

Geography Teaching as a Tool for Enhancing Values Education: A Case of Promoting Sustainable Development Values in Selected Secondary Schools in Northern Education Division (NED)

By

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DECLARATION

I declare that the master's thesis entitled '*Geography teaching as a tool for enhancing values education: A case of promoting sustainable development values in selected secondary schools in NED*' is my own work and has not been submitted in any form anywhere or for any other degree at any University. Information derived from either published or unpublished work of others has been duly acknowledged in the text and a list of references.

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God bless you all.

DEDICATION

This work is dedicated to my caring mother, Mama **Oliva Chirwa**, my lovely and beautiful wife **Martha Banda**, my children **Takondwa**, **Talumba**, and **Tazirwa**, as well as all my brothers and sisters for their resilience and internal affection, care, support, and encouragement throughout my study. Never get tired as this may not be the end of the journey.

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ABSTRACT

This study aimed at exploring how Malawi secondary school Geography helps to promote geographical values particularly Sustainable Development Values (SDVs) in learners. This was achieved by examining how SDVs are addressed in secondary school Geography syllabi; investigating how secondary school Geography teachers address SDVs through the teaching of Geography; assessing challenges facing promotion of SDVs through the teaching of Geography, and evaluating how some Geography school leavers apply SDVs in their societies. The study was guided by Transformative Learning Theory, adopted a mixed-method approach and fell under the pragmatic research paradigm. It involved 78 Geography teachers and 38 former Geography students as participants. This project was conducted in 35 secondary schools in two districts (Mzimba north and Nkhata bay) of NED.

The study findings show that most success criteria in junior and senior secondary school Geography syllabuses do not promote the SDVs. In addition, most Geography teachers do not consider addressing geographical values when handling Geography lessons. Furthermore, there are a lot of challenges facing the effective promotion of values through the teaching of Geography. It has also been established that although it seems that the former Geography students make use of the SDVs in their everyday lives, secondary school Geography course does not contribute enough. Therefore, the study recommends that MIE should revise the success criteria of secondary school Geography syllabuses to promote learning through practice; Teacher training colleges should impart values-teaching skills in teachers; Geography teachers should also be encouraged to use more action learning methods to allow learners learn through practice, among others.

Keywords: *Values Education, Sustainable Development Values, Geographical Values, Transformative Learning.*

GLOSSARY OF ACRONYMS AND BBREVIATIONS

AU	African Union
CGE	Commission on Geographical Education
EDM	Educational Division Manager
ESD	Education for Sustainable Development
GCC	Geography Course Curriculum
ICT	Information Communication Technology
IGU	International Geographical Union
MIE	Malawi Institute of Education
MoE	Ministry of Education
MZUNIREC	Mzuzu University Research Ethics Committee
NED	Northern Educational Division
NGO	Non-Governmental Organisation
OEDC	Organisation for Economic Development and Cooperation
SDVs	Sustainable Development Values
SPSS	Statistical Package for Social Science
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNICEF	United Nations International Children's Emergency Fund
USAS	United States National Academy of Sciences

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CHAPTER 1: ORIENTATION OF THE STUDY

1.1 CHAPTER OVERVIEW

Through education, individuals are trained to attain the knowledge and skills they need in their future lives (Kalita, 2015). Besides that, it is also aimed at the attainment of universal values along with the values of society experienced by individuals in the education process through subjects like Geography. For this reason, this study seeks to explore how Geography education helps in instilling values, particularly the values of sustainable development in Malawi citizens. Therefore, this chapter highlights the background information of this study which includes baseline information and research gap, research objectives, justification of the study as well as the theoretical framework.

1.2 BACKGROUND TO THE STUDY

School life is a very important period in the acquisition process of values that continues from birth to the end of our lives (Şahin, 2021). As such, the achievements of values made at school are only truly beneficial when students transfer them to life beyond school life and view learning as a lifelong process that happens within and outside the school setting. Globally, the international geographical education declarations and declarations issued by the International Geographical Union (IGU) and Commission on Geographical Education (CGE) between 1992 and 2016 included the main values and attitudes that can be attained by individuals through geographical education (Şahin, 2021).

Nevertheless, Sadie (1999) in his study called ‘Values Education in a South African Geography Classroom’ alluded that a lot of research has gone into knowledge and skills required in developing the cognitive and psychomotor domains respectively, while the affective domain which deals with the acquisition of values and attitudes remains poorly

developed. Similarly, it is observed that Malawi secondary school curriculum is labeled as examination oriented since it prepares learners for national examinations at the expense of values education needed to transform their daily lives (Wadson, 2020). Nevertheless, the Malawi education curriculum is said to focus on learners' achievement which require learners be introduced to new knowledge, skills, values and attitudes in order to attain learning outcomes (MIE, 2013). This seems to be mere rhetoric as this is not what really happens in schools. This is the case because the performance of schools in Malawi is usually rated based on the number of learners who have passed national examinations. As such, this only assesses the retention of knowledge and skills disregarding the recognition of the acquired values.

1.2.1 Understanding the Concept of Values

The concept of values has different definitions in the literature. For example, Şahin (2021) defines values as enduring beliefs that indicate whether behaviours are personally or socially acceptable. According to Slater (2001), values are principles, ideals, standards, or life postures that guide general behaviour and are reference points in decision-making or the evaluation of beliefs and actions. Shukla (2004) defines a value as anything socially desired that satisfies a human need, leading him to a higher ideal of life. In addition, values are basic standards and judgments that represent common beliefs and thoughts that are considered necessary and appropriate by all individuals in the society and aim to maintain the integrity of the social structure (Rokeach, 1973; Banik, 2020). In the most general sense, values can be defined as a reflection of the wishes, preferences, and desired and undesired situations that highlight what individuals consider important (Şahin, 2021). Accordingly, a value consists of criteria that are adopted by society and individuals and believed to be in the interests of society and individuals, judgments involving qualifications, consciousness emotions, and excitement, management, and integration of an individual's behaviour. Examples of values according to Şahin (2021) include human rights, equality and responsibility, love of nature

and people, respect for cultural diversity, and sensitivity to the environment. Nevertheless, Mondal (2017) has classified values into nine types which include; Political values, Value of time, Value of conservation, Value of sustainable development, Environmental Value, Economic Value, Value of location, Values of backward community, as well as Social and Cultural values.

1.2.2 Understanding the Concept of Values Education

Through education, individuals are taught to acquire the knowledge and skills they need in their future lives. Nevertheless, the education process is also aimed at the acquisition of universal values along with the values of the society experienced by individuals (Kalita, 2015). No individual is born with a set of values. In other words, values cannot be transferred from parents to children by genetic means (Venu, 2018). Just like knowledge and skills, values and attitudes are acquired later by individuals. Such values and attitudes that appear as a result of values attainment through education greatly shape behaviours that people will exhibit throughout their lives, as well as their decisions and choices.

Values education is an inclusive concept that consists of terms such as moral education, civic education, and citizenship education (Tonga, 2016). It involves the acquisition of qualities such as human rights, equality, responsibility, love of nature and people, respect for cultural diversity, and sensitivity to the environment. This is because the common point of the definitions is that values combine the common wishes, preferences, and beliefs that are effective in the psychological and sociological well-being of the individual and society.

Various international organisations working on education have also adopted an approach that puts values education at the centre of the education process. For example, the report titled OECD Future of Education and Skills for 2030, prepared by the Organisation for Economic Development and Cooperation (OECD), indicates the following statements regarding the

importance of values education; “Strengthening and renewing trust in institutions and society and building more inclusive, just, sustainable economies and societies are committed to developing core values of common citizenship in school” such as respect, justice, personal and social responsibility, honesty and self-awareness (Arora, 2010). In addition, the United Nations International Children's emergency fund (UNICEF) on the project “Every Child Learns UNICEF Education Strategy 2019-2030”, a report developed gradually from the earliest years of childhood, empathy, communication, and participation will enable individuals to become equipped citizens with values by overcoming social, academic, economic and environmental challenges (UNICEF, 2019). In this context, these reports emphasise that values and attitudes are increasingly being included in educational curriculums of different countries around the world.

