are better than the learners' EUEE results (only 13% of learners failed in the school examination. However, 58% of learners failed in the EUEE. Therefore, one can generalise that a paradox nature was observed between learners' school's prepared examination results and learners' EUEE results in 01Preparatory Secondary School.

### 6.3.1.3 School 02 Grade 11 learners' results of school's prepared examination of 2011-2012 academic years:

**Table 6.3: 02 Preparatory Secondary School's examination results**

**Subject: Geography**

Grade	year	<50%	50-60%	61-70%	71-80%	81-90%	91-100%	Total
11	2011	1	3	19	14	6	–	43
11	2012	-	4	18	11	3	–	36
<b>Total</b>		<b>1</b>	<b>7</b>	<b>37</b>	<b>25</b>	<b>9</b>	–	<b>79</b>
<b>In %</b>		<b>1.3%</b>	<b>9%</b>	<b>47%</b>	<b>32%</b>	<b>11%</b>	-	<b>100%</b>

Table 6.3 displays that all learners except one passed the school’s prepared examination, and 71 of 79 learners scored above 60%. Only 7 learners scored 50%-60%. Thus, from this point of view, it is possible to say that 98.7% passed the school’s prepared examination. Only 1 (1.3%) failed the school examination. Therefore, we can understand that Preparatory Secondary School 02 learners showed a great academic achievement in the examination that was prepared in the school level in the two consecutive academic years (2011-2012).

#### 6.3.1.4 School 02 Grade 12 learners’ results of EUEE in 2011-2012 academic years

**Table 6.4: 02 EUEE results of 2011 academic year**

**Subject: Geography**

Grade	year	EUEE result from 100 %						Total
		<50	50-60	61-70	71-80	81-90	91-100	
12	2011	43	19	7	3	–	–	72
<b>Total</b>		<b>43</b>	<b>19</b>	<b>7</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>72</b>
<b>In %</b>		<b>59.7%</b>	<b>26.4%</b>	<b>9.7%</b>	<b>4.2%</b>			<b>100%</b>

Table 6.4 indicates that 43 (59.7%) of 72 learners scored below 50% and 29 (40.3%) of 72 learners scored 50% and above. From these 29 learners 19 (26.4%) scored between 50%-60%. Only 10 (13.9%) learners scored 61%-80%. But no learner scored above 80%. Thus, we can generalise that the majority of learners (nearly 60%) failed in the EUEE. 29 of 72 (40%) of learners passed with low results. This result shows only one year information due to the unavailability of 2012 results. The record officer did not find the 2012 academic year results from the record and documentation office while I asked him to take the copy. And he Saied me that I forgot where I had been put the results. As a result, I only analysed the 2011 results.

When we compare learners’ school’s prepared examination results and EUEE (national examination) results, learners better achieved in their school’s prepared examination than in their EUEE (national examination) results. This implies that Preparatory Secondary School 2 learners’ school’s prepared results were better than the EUEE results. Thus, it can be deduced that Preparatory Secondary School 2 learners did not compute the EUEE, national examination

standard. There might be a problem in the teaching process of Geography at Preparatory Secondary School 02.

**6.3.1.5 School 03 Grade 11 learners’ results of school’s prepared examination of 2011-2012 academic years:**

**Table 6.5: 03 Preparatory Secondary School’s prepared examination results**

**Subject: Geography**

Grade	year	<50 %	50- 60%	61- 70%	71- 80%	81- 90%	91- 100%	Total
11	2011	22	11	8	5	4	–	50
11	2012	4	19	14	6	1	1	45
<b>Total</b>		26	30	22	11	5	1	95
<b>In %</b>		27%	32%	23%	12%	5%	1%	100%

Table 6.5 clearly identifies that from 95 learners only 26 (27%) learners scored below the passmark (50%) but the rest 69 (73%) of the learners got a pass mark and above. The majority of learners (52) scored between 50% and 70%, and 16 learners scored between 71%-90%. Only 1 learner scored above 90%. Thus, it can be concluded that from 95 learners, 69 learners (73%) passed the school examination. However, 26 (27%) learners failed in EUEE, national examination. More learners (22) failed in 2011 academic year than 2012 academic year (4 learners failed). Thus, it is possible conclude that learners’ performance showed a relative progress in the 2012 academic year.

### 6.3.1.6 School 03 Grade 12 learners' results of EUEE in 2011-2012 academic years:

**Table 6.6: School 03's EUEE results**

**Subject: Geography**

Grade	year	EUEE results from 100 %						Total
		<50	50-60	61-70	71-80	81-90	91-100	
12	2011	52	47	36	15	1	–	151
12	2012	22	25	21	4	–	–	72
<b>Total</b>		74	72	57	19	1	0	223
<b>In %</b>		37%	33%	22%	7%	0.4%		100%

It can be noticed from Table 6.6 that 74 of 223 learners scored below 50%. However, 149 of 223 learners passed the EUEE, national examination. 72 learners scored between 50% and 60%. 77 learners scored between 61% and 80%. Only 1 learner scored between 81% and 90%. No learner scored between 91% and above. Thus, it is possible to conclude that 37% of learners failed in EUEE and 63% of learners passed. We can also understand that majority learners (33%) passed in EUEE with low results (50%-60%).

When we compare the school's prepared examination and the EUEE, national examination results of the learners, it is possible to see little improvement in the learners' school's prepared examination results than in the EUEE, national examination results (69 of 95 learners passed the school examination), but 149 of 224 learners passed in the EUEE, national examination. Thus, we can understand from table 6.6 that learners passed the school's prepared examination better than the EUEE, national examination (41% of the learners scored 61% and above in the school examination but 29% of the learners scored 61% and above in the national examination).

Though, both the school and the EUEE results indicated problems in the teaching-learning of Geography and the learners' achievement, these School 03 learners scored better in EUEE results than the other five sampled preparatory secondary schools' learners. This improvement was due to learners' effort for their own learning but not better availability of school facilities and teaching strategies than the other sampled schools.

**6.3.1.7 School 04 Grade 11 learners' results of School's prepared examination in 2011-2012 Academic Years**

**Table 6.7: 04 Preparatory Secondary School's prepared examination results**

**Subject: Geography**

Grade	year	School administered examination result from 100 %						Total
		<50	50-60	61-70	71-80	81-90	91-100	
11	2011	11	16	6	4	6	1	44
11	2012	10	19	6	10	8	3	56
<b>Total</b>		21	35	12	14	14	4	100
<b>In %</b>		21%	35%	12%	14%	14%	4%	100%

The results in Table 6.7 show that 79 of 100 learners scored 50% and above, while 21 of 100 learners scored below 50%. Thus, it is possible to say that 79% of learners passed the school's examination and 21% of learners failed the school's examination. Thus, the data leads us to conclude that learners of Preparatory Secondary School 04 were successful in their Geography school's examination.

**6.3.1.8 School 04 Grade 12 learners' results of EUEE in 2011-2012 academic years**

**Table 6.8: School 04's EUEE results**

**Subject: Geography**

Grade	year	EUEE result in100%						Total
		<50	50-60	61-70	71-80	81-90	91-100	
12	2011	38	14	12	3	1	–	68
12	2012	13	17	2	–	–	–	32
<b>Total</b>		51	31	14	3	1	–	100
<b>In %</b>		51%	31%	14%	3%	1%	–	100%

The Table displayed the two consecutive years of learners' EUEE, national examination results and thereby 49 of 100 scored 50 and above, but the rest 51 learners scored below 50%. Thus, it is possible to say that more than half (51%) of the learners failed in the EUEE, national examination and the rest less than half (49%) failed in the EUEE, national examination. Therefore, learners' school examination results are better than learners' EUEE, national examination results. It implies that learners performed higher results in school examination than in EUEE, national examination.

### 6.3.1.9 School 05 Grade 11 learners' results of school's prepared examination of 2012 academic years

**Table 6.9: 05 Preparatory secondary schools' prepared examination results**

**Subject: Geography**

Grade	year	<50%	50-60%	61-70%	71-80%	81-90%	91-100%	Total
11	2011	-	-	-	-	-	-	-
	2012	-	-	4	14	9	2	29
<b>Total</b>		-	-	4	14	9	2	29
<b>In %</b>		-	-	13.8%	48.3%	31%	6.9%	100%

As the Table displayed, no learner scored below 60% and only 4 of 29 learners scored between 61% and 70%. But the rest 25 learners scored above 71%. Thus, the table indicated that 100% of the learners passed the school's prepared examination. Therefore, one can conclude that 05 higher education preparatory secondary school learners achieved their academic goal with great school examination results and no learner who was low academic achiever in the school.



### 6.3.1.10 School 05 Grade 12 learners' EUEE results of 2011- 2012 academic years

**Table 6.10: School 05 EUEE results**

**Subject: Geography**

Grade	year	EUEE result from 100%						Total
		<50	50-60	61-70	71-80	81-90	91-100	
12	2011	18	3	2	–	–	–	23
	2012	11	3	–	–	–	–	14
<b>Total</b>		29	6	2	–	–	–	37
<b>In %</b>		78.4%	16.2%	5.4%	-	-	-	100%

The above Table showed that 29 of 37 learners scored below 50% and only 8 of 37 learners scored 50% and above in the EUEE, national examination. From 8 better achievers 6 scored between 50 % and 60% and only 2 better achievers scored between 61 % - 70%. From this point of view, it is possible to infer that only 21% of the learners passed in the EUEE, national examination. But the rest 79% of learners failed in the EUEE, national examination.

When we compare this EUEE, national examination results with the school examination results there is a great difference between them. In other word, learners' school's prepared examination results were by far better than learners' EUEE, national examination results. Therefore, these controversial results clearly indicate the problem in the teaching process, in the assessment and strategies of Geography education in 05 higher education preparatory secondary school.

**6.3.1.11 School 06 Grade 11 learners' results of school's prepared examination of 2011-2012 academic years**

**Table 6.11: 06 Preparatory Secondary School's prepared examination results**

**Subject: Geography**

Grade	year	School's examination result from 100 %						Total
		<50	50-60	61-70	71-80	81-90	91-100	
11	2011	1	11	11	4	4	1	32
	2012	2	14	7	5	5	–	33
<b>Total</b>		3	25	18	9	9	1	65
<b>In %</b>		5%	38%	28%	14%	14%	1%	100

As indicated in the above Table, majority of the learners (62 of 65) scored between 50% and 90 % and few learners (3 of 65) scored below 50%. Therefore, about 95% of the learners passed the school examination and only 5% of the learners failed the school examination. Thus, it is possible to conclude that the majority of 06 higher education preparatory secondary school learners seemed successfully achieving Geography education goal.

**6.3.1.12 School 06 Grade 12 learners' results of EUEE in the 2011- 2012 academic years**

**Table 6.12: School 06's EUEE results**

**Subject: Geography**

Grade	year	EUEE results from 100 %						Total
		<50	50-60	61-70	71-80	81-90	91-100	
12	2011	13	12	8	1	–	–	34
12	2012	21	6	4	–	–	–	31
<b>Total</b>		34	18	12	1			65
<b>In %</b>		52%	28%	18%	2%	-	-	100%

As the Table displayed learners' results, almost half of the learners (34 of 65) scored below 50% and the rest 31 of 65 scored 50% and above. Therefore, from the general view of the data it can

be conclude that majority of the learners (52%) failed the EUEE, National examination but the rest 48 % of the learners passed the EUEE, National examination.

When we compare these results with the school’s prepared examination results, there is a great difference between them. That means 95% of the learners passed in the school examination but only 48 % of learners passed in the EUEE, National examination. Only 5 % of learners failed in the school examination, but 52 % of the learners failed in the EUEE, National examination. Thus, learners’ results were opposite each other. Therefore, 06 higher education preparatory secondary school learners were not competent enough at national academic status. This implies that there were problems both in the teaching strategies and in the assessment techniques of Geography syllabus at school 06 higher education preparatory secondary school.

### 6.3.1.13 Summary of document results of the total preparatory secondary schools

**Table 6.13: Summary of document results**

<b>Grade levels</b>	<b>year</b>	<b>Learners those scored below 50 %</b>	<b>Learners those scored 50% and above</b>	<b>Total</b>
Grade 11 learners’ result of School’s prepared Examination	2011& 2012	64	401	465
In percent (%)		14%	86%	100%
Grade12 learners’ National Examination result (EUEE)	2011&2012	445	419	864
In percent (%)		52%	48%	100%

The above summary Table 6.13 of the sampled higher education preparatory secondary schools learners’ schools’ prepared and EUEE, National examination results imply those majority learners (401 of 465) scored 50% and above but the rest few learners (64 of 465) scored below 50%. From this data it is possible to infer that 86% of learners passed but only 14% of learners

failed in their schools' prepared examination. Therefore, majority learners successfully passed the schools' prepared examination and they seem achieved Geography education at school levels.