1.2.3 Values in Geographical Education

Looking at values education in the historical process, whether hidden or open, it reveals that the school curriculum and education processes always have a certain value base. In the same way, geographical education and teaching include a value dimension (Morgan & Lambert, 2005; Banik, 2020). Compared to many different disciplines, Geography is one of the disciplines where value transfer can be best done. For this reason, it is widely accepted by geographical educators that value transfer is very important in geographical education. In this context, Şahin (2019) states that values exist overtly and covertly in Geography and geographical education. Geographical education includes values that shape decisions that affect the quality of life in a place since these values and attitudes are gained by understanding the problems from local, national, and global perspectives (Berkowitz, 2011).

Inquiries on geographical values reveal negative consequences of the interaction of human activities and nature such as deforestation, soil erosion, excessive consumption of natural

resources, pollution of the oceans, air pollution, and overfishing, among others. To turn around negative human activities, it requires values in citizens for a sustainable world (Şahin, 2021). Thus, it is possible to achieve positive attitudes and values such as social justice, empathy, and respect for differences through the teaching of geographical values.

1.2.4 The Concept of Sustainable Development

Sustainable development is a powerful concept that bears international credence and is significantly responsible for championing environmental ethics and awareness in schools and other sectors of society (Mkhize, 2019). Emas (2015) defines sustainability as the possibility that humans and other life will flourish on earth forever. Generally, sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs (Banik, 2020). Recent thinking about sustainable development emphasises social, economic, and environmental sustainability and the interaction of these three elements. Therefore, it is very essential to equip people with the necessary values to enhance the understanding and the achievement of sustainable development in various societies. As such, Mkhize (2019, p. 19) provides the following advice to emphasise the need for sustainable development through education:

“If you are thinking a year ahead, sow a seed. If you are thinking years ahead, plant a tree. If you are thinking a hundred years ahead, educate the people”.

The advice goes to humans that if we want to achieve sustainable development that future generations will also benefit from, we need to educate the human race about sustainable development values.

1.2.5 Understanding Sustainable Development Values

Mondal (2017) identifies nine types of values to be addressed through values education one of which is the Sustainable Development Values (SDVs). By definition, Sustainable

Development Values is a set of fundamental principles that drive an individual's attitude, behaviour and action for the good of the present and future generations (Huba, 2006; Emas, 2015). Historically, the notion of SDVs originated after World War II. It was based on a study from the United States National Academy of Sciences (USAS) to collect the aspirations and desires of people around the world (Quoquab, et al, 2018). At that point, only human value was identified. However, on 8 September 2000, the General Assembly of the United Nations adopted a set of fundamental principles which they called Sustainable Development Values. These values include freedom, equality, solidarity, tolerance, shared responsibility, concern for future generations, respect for nature, and integrity (UN, 2000). Freedom and equality are considered the core values, whereas, solidarity, tolerance, and shared responsibility are considered the secondary values. On the other hand, respect for nature, integrity, and concern for the future generations are suggested to be considered tertiary values.

SDVs are essential to international relations in the 21st century since they are likely to guide policy decisions (by international bodies and national governments), organisational actions, as well as customer and user behaviour, which subsequently impact the quality of life throughout the world and the preservation of the social and natural environment (Shepard et al., 2009; Emas, 2015). These sustainable development values underlie 60-millennium development goals regarding peace, development, environment, human rights, vulnerability, hunger, and poverty. In addition, SDVs support sustainable development by translating these values into Sustainable Development Goals (SDGs) in accordance with the countries' needs (Quoquab et al., 2018). As such, Huba (2006) concludes that values for a sustainable future are a welcome barrier against the growing negative impacts of globalisation related to the growth of global problems and threats to a sustainable world. Accordingly, Huba (2006) considers the following as values for sustainable living as proposed in 1991:

- Respecting and securing community life,
- Protecting the vitality and diversity of the Earth
- Minimising the exhaustion of non-renewable resources,
- Maintaining the development of civilisation within the Earth's carrying capacity limitations,
- Changing personal attitudes and behaviour towards the environment,
- Providing community-based care for their environment,
- Creating frameworks for integrated development and protection,
- Establishing a global alliance.

Similarly, IEF (2002) declares 18 principles, which are referred to as *the commandments for sustainable living*. Some of these include (a) respecting Earth and all life; (b) caring for Earth, protecting and restoring the diversity, integrity, and beauty of the planet's ecosystems; (c) establishing justice, and defending without discriminating the right of all people to life, liberty, and security of person within an environment adequate for human health and spiritual well-being. People have a right to potable water, clean air, uncontaminated soil, and food security; (d) ensuring that people throughout their lives have opportunities to acquire the knowledge, values, and practical skills needed to build sustainable communities; (e) affirming that gender equality is a prerequisite for sustainable development; (f) advancing and putting to use scientific and other types of knowledge and technologies that promote sustainable living and protect the environment; (g) treating all creatures with compassion and protecting them from cruelty and wanton destruction, among others; as well as (h) living sustainably, promoting and adopting modes of consumption, production and reproduction that respect and safeguard human rights and the regenerative capacities of the Earth.

1.2.6 Contextual Background of Values Education in School Geography

Geography is one of the school courses that contribute to citizenship on a local and global scale through correct decision-making on environmental issues, critical thinking about the relationship between citizenship and responsibility, developing a sense of place, as well as clarifying values according to ideas about people and countries (Emas, 2015). In addition, a study conducted by Morgan and Lambert (2015) called ‘Values in Geography Teaching’ found out that roles and purposes of values inquiry in Geography education include stimulating meaningful learning and application of knowledge to address problems, issues, and questions relating to people and their environment; to give active encouragement to learners to see the link between their attitudes, values and the actions they take in their own lives; to enable learners to develop their values and attitudes relating to the environment in which they live and to increase awareness about community development.

Locally, the Malawian Geography curriculum has featured several topics both in junior and senior syllabi which can help learners develop in cognitive as well as affective domains. These topics include waste management, pollution, climate change, desertification, natural resources, population, fishing, industrialisation, settlement/urbanisation, and mining among others (MIE, 2013). Learners can acquire knowledge in these areas of study, and if properly taught, they can also develop values and attitudes on how they can responsibly interact with the environment while being conscious of the future generation.

Furthermore, since Mondal (2017) established the SDVs as one of the nine types of values which can be addressed through geographical education, schools remain the ideal setting through which responsible citizens can be harnessed to preserve environmental integrity. Pedagogical content knowledge, together with progressive teaching strategies, is a vital force for Geography teachers in the quest to promote environmental sustainability, accountability,

and ethical behaviour by instilling relevant values and attitudes in learners (Lorr, 2012). In essence, sustainable development as a concept is context-dependent in economic, social, cultural, and environmental situations and can be more practical if people have intrinsic values that drive their actions. As such, sustainable development should aim at meeting the needs of the present without compromising the ability of future generations to meet their own needs.

Practically, sustainability is the creation of a social norm starting from the school premises and broadening out to the wider community (Hanifah et.al, 2015). As such, when initiating sustainable development programmes, the introduction of ethical principles within education to safeguard the environment is very paramount. The strength of teachers' pedagogical content knowledge has a significant impact on how awareness for sustainability is raised in schools. Therefore, Lorr (2012) observed that through the teaching of Geography in secondary schools, the citizenry can acquire the necessary SDVs that will guide their activities as they continue to interact with their environment since values for a sustainable future are said to be a potential barrier against growing negative impacts of globalisation.

1.3 PROBLEM STATEMENT

The quest for knowledge and understanding about the issue of global sustainability has become increasingly urgent and important worldwide (Mkhize, 2019). Higher education institutions and academics are busy searching for new insights that can modify our dependence on ways of living that highly rely on exploitation as well as the degradation of our planet (Halvorsen, Ibsen & M'kumbuzi, 2015). In the same vain, SDGs, the 2030 Agenda for Sustainable Development, the Continental Initiative for Growth and Sustainable Development, the Africa Union (AU) Agenda 2063 as well as Malawi's vision 2063, among others are all geared towards achieving a common agenda which is a sustainable world worth

living in for all generations, both locally and globally. The common agenda of all these endeavours will remain elusive in Malawi, unless serious efforts are employed to make people aware of what is happening around them today that may affect the future. For this reason, deliberate policies and actions should be put in place in order to equip Malawian citizens with the necessary values that will help them to be conscious of the way they interact with the environment for their own well-being and for the betterment of future generations.

Şahin (2021) claims that education plays a crucial role in the acquisition process of values that continues from birth to the end of our lives. However, it is regrettable to note that sustainable development lacks relevance and social applicability, as learners do not practice in their different societies what they have been taught at school (Borg et al., 2012). Furthermore, the secondary school Geography curriculum in Malawi is said to address all three domains by imparting knowledge, skills, values, and attitudes to learners (MIE, 2013). On the contrary, in his study, Wadson (2020) observed that this is just mere rhetoric as the teaching of Geography in Malawian secondary schools is so examination oriented that teachers mainly teach to prepare learners for national examinations and University selection, disregarding values education which is needed in their daily lives. It, therefore, appears that Geography teaching in secondary schools in Malawi may be failing to help in planting relevant geographical values in learners, which are necessary to make them grow into responsible and conscious citizens during and after school life. This poses a danger as far as achieving the aforementioned common agenda of realising a sustainable world in general and Malawi in particular, is concerned. There can be little doubt about the importance of teaching and learning Geography content that focuses on geographical values. Following such an approach is likely to educate citizens who are conscious of the need to conduct themselves appropriately in a manner that uses resources responsibly and sustainably, so that future generations are not deprived of the benefits nature has granted humanity. Hence, the

education system in Malawi has no choice but to advance geographical values. Failure to do so may endanger the very livelihood of the Malawian population. It is for realising this potential danger to a sustainable Malawi that this research sets out to explore how Geography education is used as a tool to instill values, particularly of sustainable development in Malawian citizens. Therefore, the main research question is: How does Geography education advance geographical values in secondary school learners in Malawi?

1.4 OBJECTIVES OF THE STUDY

1.4.1 General Objective

The main objective of the study is to explore how Geography education would advance geographical values, particularly SDVs, in secondary school learners in the Malawian citizens.

1.4.2 Specific Objectives

The specific objectives of this study include to:

- examine how SDVs are addressed in secondary school Geography syllabi;
- assess how secondary school Geography teachers address SDVs through the teaching of Geography;
- investigate challenges facing the promotion of SDVs through the teaching of Geography in secondary schools;
- evaluate how some former Geography learners apply SDVs in their societies.

1.5 THE RATIONALE OF THE STUDY

The rationale for this study is to see to it that learners in secondary schools in Malawi are fully equipped in all domains, that is, cognitive, psychomotor as well as affective domains. It is envisaged that current education mainly focuses on imparting learners with knowledge and skills

in trying to prepare them for examinations while putting little or no effort towards values education to prepare them to be responsible citizens. As such, Geography as a subject in secondary school curriculum should be used as a tool to enhance values, particularly SDVs in learners.

1.6 SIGNIFICANCE OF THE STUDY

This study may be a useful reference for future researchers. It would shed some light on how best Geography teaching in Malawian secondary schools and teaching strategies that Geography teachers should use to instill geographical values in learners. The outcomes obtained from this study are important to help teachers in exploring the different strategies that they can use in their classroom in order not only to impart knowledge and skills but also instill values in learners. The results of this study would also add value to the understanding of how secondary school Geography curriculum help to address the SDVs as well as teaching methods that are suitable to teach SDVs in line with the projects done in schools, communities, nations, and the world at large in order to save our earth.

Furthermore, the study outcomes would act as a wakeup call to the Ministry of Education to consider incorporating or putting an emphasis on values especially SDVs in the Geography curriculum. This might help to achieve both local and international agenda such as the SDGs. In addition, this study could not only be of benefit to Geography teachers only, but also to all teachers who teach issues of sustainable development in their subject areas.

1.7 THEORETICAL FRAMEWORK

1.7.1 Transformative Learning Theory

This study was guided by Transformative Learning Theory. This learning theory was developed by Jack Mezirow around 1990 whose interest was what leads people to change

their particular views and perception of the world in which they live (Mezirow, 1991). According to Sterling (2011), transformative learning is defined as learning that touches our deeper levels of knowing and meaning which influences our more immediate and concrete levels of knowing, perception and action. It is the process of effecting change in a frame of reference which is a learner's habit of the mind, as well as a personal point of view. The habits of mind are affected by previous learning experiences and cultural norms, while the points of view are the learner's personal beliefs and attitudes (Mezirow, 1997). Mezirow identified four processes of learning:

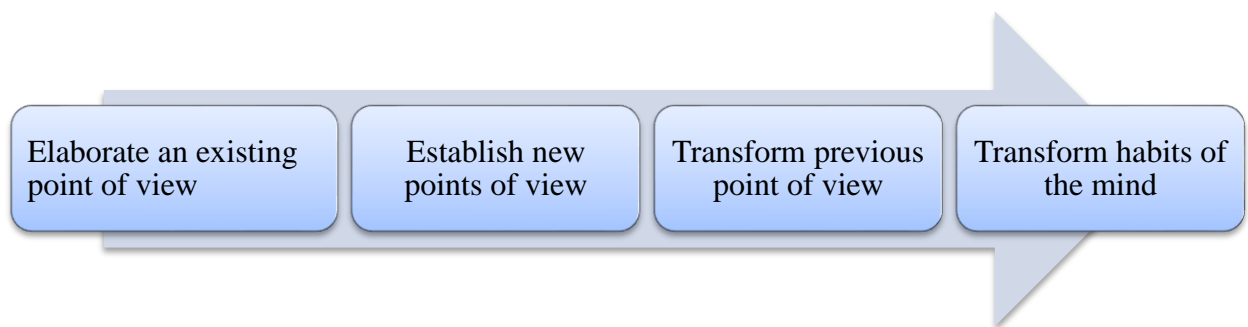


Figure 1.1 Model showing processes of transformative learning

For that reason, the educational experience begins to transform the learners to start to examine alternate points of view. These alternate points of view may then replace or be added to the existing points of view to create a new point of view. This transforms into a habit of the mind when the student can learn to look at things differently. It includes acknowledging potential biases of previous, as well as new points of view (Mezirow, 1997). Ison and Russell (2000) identified two levels of change that are driven by learning; first and second-order change. In first-order learning, students may learn the content for a test, but it never really makes any long-term impact on their lives. What they have learned is quickly forgotten. On the other hand, second-order change impacts both the way a learner thinks and believes, as well as the way he acts. This is reflective learning and facilitates action and change.

The Transformative Learning Theory is important in guiding this study because, according to Wadson (2020), to attain values of sustainable development through the teaching of Geography, teachers are expected to use methods that change the thinking of learners on how they interact with the environment. Values education embedded in Geography is supposed to assist learners to think and question things critically. This helps them to be transformed by revisiting their assumptions and beliefs, and develop new values.

Furthermore, Transformative Learning Theory provided a framework to determine if secondary school Geography content as well as the practice of Geography teaching address and help to impart values, including SDVs in students for their mindset change towards the environment. The study was further set to find out if members of different communities could apply Sustainable Development Values attained at school through Geography learning, to solve various crosscutting issues in their communities, hence transformative learning.

1.8 OPERATIONAL DEFINITION OF TERMS

There are varying meanings of the terms that have been used in this research project as indicated in the background information. However, for the sake of this study the following operational definitions of the terms have been used in this document:

- **Values:**

Values are guiding principles that are upheld and deemed important by a given society. According to Slater (2001), these are ideals, standards, or life postures that guide general behaviour and are reference points in decision-making or the evaluation of beliefs and actions.

- **Values Education:**

An education process that is aimed at instilling universal values along with the values of society (Kalita, 2015). It involves the acquisition of qualities such as human rights,

equality, and responsibility, love of nature and people, respect for cultural diversity, and sensitivity to the environment.

- **Sustainable Development:**

This is social and physical development that meets the needs of the present without compromising the ability of future generations to meet their needs (Emas, 2015).

- **Sustainable Development Values:**

This is a set of fundamental values that drive individuals' attitudes and behaviour in a way that enables sustainability for the present and future generations. Similarly, Huba (2006) defined SDVs as a set of values that drives individuals' attitudes and behaviour towards sustainable development in environmental, economic, and social aspects.

- **Former Students:**

Individuals who attended secondary school education not more than 10 years before this study was conducted.

1.9 CHAPTER SUMMARY

This section of the paper has introduced the study by highlighting the preliminary aspects such as the background information about Geography and values education. It has also included baseline information that has laid the foundation of the study, problem statement, research objectives, rationale and significance of the study, theoretical framework as well as the operational definition of terms. The succeeding chapter reviews the literature related to the study.