However, on the contrary more than half of the learners (445 of 864) or 52% scored below 50% in the EUEE, national examination and less than half (419 of 864) or 48% of the learners scored 50% and above in the EUEE, national examination. Even from this number, majority learners' results are found in the range of 50% -60%. Thus, we can understand that learners scored better in the schools' prepared examination than in the EUEE, National examination. Thereby, controversial results are observed between learners' schools prepared examination and EUEE, National examination results. Thus, based on this evidence one can generalize that majority of learners of the entire sampled schools were incompetent in the EUEE, National examination.

Regarding this, one respondent from school 01 explained the reasons why learners' schools prepared examination and EUEE, National examination results were controversial each other as

*...the first reason is the school examination is prepared under standard; very easy questions. As a result students score high result. And the second reason is during the continuous assessment; when students are given assignments and home works they didn't do by themselves rather by other individual outside the school and other groups copy from the first group and thereby all students get high result without working by themselves. The third reason is teachers are questionable when students scored low results in the schools' examination. Therefore, to be free from any claim teachers prepare easy questions and they are careless when they administer the exam and students cheat each other and get high result without their effort and ability. However, when they take the National examination they score low result because cheating is controlled and the questions are standardised. These factors make students' school examination result high and National examination result low (AkAs).*

From these data, we come to the conclusion that learners the sampled higher education preparatory secondary schools were not well competent in the EUEE, National examination or standardized test. Generally, when we compare learners' EUEE, National examination results of the sampled schools, school 03 learners scored better results than the others due to learners' private effort; no better facilities in the school than the other sampled schools.

#### **6.4 Observation of the Syllabi**

This observation was carried out in Grades 11 and Grade 12 Geography syllabus. Accordingly, the observation was focused on the availability of syllabi, the arrangement of the contents, the difficulty level of the contents, the complexity nature of the language, the feasibility of the contents, the methods/strategies designed to implement the contents, the instructional media designed to be utilised in the implementation process, the activities designed for the learners and the teacher, the assessment techniques to measure learners academic achievement and the allotted time to cover the contents through learner-centered methods of teaching.

In my observation I came across great scarcity of the syllabi in the sampled schools. I got only one syllabus from each grade levels. After I found the syllabi, I carried a simple look at them based on the aforementioned issues. Accordingly, regarding the arrangement of the contents, the contents are arranged from simple to complex, general to specific and they are well integrated. Besides, the contents are easily understandable and directly related to learners' daily life and an experience as well as the language is simple and easily understandable by the learners. Moreover, the contents are practicable and related learners' day-to-day activities as well as the real world.

Furthermore, the learning and teaching strategies designed in the syllabi are variety of learner-centered approaches such as Geography information system (GIS), field work, discussion, project work, drama, role-play, map work/projection, inquiry method, questioning, activity-based method, and laboratory techniques. Similarly, relevant instructional media such as maps, Globes, charts, slides, projectors etc are identified to be utilised in the teaching and learning process. Likewise, the continuous assessment and summative assessment such as, class activities, assignments, home works, project works, mid and final examination are properly identified in the syllabi. Finally, I

compared the allotted time and the broadness of the contents. Accordingly, I found that the allotted time is not sufficient to cover the contents through learner-centered methods and continuous assessment techniques.

Therefore, one can deduce that the nature of Geography, the content organisation, the methods designed in the syllabi, the instructional media identified in the syllabi, the language in which the contents were organised, the integration and feasibility of the contents, the assessment techniques designed in the syllabi are suitable for the practice of learner-centered methods of teaching. The only problems that I found were insufficient time allotment in the syllabus and scarcity of syllabus in the schools.

## **6.5 The Summary of the Results of Qualitative Data Analysis: Observation and Documents**

Based on the analysis of the qualitative data, the following results were found:

1. Geography is a unique subject because most of its contents are found outside the class room, found in the real world. Therefore, Geography contents need teaching strategies that initiate practical learning and learning by doing as well as teachers who have good subject matter knowledge, pedagogical skill, classroom management skill, interest and commitment to implement Geography syllabus through learner-centered methods of teaching. Thus, the study revealed incompatibility between Geography teaching strategies identified in the syllabus and actual teaching strategies practiced by Geography teachers. Though learner-centered strategies of teaching are identified, traditional lecture method of teaching was frequently practicing in the actual teaching process. This method of teaching doesn't provide an opportunity for learners to construct their own knowledge. As a result, learners failed under teachers' academic oppression.
2. The classroom teaching process was dominantly carried out through traditional lecture method of teaching. As a result, learners were receiving the teacher's lecture and taking the note. Teacher's lecture did not afford time to learners to construct their own ideas, teachers' did not make use of sketches and diagrams when they were clarifying new concepts to the learners, teachers did not draw examples from everyday life when they explain new concepts to the

learners and teachers' lecture was not eliciting learners' prior ideas. As a result, most learners were unable to provide some examples of their own concepts and unable to relate new concepts to what they had learnt previously.

3. Teachers frequently practice lecture method of teaching. As they discussed the reasons why teachers frequently practiced lecture method of teaching were to cover large portion of lesson in a short time and to finish the annual lesson in the given period of time, to manage the class room discipline, to satisfy the majority learners' interest; learners were not happy to process knowledge by themselves or to learn by themselves independently and in group and the other reason was group work is dominated by few high achievers; the low and medium achievers(majority of the learners) were not active in the group work and thereby the whole activities were dominated (covered and done) by high achievers.

4. The majority of the learners are incapable to work independently and weak participant in the group work. Thus, most learners figure out things or the lesson through listening of teacher's lecture. Therefore, learners' role was limited in listening of teacher's lecture and taking note.

5. The research also found out that teachers are not ready to practice constructivists' methods of teaching. The main reasons why teachers do not have readiness are they did not get trainings to refresh their profession especially regarding learner-centered methods of teaching and continuous assessment techniques; the trend that most teachers were coming was teacher-centered methods of teaching. As a result, they were not happy and committed to practice learner-centered methods of teaching.

6. The results of this study also revealed that shortage of resources is a big constraint to practice learner-centered methods of teaching. Most resources were totally unavailable in the schools and few were insufficiently available. Accordingly, regarding physical resources such as weather station, map work room, Geography display room and display field were completely unavailable. However, library is the only resource available in all schools with limited reference books and facilities, but Departmental room is available in only one school with limited facilities. Besides,

disorganised pedagogical center was also available in one sampled school. Moreover, the research revealed a series shortage of printed instructional media like maps, Globes, charts, reference books as well as weather station instruments.

7. Concerning the assessment techniques, majority of the respondents explained that teachers assess learners' academic achievement through quiz, test, mid and final examination. Moreover, they reported that most teachers ask yes or no questions frequently. However, most teachers assess their learners' performance through true/ false, multiple choice, short answer, matching and essay questions rarely while the teaching process is going on. Thus, majority teachers neglected to practice continuous assessment techniques/ formative assessment techniques such as class work, home work, class participation and assignment to measure learners' academic progress and academic achievement.

Furthermore, during my observation I did not see a teacher who gave class room activities such as class works, home works, assignments, quiz, tests; and no one learner participate in the teaching process; the whole periods of the lesson were covered by teachers' lecture. Thus, learners were listening teachers' lecture and taking note which was provided by the teacher. Teachers in all sampled schools did not ask questions throughout the whole periods. And I believed what I observed rather than what I have been told me by others.

8. There was no plasma TV transmission except in one sampled school due to frequent electric power interruption.

9. Teachers failed to utilise instructional media while they were practicing the teaching process of Geography; the teaching process was dominated by talk-and-chalk type.

10. The class rooms facilities were not sufficient to carry out effective teaching process because the black boards were too old to write on them, the seats were not comfort to seat and to write as well as they were arranged in raw towards the blackboard; it was difficult to make circle, half circle and horse shoe seating arrangement to practice learner-centered methods of teaching and to



move in the needed position, the roofs was not covered with cornice and the floors were not well cemented. As a result, learners were disturbed with dusts, suffocations and colds from seasons to seasons.

11. To make Geography lesson easily understandable and unforgettable, participatory methods of teaching such as, group discussion, field work, demonstration, technology based learning like computer, GIs and TV, class room activities, question and answer method, practical learning and project methods were identified to be alternative teaching strategies in the syllabus. However, the study generally revealed that the lesson was totally dominated by lecture method of teaching. As the respondents clarified that scarcity of resources in the school, shortage of class room facilities and teachers inability to utilise instructional media were the main problems to practice learner-centered methods of teaching.

12. Lack of awareness both on the part of teachers and learners about the advantage and way of implementation of learner-centered methods of teaching, lack of awareness about the advantage and the way how to employ continuous assessment techniques, the over loaded of teachers and departmental heads by different tasks, shortage of resources (physical resources, instructional materials and other resources) as well as school facilities, un appropriate type and arrangement of seats, absence of budget supply from the schools were the main problems that hinder the practice of constructivist approaches of teaching.

13. Moreover, the study revealed that shortage of time to cover the intended contents at a given period of time, lack of learners' interest to learn through learner-centered methods of teaching, lack of teachers readiness and commitment to implement learner-centered methods of teaching, placement of low achievers in social science stream, learners could not able to learn by themselves and with their friends, lack of confidence on the part of the learners to learn independently and to reflect their own views and shortage of time were also the major problems that affect the practice of learner-centered methods of teaching and the quality of Geography education in higher education preparatory secondary schools.

14. The majority learners of the sampled schools were not well competent in EUEE, National examination or standardised test; learners scored better in the school examination than in the EUEE, National examination due to the fact that schools' examination is prepared with easy questions and learners scored high results, the miss practice of continuous assessment techniques; when learners are given assignments and home works they did not do by themselves rather by other individuals.

Besides, teachers will be questioned when learners score low results in the school's examination. Thus, teachers make themselves free from any claim and they prepare easy questions as well as they are careless when they administer the exam. As a result, learners cheat each other and score high results without their effort and ability. On the contrary, when learners take the EUEE, National examination they score low results because cheating is relatively controlled and questions are standardized. Therefore, these factors make learners school's examination results high and National examination results low.

## 6.6 Data Analysis and Presentation of Results from a Close-ended Questionnaire

The quantitative data were gathered through close-ended questionnaires and organised in the form of tables and analysed via descriptive statistics such as frequency, percentage and mean.

### 6.6.1 Characteristics of participants

**Table 6.14: Biographical data of participants**

Schools' code	Grade				Total		Grant total	In %
	11		12		M	F		
	M	F	M	F				
01	15	17	11	19	26	36	62	31.2
02	10	6	8	6	18	12	30	15.1
03	15	11	10	5	25	16	41	20.6
04	13	10	6	4	19	14	33	16.6
05	6	5	4	3	10	8	18	9.0
06	6	3	3	3	9	6	15	7.5
total	65	52	42	40	107	92	199	100%
In %	55.6%	44.4%	51.2%	48.8%	53.8%	46.2%	100%	

Table 6.14 reveals that 53.8% (107 of 199) of participants were male and the rest 46.2% (92 of 199) of the participants were females. Thus, the numbers of male participants were relatively larger than female participants. So relatively larger participants were found in Grade 11. Moreover, the largest numbers of participants (62 / 31.2%) were found in School 01 and the smallest numbers of participants (15 / 7.5%) were found in School 06. Large numbers of female learners (36 of 62) were found in School 01 due to its location; it is found relatively in urban center.

### 6.6.2 Analysis of gender of the participants

**Table 6.15: Characteristics of participants in terms of gender**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	92	45.8	46.2	46.2
	Male	107	53.2	53.8	100.0
	Total	199	99.0	100.0	
Missing		0	0		
Total		199	100.0		

From Table 6.15 we can observe that from 199 (100%), 92 (46.2%) learners were females and 107 (53.8) were males. This implies that the numbers of male learners were greater than the number of female learners.

### 6.6.3 Analysis of learners' response on the nature of Geography as a discipline

**Table 6.16: The nature of Geography as a discipline**

N O	ITEMS	A		U N	D	T	X
		F	%				
1	Geography is unique for me from other disciplines.	F	176	20	3	199	4.33
		%	88.4	10.1	1.5	100	
2	In my opinion, the concept of the contents of my Geography textbook is clear and easily understandable.	F	198	1	0	199	4.25
		%	99.5	0.5	0	100	
3	The language in my Geography textbook is simple and easily understandable.	F	197	1	1	199	4.21
		%	99	0.5	0.5	100	
4	The contents of the text book are arranged from simple to complex.	F	196	1	2	199	4.17
		%	98.5	0.5	1	100	
5	Geography text book has participatory exercises/activities.	F	197	1	1	199	4.18
		%	99	0.5	0.5	100	
6	I think that the annual lesson will be covered at a given time.	F	7	25	167	199	2.15
		%	3.5	12.6	83.9	100	

**Note: A= agree, UN = undecided, D= disagree, T= total, X= mean**

As Table 6.16 indicates, 176 (88.4%) of the respondents agreed that Geography is unique from other discipline, while 20 (10.1%) respondents were not able to decide where as the rest 3 (1.5) of the respondents disagreed about the unique nature of Geography from the other disciplines. Thus, most respondents believe that Geography is unique from the other disciplines and teachers should acknowledge and implement its syllabus according to its unique nature.