CHAPTER 2: LITERATURE REVIEW

2.1 CHAPTER OVERVIEW

This chapter presents reviews of some literature which is relevant to this study. As the aim of this study is to explore how Geography education is used as a tool to instill values of sustainable development in Malawian citizens, writings discussed here are related to this area of study. The discussion of these related literature is based on the specific objectives of the study. As such, literature discussed is connected to how geographical values are addressed in secondary school geography curriculum, how Geography teaching addresses the values particularly the SDVs, challenges facing promoting values through the teaching of values in secondary schools, as well as how students apply such values in their everyday life. It also includes the conceptual framework that guide the study.

2.2 HOW GEOGRAPHICAL VALUES ARE ADDRESSED IN SECONDARY SCHOOL GEOGRAPHY SYLLABUS

Since through education, people are trained to acquire values, values education must be incorporated into secondary school Geography curriculum so that citizens are equipped with all the required values including that of sustainable development (Kalita, 2015). SDVs can be transmitted in the school curriculum through success criteria, lesson activities, teaching and learning methods as well as teaching strategies and techniques. Different researchers have conducted different studies on the inclusion of values education in the school curriculum to instill values in students besides the usual knowledge and skills.

2.2.1 Values of Sustainable Development in Secondary School Geography Curriculum

In the secondary school Geography syllabus, Geographical values can be addressed in different ways such as through success criteria, suggested teaching learning assessment

activities, as well as suggested teaching, learning, and assessment methodologies. A study conducted in Germany by Seguin (2015) unveils that success criteria in the Geography syllabus promoted value clarification and problem-solving skills on issues related to sustainability. Furthermore, some success criteria in the secondary school Geography syllabi in Germany have action verbs such as demonstrate, apply, practice, design, create and evaluate (Grindsted, 2017). In addition, secondary school Geography teaching syllabus should have success criteria that allow students to have more practice with whatever they cover in class (UNESCO, 2016). Therefore, success criteria and their learning activities should be formulated in a way that should encourage learning by doing, which should enhance values education and change students' mindsets through transformative learning. This can also be applicable to the Malawian education set up.

2.2.2 Promoting Values Education among School Students through Geography

In his paper, Mondal (2017) mainly looks at how Geography helps to construct value-based knowledge among students. The main aim of education is all-round development which is difficult without value-based education. A school is the miniature of society from where socialisation starts and one of the basic factors for socialisation is the presence of value-based knowledge among students. Mondal (2017) tries to show how Geography takes a crucial role to transmit values among students in practical and theoretical ways. To maintain national harmony and integrity, value-based curriculum is of utmost necessity. As Geography takes the major role to convey values among students, what matters most is that the success of the whole process depends on the role of the teacher in terms of teaching methods and strategies.

In his study about promoting values education, Mondal (2017) employed descriptive and conceptual approaches where the study purely relied on secondary data sources from various books, articles, journals, reports, and websites to generate an understanding of how

Geography helps to transmit and built values among the school students. Nonetheless, there is a need to make use of a mixed approach to gather, both understanding of values education in Geography teaching, as well as to dig into how best learners transfer and apply acquired values outside the classroom. As such, the use of questionnaires, interviews, as well as document analysis as data collection methods is ideal to pull together both, primary and secondary data to authenticate the findings (Creswell, 2014).

Furthermore, Mondal (2017) wanted to find out how Geography helps to transmit and built values among school students. This triggers the need to explore how the teaching of Geography helps to enhance values education in secondary school learners in Malawi. Besides, in his findings, Mondal discovered that excursion is the best teaching method that helps learners acquire values practically. These findings enhance the quest to investigate how secondary school Geography teachers address the Values of Sustainable Development through the teaching of Geography. Wadson (2020) also agrees that through Geography education, teachers can help to transfer values that help to achieve the SDGs. Additionally, in responding to his first objective, which is to understand the meaning of values education, Mondal (2017) found out that there are nine types of values that can be transmitted through the teaching of Geography as presented in the introduction in section 1.2.1. In agreement, Quoquab et al. (2018) argues that open-mindedness, respect for human rights, concern for justice, participation, and commitment to sustainable development are values applicable to geographical education.

Generally, Şahin (2021) concurs with Mondal (2017) in dealing with issues and concepts which are directly related to values education in the teaching of Geography. For instance, as Şahin put his concentration on the Geography curriculum and its development with regard to values education, Mondal looked into promoting value education among learners through

Geography teaching within the classroom setting. As such, Şahin focused on the inclusion of values education in the curriculum while Mondal dwelt on the pedagogical point of view of teaching Geography in relation to values education. Hence, the need to investigate both the inclusion of values education in the Geography curriculum, as well as the pedagogical aspect of how Geography teachers inculcate values in their Geography lessons.

Furthermore, Kalita (2015) agrees that through education, can attain knowledge and skills they need in their future lives. Not only that, it is aimed at acquiring universal values along with the values of society experienced by individuals in the education process. Just like knowledge and skills, values are acquired later by individuals through formal and informal education. These values and attitudes that appear as a result of values attainment, greatly shape the behaviours that a person will exhibit in the decisions and the choices that they will make throughout their life. For this reason, value transfer is extremely important in the educational process not only for the individual's life cycle, but also for the healthy functioning of the social order. Hence, they should be incorporated into the school curriculum. This is in line with Freire (1998) who asserts that educational approaches should enhance learners' confidence and strength to address their problems, instead of just accepting information and solutions offered by others. Education should aim at transforming individuals not just treating them as mere banks of knowledge (Freire, 2005).

Similarly, various international organisations working on education have adopted an approach that puts values education at the centre of the education process. For example, Şahin (2021) presents a report called "OECD Future of Education and Skills 2030", prepared by the Organisation for Economic Development and Cooperation (OECD), as presented in section 1.2.2 of the introduction. In this context, the report also emphasises that values and attitudes

are now increasingly being included in educational curriculums of different countries around the world, including that of Malawi.

2.2.3 The Development of Values Education in the Turkish High School Geography Curriculum

In his research, Şahin (2021) aimed at examining the Geography Course Curriculum (GCC) applied in Turkey from the Republic to the present day, with the dimension of values education. According to the results of the analysis, the research findings were presented in three periods: 1924-1971, 1971-2005, and 2005-2021. Accordingly, the GCCs applied between 1924 and 1971 do not include any content related to values education, while the GCCs applied between 1971-2005 implicitly included values for general teaching purposes, and in the period 2005-2021, a curriculum element of values was included in the GCC. With the 2017 GCC, values were in a relationship with attainment, unit, and class level for the first time. As a result, in the last half-century, GCCs have shown slow but continuous development in terms of values education, nevertheless, the researcher found out that there are some problems with the pedagogy.

Therefore, it is concluded that besides the provision of knowledge and skills to individuals, the educational process is also aimed at the attainment of values and attitudes. For this reason, these findings have been very significant because currently values are being included in the Geography curriculum of many countries, both developing and developed, as their curriculum component (Şahin, 2021). In addition, Şahin (2021) also argued that values that form the basis of attitudes on most geographical issues can be classified as social values, economic values, environmental values, and moral values.

In addition, as this study aims at exploring how some topics in secondary school syllabuses carry and help to transfer values, particularly the sustainable development values (SDVs),

Şahin (2021) agrees that geographical inquiry skills in areas of interaction between human beings and nature through issues of deforestation, soil erosion, excessive consumption of natural resources, pollution of the oceans, air pollution, and overfishing, among others, can carry a lot of values for a sustainable world. Although the study by Şahin (2021) was limited to the inclusion of values education in the Geography curriculum over a given period, the findings from the study are significant in making a comparative analysis of the results from the first objective of this research, which also seeks to investigate the inclusion of values education in Geography curriculum through syllabuses. Şahin (2021) mainly assesses the inclusion of values education in the Turkish Geography curriculum, which indirectly triggers the quest to find out the inclusion of values education in the Malawian Geography curriculum.

The study found the intended results but the researcher feels that the approach used was not appropriate to the nature of the study. As suggested by Creswell (2014), the study would have adopted a mixed method instead of only a qualitative approach, since it was not only looking at the understanding of the Geography curriculum in terms of values education, but also had to study the inclusion of values education in different Geography curricula at different times. This involved numerical values to the collected data, which validates the inclusion of quantitative approach to the study. In terms of methodology, Şahin used document analysis as a data collection method, but there is a need to make use of document analysis, interviews as well as observation for the sake of triangulating the results for the trustworthiness of the findings of the study (Creswell, 2014).

As this research seeks to find out how the teaching of Geography in secondary schools enhances the values education in learners, there is also a need to explore how some topics in secondary school syllabuses carry and help to transfer values, particularly the SDVs. Since the study by Şahin (2021) was limited to the inclusion of values education in the Geography

curriculum over a given period, there is a need to dig into how the secondary school syllabi address values education, particularly SDVs as well as how Geography teachers help to address and instill values in their Geography lessons. This involved the pedagogy in form of teaching techniques, strategies, and/or methods as well as teaching and learning resources teachers employ in a classroom set up to impart values besides knowledge and skills (Tirri, 2011). Besides that, there is also a need to find out how the acquired values are applied outside the classroom.

Agreeably, Bar-Gal and Bar-Gal (2003) in Mondal (2017) in their study called “Education for values in Geography lessons,” have found that like many other subjects studied at school, Geography too may impart attitudes and values along with the acquisition of the main concepts of this subject. By its nature, Geography deals with the relations between places and human society and culture, and with the relations between people in geographical space. This discipline provides a fertile ground for discussions on the social, cultural, spatial, and environmental values of a society.

2.2.4 Guiding Principles for the improved provision of values education in Australian schools

In accordance with Zbar (2003), for the improved provision of values education in schools, the following effective guiding principles hold that education:

- is an explicit goal of schooling that promotes care, respect, and cooperation and values the diversity of Australian schools;
- articulates and makes explicit the values of the school and the community in which it is based, and applies these consistently in the practice of the school;
- is presented in a safe and supportive learning environment in which students are encouraged to explore their own, their schools’, and their communities’ values;

- is presented in a developmentally appropriate curriculum that meets the individual needs of students;
- addresses clearly defined and achievable outcomes is evidence-based and uses evaluation to monitor outcomes and inform decisions.

With such principles, a school curriculum is made robust and efficient in transmitting values to learners besides knowledge and skills, hence addressing all learning domains (i.e., affective, cognitive, and psychomotor).

2.2.5 The World of Sustainability Education in USA Geography

In this study, Liu (2011) deepens the newest approach to understanding the causes of sustainability involved in the rediscovery of Geography and addresses physical and human geographic features because place matters. As such, Geography and sustainability issues are inherently very closely related to that of the study of human-environment interactions (Zengin, 2017). This means that Geography is an ideal discipline for the academic advancement and proclamation of the concept of sustainable development values and would appear to be the discipline that is most readily associated with the subject area.

However, Geographers are far less involved in sustainability education than sustainability research, hence the need to look into the incorporation of SDVs into the Geography curriculum. Zengin (2017) states that Geography did not provide the amount and depth of sustainability education, as it was positioned to or expected to by geographers and non-geographers. Agreeably, Liu (2011) argues that Geography course offerings and curricula lagged behind the active and growing environmental and sustainability research in Geography and that Geographers had not come together to offer a comprehensive or synthetic environmental or sustainability programme to learners. The point is to demonstrate that sustainability can be integrated into all sub-disciplines of Geography. Some Geography

courses seem to be more in with the sustainability programmes such as Climate, Natural Hazards, Environment and Resource Geography, Conservation, Urban Geography, World Geography, Political Ecology, and Nature and Culture (Liu, 2011). Likewise, most of the topics in both physical and human Geography in the secondary school Geography curriculum seem to address issues of sustainability.

2.2.6 Sustainable Development in Geography Education for Middle Schools in China

Education for Sustainable Development (ESD) has become a priority in many school systems. Geography has a tradition of investigating human-environment interactions and Geography education is vital to make sense of sustainable development (SD) (Guo, et al., 2018).

In their paper, Guo, et al. (2018) aimed at contributing to the implementation of ESD and SD in middle school Geography in China. The study found that Geography education was important to ESD implementation, although the requirements for SD are low in the selected middle schools. The SD content was reflected clearly in the content standards and textbooks, but it was not evenly distributed in Geography education.

Concurrently, Mondal (2017) discovered that Geography takes a major role to transmit values, particularly SDVs among students. He further observed that many Geography teachers in China had ample Geography and interdisciplinary knowledge, and they could use textbooks and other teaching methods to teach SD. Most students were familiar with people, resources, environmental problems, and climate change, yet most were unable to grasp the factual knowledge about SD, such as international events and documents, the latest predicted data, and research on global warming, as well as the indicators used in the specific SD assessment (Guo, et al., 2018). Suggestions include providing students with more practical activities and a chance to do hands-on experiments, building students' organisations and

clubs, improving Teachers' knowledge, and understanding through teacher training programmes, and building a platform for communicating ideas of SD through modern communication technology. As such, ideas of SD should be integrated into students' daily life in form of values through Geography education.

2.3 HOW SECONDARY SCHOOL GEOGRAPHY TEACHERS ADDRESS SDVs THROUGH THE TEACHING OF GEOGRAPHY

Teachers are making the central point of value transferring through the teaching of Geography in schools (Venu, 2018). From different studies, teachers can help to instill values in students through well selected teaching methods/strategies as well as techniques. Furthermore, with the proper use of teaching and learning materials during the teaching and learning process, teachers can also effectively transfer values to their students (Sadie, 1999).

2.3.1 Values and Values Education as Perceived by Teachers

In this study, which was carried out in the phenomenology pattern, the aim was to determine the opinions of the pre-service teachers about the value concept and values education (Şahin, 2019). In the study, where Şahin interviewed twelve prospective teachers in the 4th grade in the department of primary education in the faculty of education, he found out their opinions on values and values education were grouped under two categories as “My Values” and “Values Education”. In the category of “My Values”, prospective teachers included the concept of values and the values that guided their lives within personal and social values. The category of Values Education was examined under the purpose of values education and the path that this study follows. While some prospective teachers emphasised that the primary goal in values education should be to raise good citizens, other teacher candidates highlighted the importance of having good character by focusing on personal values. Prospective teachers

thought that active learning methods, modeling, and cooperating with the family would be effective in values education.

In addition, Şahin (2021) also argued that the values forming the basis of attitudes on most geographical issues can be classified as social values, economic values, environmental values, and moral values. For example, in a study with a group of teachers, Geography teachers were asked, “what are the values in Geography?”. Common responses were environmental care, human rights, social /political/economic justice, conformity to one culture/society, respect for other cultures, protection of landscape quality, use/exploit/sustainability, lack of exploitation, empathy for Culture and the environment, and responsibility to the environment (LePage et al., 2011). Accordingly, it was also noted that Geography teachers believe that with geographical education, value transfer can be carried out not only on issues related to nature, but also on social, political, and economic-based issues (Şahin, 2021). A lot of research has gone into the skills required in developing the cognitive domain, while the affective domain remains poorly developed. As such, much of what passes for values education still stresses the cognitive domain (Quina, 1989). Nevertheless, nearly all Geography teachers agreed that values education is an important part of the discipline. What remains is the confusion over how values should be taught (Aydoğdu, 2016).

2.3.2 Values in Geography Education and Teacher Training

This section discusses the importance of values in Geography education and the need to offer guidelines for the training of teachers. Firstly, Hernando (1998) examines some of the ideas arising from the research conducted in this field and considers the difficulties which exist in distinguishing the values which permeate and legitimise the culture upholding Geography education. Secondly, Hernando demonstrates the strength behind these ideas and values, both inherited from the preceding political regime on which the education currently being fostered

is founded. This education seeks to limit the evident dogmatism which inspires these values and to offer, by way of alternative, a renewal of this discourse. The success of this endeavour requires greater participation from all teachers, who must first understand and be fully conscious of the ideology and values which the educational culture manifests (Fien & Slater, 1980).

More specifically, it draws attention to the repulsive manner in which ‘other’ societies are presented and reveals some of the values which need to be eradicated from the problems being presented. Equally, the new, provocative educational resources designed in accordance with attitudes that promote solidarity and empathy with criteria extracted from the educational and geographic ideologies of a humanistic or radical nature, have generated considerable interest. The resolution and enthusiasm shown by certain authors have produced study units and classroom resources which seek to mobilise strategies related to effective learning of values and attitudes.

To concur with Hernando (1998), in his study called “*Values Education from Perspectives of Classroom Teachers,*” Aydoğdu (2016) found out that if value education starts at an early age, it would provide much more opportunities to prepare for future life, to improve personality and to have long-lasting values. He noticed that parents are very significant in values education. This is because before coming to school, students spend substantial time with their parents who take a role to instill in them values inherent in their families and the society at large. The participants suggested that value education should be either an independent course or certain values should be taught in existing courses (Aydoğdu, 2016).