Moreover, regarding the contents and concepts of Geography textbooks, 198 (99.5%) of the respondents agreed that the contents are clear and easily understandable for the learners, while 1 (0.5%) of respondent was unable to decide but no respondent rating on disagree. Thus, it is possible to understand that no challenging factor in the higher education preparatory secondary school Geography contents to practice learner-centered methods of teaching. Therefore, the hypothesis failed due to continuous revision on higher education preparatory secondary school Geography text books and Geography syllabus.

Furthermore, 197 (99%) of the respondents responded that the language that the textbook was prepared is simple and easily understandable, whereas 1 (0.5) of the respondent was unable to decide but the remaining 1 (0.5) of the respondent was rating disagree. Therefore, as to the respondents, the language of the text book does not affect the practice of learner-centered methods of teaching in the higher education preparatory secondary schools Geography education. Thus, it failed to fit the hypothesis.

Regarding the arrangement of the contents of Geography textbooks, 196 (98.5%) of the respondents agreed that the contents are arranged from simple to complex. And 1 (0.5%) of the respondent was unable to decide but 2 (1%) of the respondents disagreed that the contents of Geography text books are not arranged from simple to complex. Thus, from the majorities' perspective we can understand that the contents are arranged properly; from simple to complex and it has not a negative impact in the practice of learner-centered approaches of teaching in higher education preparatory secondary school of Geography education.

Concerning activities/exercises of the higher education preparatory secondary school Geography textbooks, 197 (99%) of the respondents agreed that both Grades 11 and 12 textbooks have participatory exercises, while 1 (0.5%) of the respondent did not decide and the remaining 1 (0.5%) of the respondent disagreed that textbooks have not exercises to be practiced by the learners. From these data it is possible to sum up that text books have exercises that encourage learners' participation.

Finally, as Table 6.16 indicates,7 (3.5%) of the respondents agreed that the annual lesson is covered in the allotted time,while 25 (12.6%) of the respondents were not able to decide but the rest 167 (83.9%) of the respondents agreed that the annual lesson is not covered with in the allotted time. Thus, we can understand that there is shortage of time to cover the annual lesson and has a negative impact in the practice of constructivist approaches in the higher education preparatory secondary school Geography teaching process.

Though it was hypothesised that the nature of Geography as a discipline would be a challenging factor for the practice of learner-centered methods of teaching, the result of the study on the contrary revealed that the nature of the curriculum rather facilitate the practice of learner-centered methods of teaching. This was due to the frequent revision and updating of the curriculum. Thus, the result did not confirm to the hypothesis.

#### 6.6.4 Analysis of learners' response on methods of teaching practiced by Geography teachers

**Table 6.17: Teaching methods practiced by Geography teachers**

No	Items		A	UN	D	T	X
1	My teacher gives me a chance to ask questions and express my opinions at any time while the learning-teaching process is going on.	F	24	3	173	199	2.24
		%	11.5	1.5	86.9	100	
2	I have visited geographical areas relevant to the classroom lesson.	F	26	0	173	199	1.45
		%	13.1	0	86.9	100	
3	My teacher practices varied teaching methods.	F	26	0	173	199	1.45
		%	13.1	0	86.9	100	

4	My teacher motivates my classroom participation.	F	25	7	167	199	2.27
		%	12.5	3.5	83.9	100	
5	My teacher advises/encourages me to take responsibilities on my own learning.	F	25	18	156	199	2.35
		%	12.5	9	78.4	100	
6	My teacher cooperates with me when I encounter problems in learning Geography.	F	10	125	64	199	2.68
		%	5	62.8	32.1	100	
7	My teacher checks and gives feedback for my day-to-day activities.	F	25	10	164	199	1.83
		%	12.5	5.0	82.4	100	
8	My teacher utilizes instructional materials in the teaching-learning process.	F	26	0	173	199	1.76
		%	13.1	0	86.9	100	
9	I have experience/learning background in learner-centered methods.	F	35	1	163	199	1.88
		%	17.5	0.5	81.9	100	
10	My Geography teacher frequently practices a lecture method of teaching.	F	165	0	34	199	1.73
		%	82.9	0	17.1	100	
11	My Geography teacher frequently practices discussion method of teaching.	F	26	0	173	199	1.66
		%	13.2	0	86.9	100	
12	My Geography teacher frequently practices inquiry method of teaching.	F	22	3	174	199	1.37
		%	11.1	1.5	87.4	100	
13	My Geography teacher frequently practices role-play method of teaching.	F	18	8	173	199	1.38
		%	9.0	4.0	86.9	100	
14	My Geography teacher frequently practices questioning method of teaching.	F	25	0	174	199	2.01
		%	12.5	0	87.4	100	
15	My Geography teacher frequently practices simulation method of teaching.	F	24	1	174	199	1.44
		%	12	0.5	87.4	100	

16	My Geography teacher frequently practices fieldwork method of teaching.	F	25	0	174	199	1.42
		%	12.6	0	87.4	100	
17	My Geography teacher frequently practices map work method of teaching.	F	23	2	174	199	1.41
		%	11.5	1.0	87.4	100	
18	My Geography teacher frequently practices activity method of teaching.	F	25	12	162	199	1.69
		%	12.5	6.0	81.4	100	
19	My Geography teacher frequently practices project method of teaching.	F	19	9	171	199	1.58
		%	9.5	4.5	85.9	100	
20	My Geography teacher frequently practices demonstration method of teaching.	F	25	0	174	199	1.67
		%	12.5	0	87.4	100	

**Note: A= agree, UN = undecided, D= disagree, T= total, X= mean**

Table 6.17 indicates that 24 (11.5%) of respondents agreed that their Geography teachers give a chance to ask questions and express their opinions while the teaching process was going on and 3 (1.5%) of the respondents were neutral to decide, but the majority of the respondents, i.e. 173 (86.9%) disagreed that their Geography teachers do not give a chance to them to ask questions and to express their opinions while the Geography teaching process was going on. Therefore, the data lead us to understand that learners could not get a chance to participate in the teaching processes. Thus, one can infer that the higher education preparatory secondary school Geography education has been practicing through teacher-centered method of teaching and learners were encouraged to be information receivers.

Moreover, Table 6.17 indicates that 26 (13.1%) of the respondents agreed that they visit Geographical areas relevant to their class room lesson, while 173 (86.9%) of the respondents agreed that they do not get an opportunity to visit areas of Geographical interest relevant to their class room lesson, but no respondent who was neutral to decide about the visiting of Geographical areas relevant to their classroom lesson. Therefore, as majority of the respondents pointed out that the classroom lessons were not supported by practical field work learning. Thus,



we can infer that learning by doing as well as practical learning method was ignored in the implementation of higher education preparatory secondary school's Geography syllabus.

Regarding item 3 in Table 6.17, 26 (13.1%) of the respondents agreed as their Geography teachers were practicing variety of teaching methods. However, the majority of the respondents, i.e. 173 (86.9%) agreed that their Geography teachers were not practicing variety methods of teaching, but there was no respondent who remained neutral. Thus, based on the majority's response, it is possible to understand that teachers were dominantly practicing one type of method of teaching, lecture method.

With regard to item 4 in Table 6.17, 25 (12.5%) of the respondents agreed that Geography teachers motivate their class room participation, while 7 (3.5%) of the respondents were neutral to decide whether the response was agree or disagree. However, majority of the respondents (167 (83.9%)) agreed that their Geography teachers do not motivate their class room participation. From the majority's response it is possible to generalise that teachers did not motivate learners' class room participation. As a result, learners prefer be silent to engage in the teaching process.

Concerning item 5 of Table 6.17, 25 (12.5%) of the respondents agreed that their teachers advise them to take their responsibilities about their own learning, while 18 (9%) of the respondents were neutral to decide whether the response was agree or disagree. However, 156 (78.45%) of the respondents agreed that their Geography teachers did not advise them to take their responsibility about their own learning. Thus, we can say that teachers were not advising the learners as they are responsible for their own learning. Consequently, learners become careless for their own learning and expecting all lessons from their teachers. So this condition makes learners to be dependent of teacher's information.

Regarding teachers' co-operation with the learners (item 6 of Table 6.17), 10 (5%) of the respondents agreed that teachers cooperate with the learners to solve learners' problems, while 125 (62.8%) of the respondents were neutral. However, the majority, 64 (32.1%) of the respondents agreed that their teachers do not co-operate with learners to solve learners problems.

Thus, it is possible to understand that teachers' co-operation to solve learners' problems was not significantly observable by the learners. Therefore, it can be concluded that teachers' contribution to solve learners' problems is not as such significant.

Regarding check and feedback (item 7 in Table 6.17), 25 (12.5%) of the respondents agreed that their teachers check their day-to-day activities and give them immediate feedback for each activities, while 10 (5.0%) of the respondents remained neutral. However, the majority of the respondents, i.e. 164 (82.4%) disagreed that their teachers check and give immediate feedback to their day-to-day activities. According to majority respondents' response, we understood and infer that teachers do not follow learners' day-to-day activities and give immediate feedbacks.

Moreover, concerning the utilisation of instructional materials (item 8 in Table 6.17), 26 (13.1%) of the respondents agreed that their teachers utilise instructional materials in the teaching process of Geography, while the majority of the respondents, i.e. 173 (86.9%) disagreed that their teachers utilise instructional materials in the teaching of Geography. However, there were no neutral respondents. Thus, we understand that teachers do not utilise instructional materials while they were teaching Geography. Thus, such type of teaching makes the lesson easily forgettable and the learners become shallow thinkers. As a result, learners could not be competent enough in the EUEE, National examination.

With regard to learners' experience about learner-centered methods of teaching (item 9 in Table 6.17), 35 (17.5%) of the respondents agreed that they came through learner-centered methods of teaching, whereas 163 (81.9%) of the respondents disagreed that they come through learner-centered methods of teaching. However, 1 (0.5%) of the respondent was neutral. Thus, we can understand that learners did not come through learner-centered methods of teaching and this trend is new for them. As a result, they could not able to adapt the learner-centered approach and this again negatively affects learners' independent learning.

Concerning the practice of lecture method of teaching (item 10 in Table 6.17), 165 (82.9%) of the respondents agreed that their teachers were frequently practicing lecture method of teaching,

while 34 (17.1%) of the respondents disagreed that their teachers were not frequently practicing lecture method of teaching. However, there was no respondent neutral to decide on the response. Therefore, we can comprehend that Geography teachers were frequently practicing lecture method of teaching. This in turn negatively affects learners' engagement and knowledge construction activities.

Furthermore, regarding the practice of discussion method of teaching (item 11 in Table 6.17), 26 (13.2%) of the respondents agreed that their teachers were frequently practicing discussion method of teaching, while the majority of the respondents, i.e. 173 (86.95%) disagreed that their teachers were frequently practicing the discussion method of teaching. No respondent who was neutral. From this one can infer that teachers were neglecting the practice of discussion method of teaching in higher education preparatory secondary school Geography education.

Regarding item 12 in Table 6.17, 22 (11.1%) of the respondent agreed that their teachers were frequently practicing inquiry method of teaching and 3 (1.5%) of the respondents did not make any decision on the response. However, the majority of the respondents, i.e. 174 (87.4%) disagreed that their teachers were frequently practicing inquiry method of teaching. This indicates that most teachers were not frequently practicing inquiry method of teaching. Thus, it also affects the critical thinking effort of the learners in Geography education.

Item 13 in Table 6.17, 18 (9.0 %) of the respondents agreed that their teachers were frequently practicing role-play method of teaching, and 8 (4.0%) of the respondents were neutral. However, 173 (86.9%) of the respondents disagreed as their teachers were frequently practicing role-play method of teaching. This indicates that majority of the respondents acknowledged that teachers were not frequently practicing role-play method of teaching.

Item 14 of Table 6.17 indicates that 25 (12.5%) of the respondents rated their agreement on their teachers frequent practice of questioning method of teaching. However, 174 (87.4%) of the respondents rated on disagree in the teachers' frequent practice of questioning method of teaching. No respondent was rated on undecided response. From this point of view, one can

understand that majority of the respondents made an approval that teachers were not practicing questioning method of teaching in their teaching process.

Concerning Item 15 in Table 6.17, 24 (12.0%) of the respondents rated an agreement that their teachers were frequently practicing simulation method of teaching, while 1 (0.5%) of the respondent was neutral to make decision. However, 174 (87.4%) of the respondents disagree with the teachers frequent practice of simulation method of teaching. Thus, one can understand that majority of the respondents reported that most teachers were not frequently practicing simulation methods of teaching in the higher education preparatory secondary Geography education.

For item 16 of Table 6.17, 25 (12.6%) of the respondents rated that their teachers were frequently practicing field work method of teaching while 174 (87.4%) of the respondents rated a disagreement. There was no neutral respondent. This implies that teachers were not frequently practicing fieldwork method of teaching. Since Geography is an out-door discipline, field-work is indispensable method of teaching in higher education preparatory secondary school Geography education. However, Geography teachers failed to employ field work method of teaching by implication therefore, exposing Geography learners for rote memorisation. Consequently, learners become incompetent in the EUEE, National examination.