2.3.3 Teaching Methods and Techniques of Teaching Values

According to their study on “Teachers' views on values education in Swedish and Turkish schools,” Thornberg and Oğuz (2013) found that a huge part of the Swedish and Turkish teachers’ narratives can be associated with the traditional approach of values education with a strong focus on transmitting taken-for-granted dominant values, particularly in terms of rules and character to students in order to create rule-conforming, honest, respectful, self-disciplined, kind, and nice people. Furthermore, the teachers depicted *role modeling* as a primary means by which values education occurred inside and outside the classroom (Solomon et al., 2001). A recent U.S. study by Thornberg and Oğuz (2013) shows that modeling was the most common explanation pre-service teachers offered of how moral education works. Role modeling is an explicit teaching strategy advocated by Social Learning Theory and could be interpreted as in harmony with the traditional approach to values education and its underlying transmission model (Bandura, 1977).

Furthermore, some of the Swedish and Turkish teachers also discussed democratic participation as an important value in values education. This approach helps to create a good moral and democratic climate, and has classroom discussions and democratic meetings or student participation, which all can be associated with the progressive/constructivist approach (Solomon et al., 2001). Particularly in democracy, the curriculum must equip students to face critical and controversial decisions like justice, concern for the environment, human rights, and respect for other cultures.

Accordingly, Thornberg (2008a) argues that the distinction between traditional and progressive/constructivist approaches is problematic because it simplifies the field. In line with their critics and Thornberg’s (2008b) findings, the narratives elicited from many teachers in the current study reflected hybrids of traditional and progressive/constructivist approaches

to values education, but with the former predominant, that is, traditionalism with more or fewer elements of progressivism. Teachers' propensity to a mixture of positions between traditionalism and progressivism/constructivism has also been indicated in prior Turkish studies. For example, teachers reported that they taught values to children by modeling, using true stories including different values, using situations to explain right from wrong, and continuously questioning classroom events together with the students (LePage et al., 2011).

Besides, Geography has a role to play in educating students to be responsible citizens. As such, a Geography teacher needs to use methods, strategies, and techniques which can effectively help in transferring values in students during lesson delivery (Ndlovu, 2012). Mondal (2017) found out that *excursion* is one of the major methods which promote values among students in practical ways. Concomitantly, Semali (1999) agrees with Mkhize (2019) that field trips are excellent strategies for developing values and attitudes of students. Outside the classroom, students can experience real-life issues which facilitate the development of values and attitudes in students. It is precisely the area of values education that provides many opportunities for students to examine their values, test values in simulated exercises, and articulate, debate, and discuss those values until they become internalised. In addition, through group work discussions, role-plays, newspaper article analyses, slide shows, and videos, the students can express their values and attitudes clearly. Phenomenology exercise and the visit to the rural areas are examples of *action learning* which agree with the statement that 'nothing teaches better than action'.

Furthermore, Aydın and Yaşar (2020) compared secondary Geography textbooks written according to Geography Course Curriculum in 2005 and 2017, pertaining to their approach to values education in secondary schools. Accordingly, in Geography textbooks, the direct teaching of values (indoctrination) approach and value explanation (value clarification)

approaches are widely used. Mondal (2017) concluded that excursion is one of the major methods which promote values among the students in practical ways.

2.3.4 Deconstruction strategy in the teaching of values

The reflections made in the values education can be molded into two types of activity aimed at equipping teachers with greater awareness and endowing them with specific experiences (Hernando, 1998). The first activity involves the detection and evaluation of values contained in Geography education, and the second, teaching our students to recognise and appreciate these values. The procedure for learning to discover the values consists of the strategy of deconstruction, based on the analysis of concepts and ideas contained in any of the manifestations of education. As such, the following three procedures have been proposed:

Firstly, the examination of the values contained within the national curricula. Here, the focus turns to the terminology used, the ideas contained in the different definitions, for example, of education or Geography, and other tangible aspects in the curricula. Following this, we identify the considerations which are revealed in our readings, attempting to establish their origin; the context in which they were created, and the effects, advantages, or limitations arising from their existence (Hernando, 1998).

A second activity, using a similar methodology, seeks to explore the values contained and divulged in textbooks. We need to learn to recognise those which are explicit as well as those which are hidden away, those which praise and those which condemn, clearly displayed or enclosed in the various representations of the components or elements integrated therein (Hernando, 1998). For example, values in literary expressions, graphic design, the logo or content, rhetoric, and the nature of the activities they encourage, among others. Agreeably, Aydoğdu (2016) proposes that values education can be established in students through case

studies and drama so that positive and desired behaviours and empathy should be encouraged among students.

Finally, the focus is on the functional and operational values displayed in students' appraisals. In teaching the appreciation of values, teachers ought to give more emphasis to activities such as reflection, discussion, debate, the giving of opinions, and the adoption of moral standpoints (Hernando, 1998). What is sought is that students learn and are conscious of what they learn, and are conscious of how they perceive the problems and controversies which we show them in the subjects and places selected through textbooks, or other resources, always placing these problems alongside their own and those of the community to which they belong. In short, it is an attempt to recover certain values which were present in the past, such as the joy of learning, enthusiasm for an activity, or the gratifying nature of human existence. Rather than promoting a Geography education endowed with intellectual resources, for understanding the world around us, what is needed is an education that encourages discovery, evaluation, and appreciation of values regarding one's very existence in the world (Hernando, 1998).

2.3.5 Strategies for Value Development through Co-Curricular Activities

Co-curricular programme is an integral part of the curricular programme. Co-curricular activities can prove to be an effective tool for the inculcation of values and nurturing creative talents if they are planned meticulously and executed properly (Brooks & Bianca, 2013). For this purpose, various clubs and associations may also be formed such as Atheistic Club, Literary Association, Science Club, Cultural Club, Magazine Committee, among others. A teacher should be made in charge of each committee. Students should also be placed as a member of each committee to ensure their active participation in the planning and implementation of various programmes. The teachers-in-charge should not impose their ideas and values upon the students. They should only counsel and guide them properly.

2.3.6 Teaching and Learning Methods in Geography Promoting Sustainability

Sustainability alone cannot be achieved unless people are equipped with SDVs which will help them to interact consciously with the world around them. Panula et al, (2020) reveals that understanding and learning geographic knowledge and applying it to Sustainable Development (SD) depends not only on the knowledge itself, but also on how it is taught and studied. They noticed that teaching and learning methods for promoting sustainability in Geography have not been thoroughly studied. Additionally, Mkhize (2019) also looks into features of the teaching methods used in Geography education, including outdoor education, to achieve SDGs that were investigated. Different teaching methods used together and interactive learning, were the most often preferred. Group work and teachers' presentations were mentioned in 12 articles, and inquiry-based learning and argumentation in half of the articles. The most current teaching methods promoting SDVs in Geography education included active participation, thinking skills, animation, evaluation, dialogue, demonstrations, and information and communication technology skills (Panula et al., 2020).

Consequently, this means that using proper teaching and learning methods, secondary school Geography teachers in Malawi can effectively help to instill SDVs to their students. As such, in his study called *'teaching strategies used by Geography teachers to teach sustainable development in Pinetown district,'* Mkhize (2019) found out the following as teaching strategies that are used to teach sustainable development and related values:

Table 2.1: Teaching strategies used by Geography teachers to teach sustainable development

Teaching strategy	Explanation
1. Whole class discussion	<ul style="list-style-type: none"> • Encourages students to share ideas on sustainability issues holistically.
2. Role-play	<ul style="list-style-type: none"> • Drama allows authentic voices to be heard through a role. Therefore, different ideas about sustainability measures can be shared (Semali, 1999).
3. Group work	<ul style="list-style-type: none"> • Helps students to develop and share ideas related to SD among each other.
4. Field trips	<ul style="list-style-type: none"> • Students get exposed to real-life situations and are encouraged to think of ways that they can reduce environmental degradation.
5. Using ICT	<ul style="list-style-type: none"> • ICT can help teachers to present sustainability content in ways most suited to individual and personal needs.
6. Debate	<ul style="list-style-type: none"> • Allows students to talk about real issues relating to SD, hence they easily develop SDV.