From item 17 in Table 6.17, 23 (11.5%) of the respondents rated an agreement that their teachers were frequently practicing map work method of teaching while 174 (87.4%) of the respondents rated a disagreement that their teachers were frequently practicing map work method of teaching. Only 2 (1%) respondents were neutral. From this point of view one can understand that teachers were not practicing map work method of teaching. As a result, learners become inefficient to read and to draw different Geography maps.

Regarding item 18 in Table 6.17, 25 (12.5%) of the respondents rated an agreement on teachers' frequent practice of activity method of teaching, while 162 (81.4%) of respondents rated disagree on the question of their teachers' frequent practice of activity method of teaching. However, 12

(6.0%) of the respondents did not make any decision. Thus, from this data one can understand that teachers were not practicing activity method of teaching in the teaching and learning process.

Concerning item 19 in Table 6.17, 19 (9.5%) of the respondents agreed that their teachers were frequently practicing project method of teaching, while 171 (85.9%) of the respondents were rated a disagreement and 9 (4.5%) of the respondents were neutral. Thus, as majority of respondents' opinion implied that teachers have not frequently practiced project method of teaching. This also affects learners self-learning efforts.

Finally, regarding item 20 in Table 6.17, 25 (12.5%) of the respondents rated an agreement, while 174 (87.4%) of the respondents were rated a disagreement. There was no respondent who was neutral to make decision. Therefore, it is possible to understand that teachers were not frequently practicing demonstration method of teaching. This data implies that learning by doing is totally ignored and affects learners' creativity and knowledge constructing activities.

Therefore, from Table 6.17 we can generalise that teachers were not practicing learner-centered methods of teaching, such as field work, inquiry, discussion, role-play, map work, questioning, project, demonstration and simulation methods of teaching in the learning-teaching process of Geography. Moreover, from the table it can be conclude that teachers were frequently and dominantly practicing traditional lecture method of teaching while they were implementing higher education preparatory secondary school Geography syllabus.

Furthermore, the above data (Table 6.17) revealed that learners have not experience about learner-centered methods of teaching; they came through the traditional lecture method of teaching. Finally, Table 18 depicted that teachers were not practicing varied learner-centered methods of teachingas well as they were not utilising instructional materials, they also failed to motivate and advice the learners to involve in the learning and teaching activities as well as they failed to solve learners' problems.

### 6.6.5 Analysis of learners' response on their activities in the learning and teaching of Geography

**Table 6.18: Learners' learning activities in the teaching process**

N o	Items	A	UN	D	T	X	
1	I figure out things through teacher's lecture while the learning-teaching process is going on	F	44	4	151	199	2.12
		%	22.1	2	75.9	100	
2	I have active participation in a Geography learning-teaching process.	F	1	0	198	199	1.61
		%	0.5	0	99.5	100	
3	I work without teacher supervision while the learning-teaching process is going on.	F	15	88	96	199	2.34
		%	7.5	44.2	48.2	100	
4	I figure out things on my own while the learning-teaching process is going on.	F	18	36	145	199	1.78
		%	9	18.1	72.8	100	
5	I work together in groups while the learning-teaching process is going on.	F	27	34	138	199	1.9
		%	13.5	17.1	69.4	100	
6	I think while the learning-teaching process is going on.	F	56	20	123	199	2.38
		%	28.1	10.1	61.8	100	
7	I have high interaction with my friends and my teacher during classroom learning-teaching process.	F	11	4	184	199	1.26
		%	5.5	2.0	92.5	100	

**Note: A= agree, UN = undecided, D= disagree, T= total, X= mean**

As indicated in Table 6.18, Item 1, 44 (22.1%) of the respondents was rated as an agreement, while item 151(75.9%) of the respondents was rated as a disagreement. However, 4 (2%) of the respondents was neutral. From this, it can be inferred that learners were not figuring out things by them while the teaching process of Geography was going on. This implies again that learners' creativity and contribution in the learning and teaching process was low. Moreover, Table 6.18 displayed Item 2 as 1 (0.5%) an agreement, while 198 (99.5%) of the respondents were rated as disagreed. There were no neutral responses. Thus, this analysis leads to the conclusion that learners were not actively participating in the learning and teaching processes. This evidence also leads to generalising that there was no learners' engagement in the learning and teaching process of Geography education.

Regarding Item 3 in Table 6.18, 15 (7.5%) of the respondents chose the “agree” option, while 96 (48.2%) of the respondents disagreed. However, 88 (44.2%) of the respondents were neutral. From this point of view, it is possible to infer that learners’ independent activities about their learning process was limited and highly supervised by their teachers while the teaching process was going on. In general, learners’ independent activities and self-learning efforts were overshadowed by the teachers’ continuous supervision. Besides, Table 6.18 showed that in Item 4, 18 (9.0%) of the respondents’ agreement but 145 (72.8%) of disagreement and 36 (18.1%) of neutrality. From the majority responses, we can understand that learners were not figuring out things by themselves while the learning and teaching process was going on. Moreover, we can infer that learners did not get an opportunity to learn by themselves through their own efforts through critical thinking. Thus, we can say that the teaching process was dominantly carried out by the teachers through lecture method of teaching.

Concerning Item 5 in Table 6.18, 27 (13.5%) of the respondents were rated as agreement while 138 (69.4%) of the respondents were rated as disagreement. However, 34 (17.1%) of the respondents were neutral. From these results, one can infer that there was no group discussion/group work/activities and interaction among the learners themselves. Thus, it implies that the interaction was one-way, from the teacher to the learners and all activities have been performed by the teachers. As a result, learners were receivers of teachers’ activities and information. Therefore, this teacher dominated teaching affects learners’ teamwork and knowledge construction activities as well as their self confidence.

Furthermore, Item 6 in Table 6.18 indicates that 56 (28.1%) of the respondents agreed with the item statement while 123 (61.8%) of the respondents disagreed with it and 20 (10.1%) were neutral. From the majority’s response, we can understand that learners were not thinking while their learning and teaching process was going on. Thus, learners were simply absorbing while their teachers were providing information. This method of teaching negatively affects learners’ critical thinking effort and engagement in the learning and teaching process of Geography.

Finally, regarding to Item 7 in Table 6.18, 11(5.5%) of the respondents were rated as agreement while 184 (92.5%) of the respondents were rated as disagreement, whereas 4 (2.0%) of the respondents were neutral. From these results, we can understand that majority of the respondents proved that no multidirectional interaction in the classroom while the Geography teaching process was going on. Thus, we can infer that there was no interaction between learners and teachers as well as among the learners themselves while the teaching process was going on. Therefore, the classroom interaction was one-way, from the teacher to the learners and the learners were receivers of teachers' information.

From the aforementioned results, it can be possibly concluded that there was no learners' independent work as well as group activities while the teaching and learning process was going on; the whole teaching and learning processes was dominated by the teachers and the communication was only one-way, from teachers to learners. This evidence implies that learners did not get an opportunity to take part/ engage in their lesson. This in turn makes learners to be passive receivers of teacher's information.



### 6.6.6 Analysis of learners' response on resource availability

**Table 6.19: Resource availability in the schools**

No	Items	A		UN	D	T	X
		F	%				
1	There is Geography room/laboratory in my school.	F	20	1	178	199	1.34
		%	10.0	0.5	89.4	100	
2	There are adequate Geography instructional materials in my school.	F	21	0	178	199	1.55
		%	10.5	0	89.5	100	
3	The ratio of Geography textbooks to students is 1:1	F	21	2	176	199	1.80
		%	10.5	1.0	88.4	100	
4	My lesson is supported with Geography information system.	F	18	3	178	199	1.34
		%	9.0	1.5	89.4	100	
5	My Geography lesson is supported with a computer.	F	21	0	178	199	1.37
		%	10.5	0	89.5	100	

**Note: A= agree, UN = undecided, D= disagree, T= total, X= mean**

Regarding Item 1 as indicated in Table 6.19, 20 (10%) of the respondents agreed that Geography laboratory is available in their schools. while 178 (89.5%) of the respondents disagreed about the availability of Geography laboratory/room in their schools. There was 1 (0.5%) respondent who did not make decision. Thus, from this result we have understood that there were no available Geography laboratories in higher education preparatory secondary schools.

Moreover, concerning Item 2 in Table 6.19, 21 (10.5%) of respondents agreed with the statement, while 178 (89.5%) of the respondents disagreed. There were no neutral responses. This result indicates that there were no adequate Geography instructional materials in higher education preparatory secondary schools. These conditions in turn negatively affect the quality of Geography education in general and the practice of learner-centered methods of teaching in particular.

This table also displays the ratio of text books to learners (Item 3). Accordingly, 21 (10.5%) of the respondents agreed that the ratio of text book was 1:1, while 176 (88.5%) of the respondents disagreed with the statement. Only 2 (1.0 %) of the respondent was neutral. Thus, it is possible to sum up that there is scarcity of text books in the sampled schools. Regarding Item 4 in Table 6.19, 18 (9.0%) of the respondents were rated as agreement while 178 (89.4%) disagreed. Only 3 (1.5%) of the respondents were neutral. Thus, based on the majorities' response it is possible to summerise that Geography lessons were not supported with Geography Information System (GIS). As a result, Geography learners become ignorant for the application of GIS in their practical activities.

Finally, Table 6.19 shows Item 5 as 21 (10.5%) of the respondents, which agreed that their Geography lessons have been supported with computer, while 178 (89.5%) were rated as disagreement on the utilisation of computer to support Geography lessons. However, there were no neutral respondents. Therefore, based on this information it is possible to sum up that Geography lessons have not been supported with computer. As a result, Geography learners could not able to update themselves with the new technologies and they become ignorant to apply computer in different duties.

From the above result, it can be summed up that Geography laboratory rooms were absent in the schools. There were scarcity of instructional materials including text books, computers and Geography Information system. This implies that Geography education in the sampled schools was not supported with Computer, Geography Information System and other instructional materials. These in turn has a negative impact on the practice of constructivist approaches; learner-centered methods of teaching in higher education preparatory secondary schools.

### 6.6.7 Analysis of learners' response on the assessment techniques of teachers to measure learners' performance

**Table 6.20 Teachers' Assessment techniques to measure learners' performance**

No	Items	Rating of raising questions					
		F	S	R	T	X	
1	My Geography teacher raises Yes or No questions while the learning-teaching activities are going on.	F	10	67	122	199	2.34
		%	5.0	33.7	61.3	100	
2	My Geography teacher raises True or False questions while the learning-teaching activities are going on.	F	14	1	184	199	1.35
		%	7.0	0.5	92.5	100	
3	My geography teacher raises multiple choice questions while the learning-teaching activities are going on.	F	15	0	184	199	1.09
		%	7.5	0	92.5	100	
4	My Geography teacher raises short answer questions while the learning-teaching activities are going on.	F	15	2	182	199	1.29
		%	7.0	1.0	91.4	100	
5	My Geography teacher raises essay questions while the learning-teaching activities are going on.	F	14	2	183	199	1.07
		%	7.5	1.0	91.5	100	
6	My Geography teacher raises matching questions while the learning-teaching activities are going on	F	15	0	184	199	1.02
		%	7.5	0	92.5	100	
7	To assess my performance my Geography teacher uses homework.	F	13	6	180	199	1.54
		%	6.5	3.0	90.4	100	
8	To assess my performance my Geography teacher uses project work/assignment.	F	16	13	170	199	1.18
		%	8.0	6.5	85.5	100	
9	To assess my performance my Geography teacher uses class participation.	F	14	29	156	199	2.12
		%	7.0	14.6	78.4	100	

10	To assess my performance my Geography teacher uses tests.	F	22	122	55	199	2.76
		%	11.0	61.3	27.6	100	
11	To assess my performance my Geography teacher uses quiz.	F	14	5	180	199	1.3
		%	7.0	2.5	90.4	100	
12	To assess my performance my Geography teacher uses class work	F	15	0	184	199	1.19
		%	7.5	0	92.5	100	
13	To assess my performance my Geography teacher implements examination.	F	184	1	14	199	1.38
		%	92.5	0.5	7.0	100	

**Note: F= frequently, S= sometimes, R= rarely, T= total, X= mean**

Item 1 in Table 6.20, 10 (5.0%) of the respondents were rated as frequently, while 122 (61.3%) of the respondents were rated as rarely and 67 (33.7%) of the responses were rated as sometimes. From these responses, it is possible to judge that teachers were not raising yes or no questions frequently while Geography teaching activities were going on. Besides, this Table shows Item 2 as 14 (7.0%) of the respondents, which were rated frequently, while 184 (92.5%) of the respondents were rated as rarely. However, 1 (0.5%) of the respondents was rated as sometimes. From this respondents' perspective, one can understand that teachers were not raising true or false questions while the teaching activities were going on.

Regarding Item 3, Table 6.20 indicates that 15 (7.5%) of the respondents were rated as frequently, while 184 (92.5%) of the respondents were rated as rarely. However, there was no respondent who was rated as sometimes. Thus, as the majority respondents indicated that teachers were not raising multiple choice questions frequently while the teaching activities were on. And this has a negative impact on the learners' preparation for their EUEE, National examination because EUEE is prepared in the form of multiple choice items. Thus, it might be one of the reasons that learners scored low results in the EUEE, National examination.

Moreover, Table 6.20 indicates Item 4 as 15 (7.5%) of the respondents were rated frequently, while 182 (91.5%) of the respondents were rated as rarely and 2 (1.0%) of the participants were rated sometimes. From these responses, we can comprehend that teachers have not been raising short answer question frequently while the teaching activities were going on. This situation does not encourage learners reasoning power and rationality.

Concerning Item 5 in Table, 6.20, 14 (7.5%) of the respondents were rated as frequently, while 183 (91.5%) of the respondents were rated as rarely, but 2 (1.0%) as rated sometimes. From this, one can infer that teachers have not been raising essay questions while the learning and teaching activities were going on. Consequently, learners could not be able to think critically and elaborate what they have in their mind as well as observing and diagnosing their environment. Thus, learners are remained with rote memory and shallow knowledge. Concerning Item 6 (Table 6.20), it shows that 15 (7.5%) of the respondents were rated as frequently, while 184 (92.5%) of the respondents were rated as rarely. However, there was no respondent who was rated sometimes. From this result, it is possible to know and sum up that teachers were not raising matching questions frequently while the teaching activities were going on.

Table 6.20 further displays Item 7 as 13 (6.5%) of the respondents were rated as frequently, while 180 (90.4%) of the respondents were rated as rarely. However, 6 (3%) of the respondents were rated as sometimes. Thus, from this evidence, it is possible to say that teachers were not using home work frequently to measure learners' academic performance. Regarding Item 8 in Table 6.20, 16 (8.0%) of the respondents were rated as frequently and 170 (85.5%) as rarely, but 13 (6.5%) of the respondents were rated as sometimes. Thus, we can infer that teachers were not practicing assignment frequently to measure learners' academic performance.

Item 9 is displayed in Table 6.20 as 14 (7.0%) of the respondents and rated as frequently. On the other hand, 156 (78.4%) of the respondents were rated as rarely and 29 (14.6%) as sometimes. From this, we can infer that teachers were not practicing class participation frequently to measure learners' academic performance. Regarding Item 10 (Table 6.20) indicates that 22 (11.0%) of the respondents were rated as frequently, 55 (27.6%) as rarely and 122 (61.3%) as

sometimes. From these respondents response, we can understand that teachers were not using tests frequently to measure learners' academic performance. This negatively affects learners' awareness on their level of understanding on their lessons. As a result, learners score low results in the mid and final as well as EUEE examinations.

Regarding Item 11 in Table 6.20, 14 (7.0%) of the respondents were rated as frequently while 180 (90.4%) of the respondents were rated as rarely and 5 (2.5%) as sometimes. Thus, one can infer that teachers have been using quiz rarely to measure learners' day-to-day academic progress. This has a negative impact on learners' regular and pre-exam preparation. Furthermore, Item 12 in Table 6.20 shows 15 (7.5%) of the respondents, which were rated as frequently while 184 (92.5%) of the respondents were rated as rarely and there was no respondent who was rated as sometimes. These evidences lead us to infer that teachers were using class work rarely to measure learners' day-to-day academic performance. Therefore, learners' day -to-day activities and progresses were totally neglected. So that the practice of continuous assessment techniques were ignored in higher education preparatory secondary schools Geography education.

Finally, Table 6.20 shows Item 13 as 14 (7.0%) of the respondents were rated as frequently while 184 (92.5%) of the respondents were rated as rarely, but 1 (0.5%) of the respondent was rated as sometimes. From the majorities' response, it is possible to infer that teachers have been using examination frequently to measure learners' academic performance. Generally, from the aforementioned data (Table 6.20 responses), one can be in a position to infer that teachers were failed to implement continuous assessment techniques as part of the learning and teaching process to measure learners' day-to-day academic progress while the teaching activities were going on. Teachers have been implementing mid and final examination as a major assessment tools to measure learners' academic performance and achievement.

## **6.7 Summary of the Results**

1. Though it was hypothesised that the nature of Geography as a discipline would be a challenging factor for the practice of learner-centered methods of teaching, the result of the study on the contrary revealed that the nature of Geography as a discipline and its curriculum rather facilitate the practice of learner-centered methods of teaching. Most Geography contents are found outside the classroom (in the real world), constructivist teaching strategies are identified in the syllabus, contents and concepts identified in the text book are clear and easily understandable and teachers are assigned to be facilitators of the teaching process. This was due to the frequent revision and updating of the curriculum. However, the allotment of insufficient time was found as a problem to practice learner-centered methods of teaching in the implementation of Geography syllabus.

2. Moreover, the results revealed that learners have not experience about learner-centered methods of teaching; they came through the lecture method of teaching. Furthermore, it depicted that teachers were not practicing varied methods of teaching as well as they were not utilising instructional materials. They also failed to motivate and advise the learners to be involved in the teaching and learning activities. Teachers also failed to cooperate with the learners to solve learners' problems.

3. The results lead to comprehend that there was no learners' independent work as well as group activities while the teaching process was going on. The whole teaching process was dominated by the teachers and the communication was only one-way, from teachers to learners. This implies that teachers were reluctant to shift their power to the learners. As a result, learners did not get an opportunity to take part or to be engaged in their lesson and construct their knowledge. Consequently, learners became incompetent in the EUEE, National examination.

4. Regarding availability of resources, the results revealed that the Geography laboratory rooms were absent in the schools. There were scarcity of instructional materials such as text books, computers and Geography Information system. This implies that higher education preparatory secondary schools Geography education in South Wollo administrative zone was not supported

with Computer, Geography Information System and other instructional materials. This in turn negatively affected the practice of learner-centered methods of teaching as well as learners' academic achievement.

5. Finally, the results revealed that teachers failed to implement continuous assessment techniques as part of the teaching process to measure learners' day-to-day academic progress while the teaching activities were going on. Teachers have been implementing mid and final examination as major assessment tools to measure learners' academic achievement. Such type of assessment techniques are product oriented, do not show the process how learners improve their academic progress continuously. Thus, the dominant practices of summative assessment techniques negatively affect the practice of learner-centered methods of teaching in general and learners' participation in particular.

## **6.8 The Main Findings of the Study**

Based on the results of qualitative and quantitative data analysis and in line with research questions, findings of the study are forwarded as follows:

1. Geography is unique subject because most of its contents are found outside the class room, i.e. found in the real world. By its nature, Geography contents are comfortable to practice learner-centered methods of teaching. Thus, Geography contents need teaching strategies that initiate practical learning and learning by doing as well as teachers who have good subject matter knowledge and pedagogical skill especially about learner-centered methods of teaching, i.e. the practice of field-work method, map work, GIS, class room management skill, interest and commitment to implement Geography syllabus through learner-centered methods of teaching. Therefore, Geography is a unique discipline regarding its methods of teaching, resources, class room facilities, instructional media, teachers' training as well as the nature of contents. It needs practical activities which are more comfortable for learner-centered methods of teaching than traditional lecture method of teaching.

2. Preparatory secondary schools Geography syllabus was prepared in line with Ethiopian Education Policy and constructivists' methods of teaching. Both the policy and the syllabus



encourage learners' self-learning, creativity, participation, confidence, continuous assessment techniques as well as teachers have been encouraged to be facilitator of the teaching and learning process. However, this study revealed that there is incompatibility in the implementation of Geography syllabus and the Ethiopian Education Policy. The policy encourages the constructivists' approaches of teaching but on the contrary the sampled schools' Geography teachers were frequently practicing traditional lecture method of teaching. Therefore, the policy and the syllabus implementation are incompatible.

3. As the study revealed, Geography syllabus is prepared to be practiced easily. The contents are clear and arranged from simple to complex, integrated vertically and horizontally, the language is simple and understandable, no more editing problems, strategies are identified, activities are recommended, contents are up to date, it fits learners' level of understanding and it is suitable to practice learner-centered methods of teaching. However, the sampled schools' Geography teachers were practicing traditional lecture method of teaching. Therefore, learners failed under teacher's academic oppression.

4. The results revealed lack of teachers' readiness and awareness about the advantages and the way how to practice learner-centered methods of teaching and continuous assessment techniques in higher education preparatory secondary schools Geography education due to lack of training for Geography teachers, low interest in the teaching profession (due to lack of incentives for the teachers as motivation), learners' low interest to learn, shortage of time and overloading of teachers and departmental heads with extra work rather than teaching. All these hindered the practice of learner-centered methods of teaching as well as to carry out effective Geography teaching activities.

5. Teachers' and learners' experience was traditional teacher-centered methods of teaching. Both teachers and learners came through traditional lecture method of teaching. As a result, both teachers and learners resisted constructivists' approaches of teaching and teachers were not committed to bring a paradigm shift and adopt learner-centered methods of teaching. Therefore, both teachers and learners contributed a lot to continue the practice of traditional lecture method

of teaching permanently. This method of teaching made teachers and learners to be pedagogically powerful and powerless respectively. Consequently, learners failed under teachers' pedagogical oppression by being dependent to teachers' information and activities.

6. Teachers were dissatisfied with their salary and disappointed with lack of incentives in the profession. As a result, they were demoralised being teachers as well as to implement the teaching and learning process effectively. As a result, teachers were reluctant to practice learner-centered methods of teaching in Geography education. Therefore, learners could not get an opportunity to be involved in the teaching and learning process and to construct their own ideas; they have been filled by teachers' information. Learners became shallow thinkers as well as less competent in the EUEE, National examination.

7. Majority of learners had low ability and was incapable to work independently and was weak participants during group work (the more capable learners joined natural science stream). Most of the learners figured out things or the lesson through receiving of teacher's lecture. Therefore, learners' roles were limited in receiving teacher's lecture and taking note and finally learners prepare themselves for examination through rote memorisation. This implies that learners came from the lower grades without sufficient knowledge and ability. As a result, they became incompetent or incapable in self learning, in generating new idea and concepts; in creativity, confidence, engaging, critical thinking and responsibility for the construction of their own knowledge.

8. Learners were passive when they were encouraged to participate in a certain group or individual tasks, were shy and afraid when they were assigned to learn through discussion and other self-learning activities due to lack of confidence in their ability. This in turn affected teachers' effort to practice learner-centered methods of teaching.

9. Learners' disturbance, few better achievers dominance, dearth of resources in the school, shortage of budget to purchase instructional media and to facilitate fieldwork method of teaching

were revealed as other factors hindering the practice of learner-centred methods of teaching in the implementation of higher education preparatory secondary schools Geography education.

10. The study revealed that the traditional lecture method of teaching makes learners dependent on the teacher's information and activities. This dependency deteriorates the learner's confidence and motivation as well as responsibility to generate their own ideas and to construct their knowledge. As a result, most learners expect and wait for every information, activities and knowledge from teachers; they hate independent work and work with their mates as well as discourage learners' participation and engagement as well as affect learners' academic achievement.

11. Though learner-centered methods of teaching have enormous value such as, they encourage learners' participation, interaction with their mates and share ideas, develop learners' creativity, critical thinking skills, self confidence, learners' independent learning ability, integrate theoretical classroom lesson with outdoor practical learning, develop learners' commitment and responsibility in their own learning, give opportunity for learners to generate their own ideas as well as to construct their own knowledge, most Geography teachers on the contrary neglect the practice of these methods of teaching.

12. Even though Participatory methods of teaching, such as group discussion, field work, field visit, demonstration and practical learning, technology-based learning like computer, GIs, TV, classroom activities, question-and-answer method, project methods as well as formative assessment techniques were identified to be learner-centered teaching strategies to make learners knowledge constructors and making Geography lesson easily understandable and unforgettable, on the contrary, most Geography teachers were frequently practicing traditional lecture method of teaching.

13. The learners' seats were arranged permanently and fixed in row towards the blackboard. Thus, teachers were not feeling comfort to practice learner-centered methods of teaching like group discussion and carrying out supervision activities. As a result, teachers were diverted to

continue their traditional lecture method of teaching. Thus, learners could not get a chance to participate in the teaching process. Consequently, learners became passive receivers of the teachers' lecture. This in turn negatively affected learners' creativity, knowledge construction effort, problem solving and decision making ability.

14. Most Geography teachers did not utilise instructional media while they were practicing Geography teaching process. The teaching process was dominated by talk-and-chalk. The teachers' lecture did not afford time to the learners to construct their own ideas. Teachers did not make use of sketches and diagrams when they were clarifying new concepts to the learners. Teachers did not draw examples from everyday life when they explaining new concepts to the learners and the teachers' lecture did not elicit learners' prior ideas. Therefore, the traditional lecture method of teaching makes learners dependent on teachers' activities; deteriorate learners' creativity, critical thinking skills, participation, confidence, motivation and responsibility to generate their own ideas as well as to construct their own knowledge.