2.4 CHALLENGES ENCOUNTERING THE PROMOTION OF SDVS THROUGH GEOGRAPHY EDUCATION

Instilling values to students through the teaching of Geography cannot smoothly be done without obstacles. Several studies have been conducted on the challenges that are faced when Geography teachers attempt to address geographical values through Geography education.

2.4.1 Barriers to Effective Values Education from Perspectives of Teachers

Considering the implication for teacher education, the lack of a qualified professional meta-language in the domain of values education identified in the current study has to be considered as an obvious obstacle to teachers' professional development and to their practice of values education (Thornberg, 2008a). Hence, teachers must become familiar with traditional, progressive or constructivist, and critical approaches to values education and with their strengths and problems or weaknesses. Therefore, teacher education has to address theories and research as well as active reflections with relevance for moral psychology and moral development, meta-ethics and normative ethics, moral teaching and values education, and the development of professional virtues (Berkowitz, 2011; Carr, 2011).

In addition, current studies have noticed teachers' tendency to split ordinary teaching and values education into two different tasks. There is a strong need for implementing programmes in which values education and best practice pedagogy are inextricably interrelated (Lovat, 2011; Tirri, 2011). This means that values cannot be taught in isolation, but need to be integrated into ordinary classroom activities and lesson delivery. As a solution to this, raising teachers' ethical knowledge is particularly urgent because, without a moral vocabulary, it is difficult to see how teachers can address the complexity of moral judgments they must make with either confidence or competence, how they can develop moral understanding, and how they can teach children to think about and reflect on moral issues.

2.4.2 Factors that Contribute to the Development of Values in Students

In his study called ‘Values Education in a South African Geography Classroom’, Sadie (1999) finds out factors that either advance or inhibit values education such as teaching strategies, contextualisation, multiculturalism, the role of the teacher, politics, group work, action, and learning support materials. Resultantly, Sadie (1999) discovered that most syllabus documents, internationally and in South Africa, refer to a threefold breakdown of geographical objectives i.e. content, skills, values and attitudes. Yet, values and attitudes still appear to be the poor cousin to content and skills as most South African Geography textbooks lack values exercises.

Additionally, the study revealed that South African values education still depends heavily on British examples. Consequently, teachers sometimes have to rely on foreign values exercises which were irrelevant. In addition, Sadie also discovered that the Geography syllabus in South African Schools is predominantly content-based; consequently, teachers are driven towards completing the content, in preparation for the examination. During informal discussions with teachers, as well as interaction at workshops and conferences, Sadie had noticed that many teachers pay lip service to values and attitudes. During lesson delivery, Sadie (1999) observed that often values and attitudes are tacked at the end of the lesson as an afterthought or, the teacher tackles them only when they arise spontaneously in the class. Very few teachers plan individual value-laden lessons, let alone a whole unit. This makes teachers to concentrate on imparting knowledge and skills while sidelining and forgetting embedding values in their Geography lessons.

2.4.3 Challenges Besetting the Teaching of Sustainable Development Values

Results from the study by Mkhize (2019) reveal that teachers are facing challenges in instilling sustainability-oriented values. This is because there is no correlation between what

students are encultured with at schools and homes. Although most participants are keen on using technology to unpack sustainability, skills, and availability of resources to do so are limited. Besides, the teachers involved in sustainable development initiatives are not necessarily Geography (social sciences) teachers. Therefore, this affects the implementation of the knowledge, skills, and values acquired from the initiative which resultantly affects the teaching of SDVs. The effective teaching of SDVs should start with the understanding and knowledge of sustainable development.

Furthermore, Mkhize (2019) also found out that other challenges that affect the correct way of teaching SDVs include overcrowded classrooms and disruptive students. This has a significant impact on lessons. Additionally, educators' understanding of the concept of sustainable development is pivotal in appreciating how effective their teaching will be (Mkhize, 2019). The results revealed that most teachers do not appreciate the practicability of sustainable development. This is due to the time constraints, the curriculum, and the means to facilitate such endeavours. As a result, instilling values generally requires more time than the allocated periods per Geography lesson.

2.5 APPLICATION OF VALUES OF SUSTAINABLE DEVELOPMENT IN THE SOCIETIES

Values are perceived differently in different settings. Hence, their application may also be based on the understanding of such values. This means that developing areas perceive values differently as compared to developed areas which may determine the zeal to apply them. Nevertheless, people should be able to apply their values regardless of the setting. As a result, after attaining secondary school Geography course, students are expected to use the SDVs they acquired in real life outside the classroom.

In this study, Quoquab et al. (2018) view that there is a great difference between developed and developing nations' perceptions of SDVs. This is crucial to achieve the nation's vision and its SDGs according to the nation's needs and demands. As such, it is expected that the current SDGs facets might not represent the developing countries' needs as well. Therefore, the researchers noted that there is a necessity to define SDVs and its dimension based on the developing country's perspectives for effective application in real life.

Based on the analysis of the interview transcriptions, Quoquab et al. (2018) found that SDVs should be defined differently for developing countries aspect than the definition given by the UN for easy understanding and effective application. Some of them have commented that the SDVs should be defined according to developing countries' perspective in order to better reflect on the developing nations' needs and demands. The definition of these values will translate into the key objectives of SDGs desired by developing countries (Quoquab et al., 2018). Following participants' feedback and suggestion, the SDVs is re-defined as a set of values that drive individuals' attitudes and behaviour towards sustainable development in environmental, economic, and social aspects, which are crucial for present and future generations. These values include freedom, equality, and solidarity. Some other Respondents have suggested including 'integrity' and 'care for future generation' since these two are related to a nation's long-term sustainability (Quoquab et al., 2018).

The findings of this study are important in the sense that locally, Malawi as one of the developing countries is also geared towards achieving SDGs, the 2030 agenda for Sustainable Development, the continental initiative for growth and sustainable development, the Africa Union (AU) Agenda 2063 as well as Malawi's vision 2063 among other agenda. All these endeavours may be in vain unless Malawian citizens are well equipped with values

particularly the SDVs, which if well applied can help them become conscious beings as they interact with their social as well as the natural environment.

2.5.1 Measuring Value Acquisition and Application

Wilson and Murrell (2004) hold that values are tied in with ethics and morals guide our judgment and prepare us to choose actions according to their consequences. Psychologists believe in the transformative power of values. In light of this notion, different studies have shown that ethics and values can change our inner world and alter the way we perceive and react to situations. Therefore, values usually determine the actions that individuals make in reaction to inducements. For example, a person who has great concern for trustworthiness or care, will genuinely reflect the same in his or her actions.

Schwartz (2021) in his theory introduces the instruments which were developed to measure the basic values: The Schwartz Value Survey (SVS), the Portrait Values Questionnaire (PVQ40), the PVQ21, also called the Human Values Scale of the European Social Survey (ESS21), and the revised PVQ-RR.

2.5.1.1 The Portrait Values Questionnaire

The Portrait Values Questionnaire (PVQ) is based on Schwartz's theory of values. The theory holds that there are ten fundamental individual values that influence human actions at any point. The PVQ includes short verbal portraits of different people and each portrait describes a person's goals, aspirations, or wishes that point implicitly to the importance of a single value type (Schwartz, 2021). These verbal portraits are designed to capture the person's values without explicitly identifying personal values. For each portrait, respondents answer: "*How much like you is this person?*" They check one of the six boxes labeled: *very much like me, like me, somewhat like me, a little like me, not like me, and not like me at all*. Therefore, respondents' values are concluded from their self-reported similarity to people who are

described in terms of particular values. The similarity judgments are transformed into a 6-point numerical scale (Sagiv & Schwartz, 2022).

Many scientists have recognised the PVQ scale to be a valid alternative to the SVS scale due to its independent nature and universal acceptability. Furthermore, studies indicate that the reduction in the number of items for the PVQ short forms does not interfere with the validity or reliability of the test. It is a universal measure of personal value systems and carefully evaluates the underlying causes of our actions and perceptions (Schwartz et al., 2012)

2.5.1.2 Valued Living Questionnaire

The principal theory of value revolves around the concept of a ‘value system’ a set of deep-rooted standards that form the foundation of our actions and life choices (Wilson & Murrell, 2004). The theory holds that our values are built on ten domains of living, and this is what the Valued Living Questionnaire (VLQ) attempts to evaluate. The VLQ is a 2-part instrument designed to assess valued living. It systematically evaluates the extent to which an individual regards his values and incorporates them into daily actions. It consists of a scale that has two sets of questions – one that evaluates our meaning of the values and one that estimates how the values have impacted our activities over the past week (Sagiv & Schwartz, 2022). It is a self-scoring form where respondents record their scores on a 10-point Likert Scale where *1* means *not at all important*, and *10* implies *extremely important*. In the second part of the form, the responses range from *1* meaning *totally inconsistent with my values* to *10* meaning *totally consistent with my values* in the second part of the test.