15. The results of the study also revealed shortage of resources as a big constraint to practice learner-centered methods of teaching in general and to improve learners' academic achievement in higher education preparatory secondary schools Geography education in particular. Most resources were completely unavailable in the schools and few were insufficiently available. Accordingly, physical resources such as Geography room, weather station, Geography display room and display field, map work room, were completely unavailable. The library, departmental room and pedagogical centre are insufficiently available. Thus, the library was the only resource available in all schools with limited reference books and facilities, and a narrow departmental room was available in one sampled school with limited facilities. Disorganised pedagogical centres were available in two sampled schools. Moreover, the study revealed a series shortage of printed instructional media like maps, globes, charts, reference books, atlas, magazines and newspapers as well as weather station and cartography instruments.

16. Besides, the results of the study revealed that most Geography teachers of the sampled schools did not ask questions throughout the periods and there was no classroom participation as

well. Therefore, the sampled Geography teachers did not give classroom activities such as class works and other tasks. There was no plasma TV transmission except in one sampled school (06).

17. Furthermore, the study revealed that the sampled schools Geography teachers did not frequently employ continuous assessment techniques such as class work, home work, assignment, quiz and other forms of learners' participation to measure the level of learners' day-to-day academic progress. No marks were given by the teachers on learners' exercise books for the activities such as class work, home work and other exercises. However, through informal talk, I found out that teachers gave 10% of marks to the learners as class participation simply by looking in the learners' note books and attendance sheet. Therefore, mostly learners were assessed through summative assessment, mid and final examination. Learners were transferred from Grade 11 to Grade 12 through cheating and chance without sufficient knowledge. Consequently, learners become less competent and fail to join the EUEE, National examination. At last, they became unemployed and burden of their family as well as their country.

18. From the study a controversial situation was observed between learners' school examination results and EUEE, National examination results. Learners were scored better in their school examination than in their EUEE, National examination. This is due to the fact that schools' examination was prepared under standard with very easy questions, assigning marks merely based on learners' note book and attendance as well as group works. When learners were given a group assignments and project work they did not work by themselves, but by one or two better achievers of the group members.

All groups scored high without working on their own. Besides, teachers were responsible and questionable by the school's administrator when learners scored low results in the school's prepared and administered examination. Therefore, to be free from claim teachers' prepared easy questions, were careless when they administered the examination and thus learners cheat each other and score high result without their effort and ability.

On the contrary, when learners took the EUEE, National examination they scored low because cheating was relatively controlled and the questions were standardised. As a result, learners scored high in the schools' prepared and administered examination but low result in EUEE, National examination. Consequently, majority of learners from the sampled higher education preparatory secondary schools were not competent in the EUEE, National examination and failed to join the university ultimately.

Generally, the findings can be summarised as: though the nature of Geography, its syllabus development and its contents feasibility were hypothesised as the factors that negatively affect the practice of learner-centered methods of teaching in higher education preparatory secondary schools Geography education, the results of the study revealed that the documented pedagogical methods and strategies are ideal for learner-centered teaching.

However, the study revealed that the absence of resources, such as physical resources, classroom facilities, shortage of instructional media, shortage of sufficient Geography reference books, scarcity of budget to practice field work method and other activities, placement of incompetent learners in social science stream, learners' low interest to learn, learners' low engagement in the teaching activities and learners' disturbance, are the significant factors hindering the practice of constructivists methods of teaching in higher education preparatory secondary schools Geography education. Besides, the study revealed that shortage of time to cover the content, absence of plasma TV transmission due to frequent interruption of electrical energy, low interest and commitment on the part of the teachers and lack of teachers' professional development about the practice of variety teaching methods and how to employ continuous assessment techniques, were factors that hindered the implementation of higher education preparatory secondary schools Geography syllabus through constructivists' methods of teaching and making learners free from teachers' domination.

# **CHAPTER 7**

## **CONTRIBUTION, SUMMARY, CONCLUSION, SUGGESTIONS AND RECOMMENDATION OF THE STUDY**

### **7.1 Introduction**

This chapter presents summary, contribution, conclusion and limitations of the study as well as suggestions for future researchers in the field of curriculum studies and recommendations of the study.

### **7.2 Summary of the Study**

The main purpose of this study is to investigate the merits and reasons for teacher dominance in the pedagogy of Geography and suggest alternative constructivist-based strategies that promote learner-centred methods of teaching.

To address the issue, the study raised the following basic questions:

- What is the nature of Geography and its related pedagogical strategies as a subject in a school context?
- What problems lead the teacher to practice teacher-dominance methods of teaching in the teaching of Geography in Ethiopian preparatory schools?
- How do these teacher-dominance methods of teaching in the teaching of Geography impact on the students' learning in Ethiopian preparatory schools?
- What are alternative strategies that can help to promote active-learning/learner-centered pedagogical strategies in the teaching of Geography in Ethiopian preparatory schools?
- To what extent are resources available in the school and reliable to practice learner-centered methods in the teaching of Geography?
- How do Geography teachers measure and assess learners' understanding and achievement?

Thus, based on the above questions and after the data were analysed the results of the study were summarised. Accordingly, the result of the study reveals that teachers frequently practice lecture method of teaching and summative assessment as dominant assessment techniques due to dearth

of resources, lack of budget to purchase teaching materials and to facilitate field work teaching, shortage of time, lack of commitment on the side of teachers (low salary and no incentives), lack of training about learner-centred methods of teaching and continuous assessment techniques, incapacity of learners to perform tasks independently, learners disturbance, few learners dominance. As a result, learners failed under teachers' domination.

Generally, the study has been summarised based on each chapters:

Accordingly, chapter 1 introduced the study. The problem to be tackled in this study was explored, which helped to state the specific research problem, research questions and aims and objectives. The study was motivated and definition of the working concepts presented. The chapter ended with mapping out the ensuing chapters of the study.

Likewise, Chapter 2 discussed the theoretical frameworks which are guiding the study. Thus, the chapter deals with the different theories of constructivists' philosophy which are relevant to the study like kolb's experiential learning theory. Besides, chapter three deals with literature review. The chapter reviews relevant literatures which show the degree of the problem globally and contextually, which also support the data analysis of the study. Thus, the chapter indicated that the study was supported with other research works.

Moreover, chapter four considers about the research design and methodology. In this chapter variables were elaborated. The chapter again explained the design and the approach of the study, the study employed mixed approach and descriptive survey design. Data gathering methods and strategies were also clearly identified in this chapter. Population and sampling techniques were explained, the study employed random and purposive sampling techniques to select the sample of the study. This chapter indicates as varied data gathering instruments employed in the study, such as observation, interview, document analysis and questionnaires. The chapter also deals with the data analysis technique employed in the study, narration for qualitative data and frequency, mean and percentage for quantitative data. Validity and reliability as well as ethics of the study were presented. Finally, the chapter ends with conclusion.



Chapter five considers the presentation and analysis of data gathered from teachers' and Departmental heads' interview questions and from learners' open-ended questionnaires. The chapter ends with the summary of the analysis and forwarded conclusions of the analysed data of interview and open-ended questionnaires.

Moreover, chapter six presents the introduction, results from the analysis of documents, observation and close-ended questionnaires. Thus, the chapter deals with the results of document analysis like syllabus, the schools' prepared examination and Ethiopian University Entrance Examination as well as observation of actual class room teaching, resources and facilities. Furthermore, the chapter considers the results of the analysed data from close-ended questionnaires. Finally, the chapter ends with the summary of the results and forwarded the main findings of the study based on the research questions.

The last chapter, chapter seven presents the introduction of the chapter, Summary of the study and Contribution of the study. Besides, suggestions and recommendations of the study were forwarded in the chapter. At last, the chapter ends with the presentation of personal reflection of the study.

### **7.3 Contribution of the Study**

The constructivist theory promotes learner-centred approaches of teaching and learning and these approaches motivate learners to construct knowledge by themselves. These approaches identified teachers to be facilitators of the teaching and learning process. However, the result of this study reveals against the constructivist theory, teachers practice lecture method of teaching and the teacher is the centre of teaching and learning process. This in turn makes learners passive information receivers. Thus, there is incompatibility between the theory and the actual practice of the teaching and learning process of Geography education, there is a gap between the theory and the actual practice of teaching and learning process of Geography education. Therefore, the result of this study has the following contribution:

The result of this study shall be a means to help teachers, researchers, educational policy makers and other educational experts to explore possibilities of developing more effective strategies of utilising the active learning methods in the teaching of Geography. Thus, the result of this study could be an input for curriculum designers, teachers, learners, educational managers and other concerned bodies to solve problems which lead teachers to practice teacher-centered methods of teaching and to shift power from teachers to learners.

Moreover, the study fills the gap of the constructivist theory and the actual practice of Geography education since no research has been conducted to address this problem in the context of Ethiopia. Thus, the study provides the necessary assistance to the Geography teachers to select the strategies and resources that encourage learners to engage in knowledge construction processes during their learning. Furthermore, the result of this study indicates strategies that raise teachers' and learners' interest towards active learning methods and continuous assessment techniques.

This study also provides information for Government representatives as to why teachers feel discomfortable with their profession and to find out relevant solutions so as to carry out effective and efficient education in general and quality Geography education in particular. Furthermore, the study serves as a stepping stone for other researchers who want to carry out further investigation on the implementation of the Geography syllabus in the Ethiopian school contexts.

#### **7.4 Conclusions of the Study**

In line with the major findings presented above, the following conclusions were drawn:

Though the nature of Geography and the preparation of Geography syllabus were hypothesised as factors affecting the teaching of Geography, the result of this study revealed a disregard of active learning methods evidenced through teacher-centered teaching which is out of step with the constructivist approaches.

Geography by itself and the preparation of the syllabus encourage teachers to be facilitators of the practice of learner-centered methods of teaching. However, Geography teachers frequently

practiced the traditional method of teaching due to lack of training about the practice of learner-centred methods of teaching and continuous assessment techniques, teachers and learners experience of traditional teaching method, learners' incompetence to work independently, shortage of time, dearth of resources, lack of commitment on the part of the teachers, learners disturbance and few better achievers dominance.

Thus, the practice of teacher dominated method of teaching makes learners passive receivers of information. It does not give the opportunity for learners to think critically and construct knowledge by themselves. Generally, the traditional method of teaching makes learners dependent of teachers' activities and containers of teachers' information. This in turn hinders learners' academic achievement and quality of Geography education.

To free learners from teachers' teaching dominance and make them knowledge constructors and Geography easily understandable and unforgettable, this and previous studies identified alternative teaching strategies such as group discussion, field work, field visit, demonstration, technology-based learning like computer, GIs and TV, class room activities, question and answer method, practical learning and project methods, map work, role-play and simulation, brain-based learning, computer-based learning, subject-based learning, multiple intelligence and event-based learning and formative assessment techniques that most Geography teachers neglect to practice these methods and make the learners under their power.

Though resources are without doubt needed for effective and efficient curriculum implementation in general and Geography curriculum implementation in particular, they were insufficient and totally unavailable in the sampled schools. Thus, physical resources such as Geography room, weather station instruments, Geography display room and display field and map work rooms are totally unavailable in most sampled schools. However, library is the only resource available in all the sampled schools with limited reference books and facilities. The departmental room was available only in two sampled schools with limited facilities. Unorganised pedagogical center was available only in one sampled school.

Moreover, this study revealed a serious shortage of printed instructional media like maps, globes, charts, reference books; atlas, magazines and Newspapers as well as audio-visual materials, information technology, equipments, consumables, and objects were insufficient in the schools. Thus, dearth of resources negatively affects the practice of learner-centered methods of teaching as well as learners' involvement in Geography education, and they are the cause for the learners to be failed under teachers' academic oppression.

Assessment is part and parcel of teaching and learning processes. However, this study revealed that teachers failed to measure learners' academic progress through continuous assessment techniques. The role of effective feedback and motivation on learners' progress in any discussion of effective teaching and assessment cannot be overstated. Learners are understandably angry when they receive feedback on an assignment that consists only of a mark or grade.

Regarding learners' competency, this study revealed that learners scored high in the school's prepared examinations and on the contrary they scored low in the EUEE, National examinations due to the fact that the schools' prepared examinations were below standard and the administration techniques were exposed for cheating whereas the examination that is prepared and administered at the national level is of a high standard and cheating is relatively minimal. As a result, learners were not competent in the National examination. Thus, relatively low numbers of learners were joined university among large number of learners those took the EUEE, National examination.

Generally, the result of this study indicates that group discussion, field work, demonstration, technology-based learning like computer, GIs and TV, class room activities, question and answer method, practical learning, project methods, map work, role-play, simulation, brain-based learning, multiple intelligence, event-based learning and formative assessment techniques were identified to be alternative teaching strategies to make learners knowledge constructors and making Geography education easily understandable and unforgettable.

However, Geography teachers neglected to practice these alternative strategies in the teaching and learning process of higher education preparatory secondary schools Geography education. As a result, learners were powerless and dependent in the teaching and learning activities in general and the knowledge construction process in particular; the power of teaching was completely authorised by their teachers.

Moreover, problems such as dearth of resources, teachers and learners experience, lack of awareness on the part of teachers, teachers' resistance to paradigm change, teachers failed to practice formative assessment techniques and inability of learners to perform tasks independently were pushing the teachers to practice teacher-dominance method of teaching in the teaching of Geography in the sampled Ethiopian higher education preparatory secondary schools.

## **7.5 Suggestions for Further Researchers**

The findings of this study suggest researchers should:

- Investigate the effect of the constructivist model, Kolb's Experiential Learning Theory in the teaching of Geography on teachers' paradigm shift from lecture method of teaching to constructivist methods of teaching and learners' engagement in their learning in private and public secondary preparatory schools of Ethiopia as well as extension programme since my study was conducted only in regular government higher education preparatory secondary schools.
- Investigate the effect of the constructivist model, Kolb's Experiential Learning in the teaching of Geography on teachers' paradigm shift from lecture method of teaching to constructivist methods of teaching and learners' engagement in their learning in secondary schools (Grades 9 and 10) of Ethiopia since this study was conducted only in the higher education preparatory secondary schools (Grades 11 and 12).
- Investigate the nature of learners' results of school administered and Ethiopian University Entrance Examination (EUEE) with complete documents since this research was conducted

with incomplete documents due to the inaccessibility of some documents from some sampled schools.

- Investigate the effect of the constructivist model, Kolb's Experiential Learning in the teaching of Geography on teachers' paradigm shift from lecture method of teaching to constructivist methods of teaching and learners' engagement in their learning with large numbers of sample schools in Ethiopia since this study was conducted only in the six higher education preparatory secondary schools.

## **7.6 Recommendations**

1. Time plays a crucial role in the effective teaching and learning process. Thus, Geography teaching should be designed and implemented in such a way that allows the learners' sufficient time to search for and reflect on their own ideas. Therefore, so as to carry out effective learner-centered methods of teaching in Geography, to give opportunities for the learners to construct their own knowledge and to cover the contents at appropriate academic schedule, curriculum developers should allocate sufficient time in higher education preparatory secondary schools Geography syllabus.

2. The value of knowledge depends on its use. Thus, teaching should aim at enhancing the learners' ability to apply the Geography concepts and principles they have learned to solve their daily problems. Thus, the implementation of Geography syllabus should be in line with the Ethiopian education policy which encourages learners to be active and creative as well as problem solvers. Therefore, school managements, supervisors, departmental heads and other concerned bodies should monitor, follow and encourage the implementation of the syllabus to be in line with the Ethiopian education policy.

3. Geography teachers should be encouraged to practice the constructivist methods of teaching. Therefore, Geography educationists should organise the sensitisation programmes for Geography teachers to create awareness in them so that the traditional method of teaching becomes less relevant to achieve the goal of Geography education in the 21<sup>st</sup> century.

4. The Ministry of Education in collaboration with Regional Educational Bureau and stakeholders as well as donors should provide training, workshops and seminars to English language teachers on how to teach English language fluently and give due attention and make learners skillful as well as confident to express and reflect their idea in the teaching and learning process.

5. Geography teachers should provide ample opportunities to the learners to formulate their own ideas and construct their knowledge rather than absorbing teachers' information. It is important for teachers to note that all knowledge emanates as hypothetical construction. No individual constructs knowledge for another. The knowledge that the learner constructs by him/herself is more meaningful than transmitted to him/her by the teacher.

6. Geography education should recognise the preconception the learners come with in to new lesson are resistant to change. Consequently, Geography teaching should aim at providing the learners with opportunities to identify their misconceptions and modify them in the light of new evidence.

7. The Government, particularly Ethiopian Ministry of Education and other concerned bodies should improve teachers' living conditions and motivate teachers' interest and commitment to their profession through incentives, rewards and other means such as transportation fee, house allowance.

8. Teachers should be committed to supervise and follow up learners' activities and thereby provide feedback to encourage the strong sides and to improve the weak sides; assure the quality of Geography teaching through learners' involvement.

9. Vice directors, schools' supervisors and departmental heads should follow and encourage teachers to practice variety of learner-centered methods of teaching and motivate learners to engage in Geography teaching and learning process actively.

10. To practice effective learner-centered methods of teaching and to authorise learners on their own learning in Geography education in general and higher education preparatory secondary school Geography education in particular, Ethiopian Ministry of Education, the school managements, Amhara States Education Bureau and other concerned bodies should provide budget, resources, Geography reference books and textbooks, other instructional media and facilities through producing in the school and buying from the market.

11. In order to carry out life and quality Geography education in higher education preparatory secondary schools, Ethiopian MOE, Amhara State education bureau, Zone, District, the schools' administrators and others concerned bodies should equip schools with adequate physical resources for Geography education in particular, such as Geography departmental room, Geography room, Geography laboratory room and Geography pedagogical center.

12. Schools' management should equip schools with adequate resources such as globs, maps, atlas, meteorological instruments, drawing instruments and reference books etc; which are very crucial for Geography teaching through the practice of learner-centered methods of teaching.

13. Ethiopian electrical energy and power agency as well as other concerned bodies should investigate the problem of electric power interruption and give appropriate solution and increase the continuity of plasma TV transmission and supporting the lesson with it.

14. Since field work is an appropriate and effective method of teaching for most Geography contents, school administrators, departmental heads, Geography teachers and other concerned bodies should facilitate budget and other utilities to practice fieldwork.

15. The Government, particularly Ministry of Education in collaboration with Amhara State Education Bureau and other concerned bodies should develop teachers' profession regarding learner-centered methods of teaching, continuous assessment techniques and classroom



management strategies in long and short term training, workshops and seminars through in-service and pre service programmes.

16. Geography teachers should assess learners' day-to-day academic progress continuously through formative assessment techniques such as class work, home work, oral questions, quiz and tests regularly and give them constructive feed backs.

17. Teachers and departmental heads should prepare standard examinations that measure learners' ability properly. Schools' prepared questions should have equal standard with Ethiopian University Entrance Examination' questions to make learners competent at National level. Moreover, invigilators, teachers, departmental heads and school administrators and other concerned bodies should take care to keep the secret and protect cheating when the examination is prepared and administered respectively. And thus, each learner should do the examination independently by her/him self and should score based on their ability.

## **Personal reflections**

Though the Government makes a tremendous effort in the expansion of education in general and higher education preparatory secondary schools in particular, significant efforts were not made in the quality of education in general and Geography education in particular. As a result, quality of education becomes the current questionable issue that every citizen has discussed due to the fact that incompetent graduates have been produced.

The Government, particularly MOE designed a wonderful education policy based on constructivists' philosophy and the curriculum was developed and its implementation strategies, methods and resources as well as teachers and learners activities and responsibilities have been clearly identified.

However, the actual practice of education in general and Geography education in particular is contrary to the policy, the curriculum implementation strategies and teachers and learners activities and responsibilities identified in the Geography syllabus due to scarcity and unavailability of resources, lack of budget, lack of teachers' commitment due to insufficient salary and lack of incentives, learners' low interest and involvement due to unemployment of new graduates, lack of training for teachers about active-learning strategies and continuous assessment techniques, large class size and teachers are overloaded with extra tasks rather than teaching.

Therefore, the Government, especially MOE should give due attention for the quality of education parallel with the expansion by providing resources and facilities to the school, allocating budget for fieldwork and other activities, giving training for teachers, increase teachers' salary and provide incentives, creating job opportunities for new graduates to raise learners' learning interest, motivate researchers to conduct research in the area of education and use the results of the research as an input to solve problems which affect the quality of education

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## **Appendix I Questionnaire for learners**

**University of South Africa**

**Graduate Studies**

**School of Education**

### **Questionnaire for learners**

Dear Student

The main purpose of this questionnaire is to gather pertinent data regarding the practice and problems of Geography teaching in the higher education preparatory secondary schools of Ethiopia. You are requested to respond to the items; give your frank opinion. Your response will be treated confidentially. There is no need to write your name down. The results are intended to serve as a feedback to improve the practice of learner-centred methods in the preparatory education in general and Geography education in particular.

I thank you in advance for your participation.

### **Part I: Participants' Biographical Information**

Name of District in code \_\_\_\_\_

Name of the School in code \_\_\_\_\_ Participants Code \_\_\_\_\_

Sex: Male \_\_\_\_\_ Female \_\_\_\_\_ Age \_\_\_\_\_

Grade level: 11<sup>th</sup> \_\_\_\_\_ 12<sup>th</sup> \_\_\_\_\_ Ethnicity \_\_\_\_\_

**Part II: Items**

**Direction:** A number of questions are listed below regarding the nature of Geography; Geography syllabus, teaching methods, students’ activity, instructional media and other resources. And five alternatives for responding to the statements are given. These are explained as follows: 1=strongly disagree(SD); 2=disagree(D); 3= undecided(UD); 4=agree(A) and 5= strongly agree(SA). Please, choose the one that applies to you and put an “X” under the number in the column.

N O	ITEMS	Rating scales				
		SD (1)	D (2)	UD (3)	A (4)	SA (5 )
	<b>Nature of Geography</b>					
1	Geography is unique for me from other disciplines.					
2	In my opinion, the concepts of the contents of Geography textbook are clear and easily understandable.					
3	The language in my Geography textbook is simple or easily understandable.					
4	The contents of the text book are arranged from simple to complex.					
5	Geography text book has participatory exercises/activities.					
6	I think that the annual lesson will be covered at a given time.					
	<b>Teaching Methods practiced by teachers</b>					
7	My teacher gives me a chance to ask questions or express my opinions while the learning-teaching process is going on.					
8	I have visited geographical areas relevant to the classroom lesson.					
9	My teacher practices different teaching methods.					
10	My teacher motivates my classroom participation.					
11	My teacher advises/encourages me to take responsibilities on my own learning.					
12	My teacher cooperates with me when I encounter problems in learning					

	Geography.					
13	My teacher checks and gives feedback for my day-to-day activities.					
14	My teacher utilizes instructional materials in the teaching-learning process.					
15	I have experience/learning background in teacher-centred methods.					
16	My Geography teacher frequently practices a lecture method of teaching.					
17	My Geography teacher frequently practices discussion method of teaching.					
18	My Geography teacher frequently practices inquiry method of teaching.					
19	My Geography teacher frequently practices role-play method of teaching.					
20	My Geography teacher frequently practices questioning method of teaching.					
21	My Geography teacher frequently practices simulation method of teaching.					
22	My Geography teacher frequently practices fieldwork method of teaching.					
23	My Geography teacher frequently practices map work method of teaching.					
24	My Geography teacher frequently practices activity method of teaching.					
25	My Geography teacher frequently practices project method of teaching.					
26	My Geography teacher frequently practices demonstration method of teaching.					
	<b>Learners' activity while learning-teaching process is going on</b>					
27	I figure out things through teacher's lecture					



	while the learning-teaching process is going on					
28	I have active participation in a Geography learning-teaching process.					
29	I work without teacher supervision while the learning-teaching process is going on.					
30	I figure out things on my own while the learning-teaching process is going on.					
31	I work together in groups while the learning-teaching process is going on.					
32	I think while the learning-teaching process is going on.					
33	I have high interaction with my friends and my teacher during classroom learning-teaching process.					
	<b>Availability of Resources in the school</b>					
34	There is Geography room/laboratory in my school.					
35	There are adequate Geography instructional materials in my school.					
36	The ratio of Geography textbooks to students is 1:1					
37	My lesson is supported with Geography Information System.					
38	My Geography lesson is supported with a computer.					

### Part III Items

Direction: below are statements about the types of questions raised by Geography teachers in the classroom, and measurement and evaluation techniques that they use. Five alternatives for responding to the statements are given. These are: 1= not at all (N); 2= rarely(R); 3= sometimes(S); 4= frequently (F) and 5= most frequently (MF). Please, choose the one that applies to you and put an “X” in the relevant number of the column.

No	Items	Rating of raising questions				
	<b>Assessment Techniques</b>	N(1)	R(2)	S(3)	F(4)	MF(5)

39	My Geography teacher raises Yes or No questions while the learning-teaching activities are going on.					
40	My Geography teacher raises True or False questions while the learning-teaching activities are going on.					
41	My geography teacher raises multiple choice questions while the learning-teaching activities are going on.					
42	My Geography teacher raises short answer questions while the learning-teaching activities are going on.					
43	My Geography teacher raises essay questions while the learning-teaching activities are going on.					
44	My Geography teacher raises matching questions while the learning-teaching activities are going on.					
45	To assess my performance my Geography teacher uses					

	homework.					
46	To assess my performance my Geography teacher uses project work/assignment.					
47	To assess my performance my Geography teacher uses class participation.					
48	To assess my performance my Geography teacher uses tests.					
49	To assess my performance my Geography teacher uses quiz.					
50	To assess my performance my Geography teacher uses class work					
51	To assess my performance my Geography teacher uses examination.					

Part V Items

Please, answer the following questions:

52. List the teaching methods that you prefer in learning Geography.

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53. what are the factors that affect your participation in Geography learning-teaching process

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54. If you have additional comments and suggestions regarding Geography learning-teaching strategies, please write them in the space provided.

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## **Appendix II Interview for Teachers**

**University of South Africa**

**Graduate Studies**

**School of Education**

### **Interviews for Geography Teachers**

Dear Participants,

The main purpose of the interview is to gather pertinent data regarding the practice and problems of Geography learning-teaching in the higher education preparatory secondary school of Ethiopia, and indicate appropriate solution to improve the quality of preparatory education in general and the practice of learner-centred methods in Geography education in particular. Your response is extensively valuable to complete this investigation. Please, give your frank opinion. Your response will be treated confidentially in the sense that your name will not be revealed; in fact, you need not indicate your name.

I thank you so much in advance!

### **I. Participants' Biographical information**

Sex: Male \_\_\_\_\_, Female \_\_\_\_\_ Code \_\_\_\_\_

Age: ≤ 20 \_\_\_\_\_ 21-30 \_\_\_\_\_ 31-40 \_\_\_\_\_ 41-50 \_\_\_\_\_ ≥51 \_\_\_\_\_

Name of the district in code \_\_\_\_\_

Name of the school in code \_\_\_\_\_

Field of qualification: \_\_\_\_\_

Level of qualification: Diploma \_\_\_\_\_ 1<sup>st</sup> Degree \_\_\_\_\_ MA \_\_\_\_\_ PhD \_\_\_\_\_

Experience/service as a teacher: \_\_\_\_\_

Experience/service in other sectors: \_\_\_\_\_

Total years of services: \_\_\_\_\_

Grade level in which you teach: \_\_\_\_\_

Average class size/section you teach: \_\_\_\_\_

Teaching load in credit hours per week \_\_\_\_\_

## Part II: Questions

**Direction:** A number of opened-ended questions are listed below regarding to Geography syllabus, teaching methods, learners' learning styles, assessment tools, instructional media and other resources. Please, answer each question according to each item types.

1. How do you experience the teaching of Geography in your school?

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2. How would you express the unique nature of Geography regarding teaching-learning strategies?

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3. Mention the teaching strategies that are designed in Geography syllabus.

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4. Mention some of the teaching methods that you use in teaching Geography.

Which of these methods do you regard as learner-centred methods?

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5. What is the value of learner-centred methods in the teaching of Geography?

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6. Express your readiness to practice learner-centred methods of learning and teaching.

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7. Mention your major role in the classroom and outside the class room in the implementation of Geography syllabus.

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8. Explain the main problems that you encounter in the practice of learner-centred methods in your Geography teaching and learning process.

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9. Explain the availability of resources (material, Physical, financial and human) in your school relevant to Geography contents.

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10. Explain the majority of learners' activities while the learning and teaching process is going on.

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11. Mention the types of teaching methods you practice frequently.

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12. Mention the dominant assessment techniques you practice to measure learners' academic achievement.

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13. In your opinion, what are the negative impacts of traditional methods of teaching on learners' academic achievement?

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14. In your opinion, what are the challenging factors that affect the practice of learner-centred methods in preparatory schools Geography education?

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15. Explain the problems you encounter while you implement the preparatory school Geography syllabus.

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16. Mention the main problems that affect the quality of Geography education in general and preparatory Geography education in particular.

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# Appendix III Interview for Departmental Heads

## University of South Africa

### Graduate Studies

#### School of Education

##### Interviews for Geography Department Heads

Dear Participants,

The following set of interview items will be addressed to you. The main purpose of the interview is to gather pertinent data regarding the practice and problems of Geography teaching-learning in the higher education preparatory secondary school of Ethiopia. Thus, there is no doubt that your response is extensively valuable to complete the investigation. Hence, you are kindly requested to give me your frank opinion cooperatively on the bases of the following questions. Your response will be treated confidentially. Your name will not be explained while you are responding to these interview questions

I am very much indebted to your kind help!

##### I. Informants' Biographical Information

Sex: Male\_\_\_\_\_ Female\_\_\_\_\_ Participants' code

Age: ≤ 20 \_\_\_\_\_ 21-30\_\_\_\_\_ 31-40\_\_\_\_\_ 41-50\_\_\_\_\_ ≥51 \_\_\_\_\_

Name of the district in code \_\_\_\_\_

Name of school in code \_\_\_\_\_

Field of qualification \_\_\_\_\_

Level of qualification: Diploma\_\_\_\_\_ 1<sup>st</sup> Degree\_\_\_\_\_ MA/MSc\_\_\_\_\_ PhD\_\_\_\_\_

Position \_\_\_\_\_

Years of Service as a teacher: 1-5\_\_\_\_ 6-10\_\_\_\_ 11-15\_\_\_\_ 16-20\_\_\_\_ 21-25\_\_\_\_ >25

Years of Service as Department head: 1-5\_\_ 6-10\_\_ 11-15\_\_ 16-20\_\_ 21-25\_\_ >25\_\_

Service in other areas: 1-5\_\_\_\_\_ 6-10\_\_\_\_\_ 11-15\_\_\_\_\_ 16-20\_\_\_\_\_ >20\_\_\_\_\_

Total years of experience: 1-5\_\_\_\_ 6-10\_\_\_\_ 11-15\_\_\_\_ 16-20\_\_\_\_ 21-25\_\_\_\_ >25\_\_\_\_

**Part II.**

**Direction:** A number of opened-ended questions are listed below regarding to Geography syllabus, teaching methods, learners' learning styles, assessment tools, instructional media and other resources. Please, answer each question according to each item types.

1. How would you explain the relevancy of Preparatory school Geography syllabus with Ethiopian education policy?

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2. How would you express the unique nature of Geography comparing with other discipline?

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3. How would you explain the feasibility of Geography syllabus?

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4. How would you express teachers' readiness to practice learner-centred methods of teaching?

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5. What is teachers' major role in the classroom and outside the class room in the implementation of Geography syllabus?

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6. How would you explain the availability of resources (material, Physical, financial and human) in your school relevant to Geography contents?

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7. How do Geography teachers in your school teach frequently?

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8. How do Geography teachers assess learners' academic achievement frequently?

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9. Explain the majority of learners' activities while the learning and teaching process is going on.

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10. Mention your roles as a Geography Department Head?

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11. Mention teachers' attitude towards the teaching profession in general and Geography teaching in particular.

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12. Mention the type of questions Geography teachers raise frequently while they are teaching.

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13. In your opinion, what are the negative impacts of traditional methods of teaching in learners' academic achievement?

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14. For you, what makes quality of Geography teachers?

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15. In your opinion what are the major constraints that negatively affect the Practice of learner-centred methods in preparatory schools Geography education?

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16. In your opinion what are the constraints negatively affect the quality of Geography education in general and preparatory Geography Education in particular?

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**Appendix IV, A: Observation Check-list**

**University of South Africa**

**Graduate Studies**

**School of Education**

Observation check-list: Methods of teaching implemented by Geography teachers:

School in code \_\_\_\_\_ Teacher's (code) \_\_\_\_\_

Class \_\_\_\_\_ Subject \_\_\_\_\_

Date \_\_\_\_\_ Observer \_\_\_\_\_

Lesson (1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup>) \_\_\_\_\_ Topic \_\_\_\_\_

Content \_\_\_\_\_ Time \_\_\_\_\_

Methods in Geography teaching:	Lesson1	Lesson2	Lesson3	Lesson4	Lesson5
Lecture method					
Discussion method					
Inquiry method					
Role-play method					
Questioning method					
Simulation method					
Fieldwork method					
Map work method					
Activity-based method					
Project method					
others					

## Appendix IV, B

### University of South Africa

#### Graduate Studies

#### School of Education

**Observation check-list B:** The type of questions the teacher raises while he/she is teaching (thick-mark).

School in code \_\_\_\_\_ Teacher in code \_\_\_\_\_

Class \_\_\_\_\_ Subject \_\_\_\_\_

Date \_\_\_\_\_ Observer \_\_\_\_\_

Topic \_\_\_\_\_ Time \_\_\_\_\_

Content \_\_\_\_\_

Teacher frequently raise:	Lesson1	Lesson2	Lesson3	Lesson4	Lesson5
Yes or No					
True or False					
M. choice					
Short answer					
Matching					
Essay/open ended					



# Appendix IV, C

University of South Africa

Graduate Studies

School of Education

## Observation check list-3: Learners' learning styles / activities

School in code \_\_\_\_\_ Teacher (code) \_\_\_\_\_

Class \_\_\_\_\_ Subject \_\_\_\_\_

Date \_\_\_\_\_ Observer \_\_\_\_\_

Topic \_\_\_\_\_ Time \_\_\_\_\_

Content \_\_\_\_\_

5=all of them, 4= most of them, 3=half of them, 2= few of them, 1=none of them

Items	Lesson1					Lesson2					Lesson3					Lesson4					Lesson5				
	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
They are figuring out things on their own																									
They are working without teacher supervision																									
They are working together in groups																									
They are thinking while learning																									

## Appendix IV, D

### University of South Africa

#### Graduate Studies

#### School of Education

#### Observation check-list-4: Utilization of resources in the classroom

School in code \_\_\_\_\_ Lesson no \_\_\_\_\_

Class \_\_\_\_\_ Subject \_\_\_\_\_

Date \_\_\_\_\_ observer \_\_\_\_\_

Time \_\_\_\_\_ Topic \_\_\_\_\_

Items		Utilized	Not utilized	Comment
Boards				
Maps				
Globes				
Models				
Real objects				
Photographs				
Illustrations				
Tables				
Films				
TV & video				
Time line				
Graphs				
Transparencies				
Computers				
Charts				
Atlas				
Diagrams				
Pictures				
Meteorol -ogical instrume- nts	Rain gauge			
	Wind vane			
	Thermometer			

	Anemometer			
	Barometer			
	Hygrometer			
Printed media	Textbooks			
	Magazines			
	Periodical			
	Reports			
	News paper			
Projected media	Slide projector			
	Overhead projector			
	Opaque projector			
	Computer powerpoint or LCD			

**Appendix IV, E**

**University of South Africa**

**Graduate Studies**

**School of Education**

**Observation check-list-5: Availability of material resources in the school**

School in code \_\_\_\_\_ Location \_\_\_\_\_

Class \_\_\_\_\_ Subject \_\_\_\_\_

Date \_\_\_\_\_ observer \_\_\_\_\_

Time \_\_\_\_\_

Items		Sufficiently Available	Available but not sufficient	Not Available at all
Boards				
Maps				
Globes				
Models				
Real objects				
Photographs				
Illustrations				
Tables				
Films				
TV & video				
Time line				
Graphs				
Transparences				
Computers				
Charts				
Atlas				
Diagrams				
Pictures				
Meteorological instruments	Rain gauge			
	Wind vane			

	Thermometer			
	Anemometer			
	Barometer			
	Hygrometer			
Printed media	Textbooks			
	Geography reference books			
	Magazines			
	Periodical			
	Reports			
	News paper			
Projected media	Slide projector			
	Overhead projector			
	Opaque projector			
	Computer powerpoint or LCD			

## Appendix IV, F

### University of South Africa

### Graduate Studies

### School of Education

#### Observation check-list-6: Availability of physical resources with their facilities

School in code \_\_\_\_\_

Class \_\_\_\_\_ Subject \_\_\_\_\_

Date \_\_\_\_\_ Observer \_\_\_\_\_

Topic \_\_\_\_\_ Time \_\_\_\_\_

Content \_\_\_\_\_

Items	sufficiently Available	available but not sufficient	Un available at all
Geog, Department room			
Library			
Geography room			
Geography laboratory			
Weather Station			
Geography Display room			
Geography Display Field			
Map-work room			
Pedagogical centre			
others			

## Appendix IV, G

### University of South Africa

#### Graduate Studies

#### School of Education

##### Observation check-list 7: Document analysis

##### Observation check-list 1: Tools of evaluation used by Geography teachers to understand students' performance:

School in code \_\_\_\_\_ Teacher /code \_\_\_\_\_

Class \_\_\_\_\_ Subject \_\_\_\_\_

Date \_\_\_\_\_ Observer \_\_\_\_\_

5= most frequently, 4= frequently, 3= sometimes, 2= rarely, 1=not at all

Tools of evaluation	5	4	3	2	1
Class work					
Home work					
Project work/Assignment					
Tests					
Examination					
Participation					
Quiz					





**Appendix V, B**

**University of South Africa**

**Graduate Studies**

**School of Education**

**Document analysis check-list**

**Document analysis check-list-2 Analysis of Grade 12 Students' Geography result**

School in code \_\_\_\_\_ Exam year \_\_\_\_\_

Class \_\_\_\_\_ Subject \_\_\_\_\_

Date \_\_\_\_\_ Analyzer \_\_\_\_\_

Grade	Section	year	National examination result						Total
			<50	50-60	61-70	71-80	81-90	91-100	
12									
Grand total									