VLQ is now a widely accepted measure of estimating the domains of life values that govern our actions. Some studies on the effectiveness of the VLQ across varied settings showed that there is a significant positive correlation between what values mean to us and how much we act according to them. Consistent validity was relatively high for the VLQ assessment,

indicating that the results are more or less constant across populations of different backgrounds (Wilson & Murrell, 2004).

2.6 CONCEPTUAL FRAMEWORK

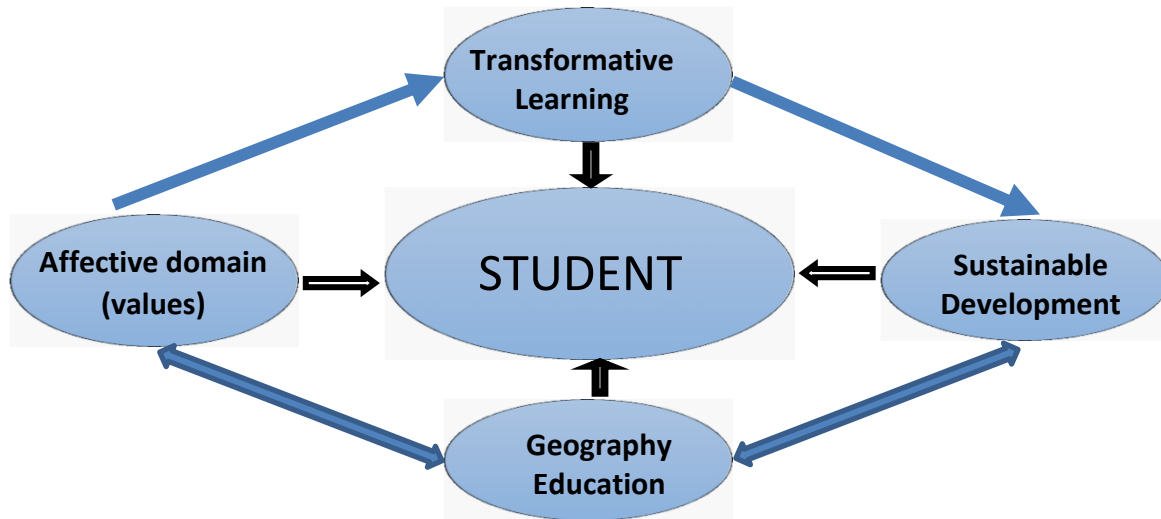


Figure 2.1 Model showing the interaction of interrelated concepts

In this model, a student is the core beneficiary of all the intertwining processes. Geography education is the driving mechanism that must aim at not only imparting knowledge and skill from cognitive and psychomotor domains respectively, but also instilling values and attitudes from the affective domain. Effective values education embedded in subjects like Geography can help to transmit values in students which, through transformative learning approaches, are expected to change students' mindsets. Sustainable development, a broad concept that covers most academic disciplines including Geography, can only be achieved if students are taught through transformative learning pedagogy. As such, Geography as a subject consists of some content that advance the SD agenda that can be realised if Geography education instills in students SDVs through transformative learning approaches and techniques. After the acquisition of SDVs, students, in turn, are expected to apply such values outside the classroom, which will be vital in achieving sustainable development agenda.

2.7 CHAPTER SUMMARY

This chapter has thematically reviewed the related literature. The following themes were derived from the research objectives and were discussed in relation to already existing studies: values of sustainable development in secondary school Geography curriculum; how secondary school Geography teachers address SDVs through the teaching of Geography; challenges faced when trying to address values through Geography teaching as well as application values of sustainable development in the societies. It has also included the conceptual framework of the study.

Different literature reviewed indicated that various studies have been conducted worldwide on values education in relation to Geography teaching and sustainable development. Nevertheless, it is not clear if Geography teachers in secondary schools in Malawi use transformative learning approaches with an aim of advancing SDVs. In addition, nothing is said on how secondary school Geography curriculum helps to promote values education (SDVs) in Malawi. This means that there is a literature gap in as far as addressing values education through the teaching of Geography in secondary school education in Malawi is concerned. This knowledge gap necessitated the researcher to carry out a study to establish how secondary school Geography education is used as a tool to address SDVs in Malawi. The subsequent chapter highlights the methodological aspects of the study.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 CHAPTER OVERVIEW

This chapter discusses several issues in line with the methodology. According to Lindsay (2010), research methodology is defined as a set of systematic techniques used in research which include procedures by which researchers go about their work describing, explaining, and predicting phenomena. Hence, this chapter includes the research design, as well as the paradigm underpinning the study. In addition, the chapter also presents the site and population involved in the study as well as issues to do with samples and sampling techniques. It also highlights data collection methods which include interviews and questionnaires as well as their data collection tools such as interview guides and questionnaires respectively.

3.2 RESEARCH PARADIGM

A research paradigm is a way of looking at the world and its philosophical assumptions (Lindsay, 2010). This study was guided by the pragmatic paradigm. The pragmatic paradigm is the underlying philosophical framework of mixed-method design (Mertens, 2005). The use of this paradigm was suitable because it enabled the researcher to view the investigations appropriately in relation to the design of the study. Concurrently, Creswell (2014) explains that pragmatists do not commit to one philosophy or reality. In the pragmatic paradigm, the researcher uses personal values to study that which is of interest and value to them; studies it in ways that they consider important; and uses the results so that they bring positive consequences to their value system (Omwuegbuzie & Teddlie, 2003). As a secondary school teacher, the researcher considers values education very essential. Therefore, the use of this paradigm was appropriate because it allowed the researcher to extensively study how best secondary school Geography helps to instill values in students, which will facilitate sustainable development in Malawi. The pragmatic paradigm is relevant in this case because

the research employed a variety of data collection methods such as document analysis, interviews as well as questionnaires to gather the much required and relevant data.

3.3 RESEARCH DESIGN

This study adopted a case study design. According to Ndengu (2012), a case study is an in-depth investigation into a single entity or a small number of entities which include an individual, family, institution, organisation, or any social unit. Yin (2003) asserts that the most common use of the term ‘case’ links it with a setting, such as an organisation. This view is supported by Baxter and Jack (2008), who emphasise that a case study is done within a bounded system in a given context. Case studies can also be used as a means of identifying key issues which merit further investigation (Mertens, 2005).

The use of a mixed case study design in this study is justified as the study required an in-depth investigation in order to explore how Geography teaching is used as a tool for enhancing values education in Malawi. As a result, an in-depth investigation within a bounded system in a given setting and from the perspectives of ‘insiders’ was an ultimate option.

3.4 RESEARCH APPROACH

The study adopted a mixed method design and specifically, an explanatory sequential approach. In the first place, a mixed-method research design is an approach that uses both quantitative and qualitative methods to answer the research questions of a single study (Mertens, 2005). An explanatory sequential design is a two-phase design. It begins with the collection and analysis of quantitative data in the first phase. This is followed by a qualitative phase, which comprises the collection and analysis of qualitative data based on the results of the quantitative phase. Since the study begins with the quantitative phase, priority is given to it (Creswell & Plano-Clarke, 2007). The explanatory sequential design is used when

qualitative data is used to explain the results of the quantitative phase (Creswell et al., 2003; Holliday, 2002). The researcher expanded the significant results in the qualitative phase (Carson, 2001). Thus, the quantitative phase was to statistically identify how some teachers address SDVs through the teaching of Geography and how former Geography students apply SDVs, which was further explored in the qualitative phase of the study.

The use of the mixed research approach helped to bring a full understanding of the research problem, which would not have been possible through the use of one research approach (Fraenkel & Wallen, 2003). This is because, in mixed method design, the weaknesses of one method are offset by the strengths of the other method (Creswell et al., 2007). In addition, the approach helped the study to make inferences from the findings. The use of qualitative and quantitative research methods provides data with greater depth and greater width, respectively (Newman, 2012). The use of the explanatory sequential mixed method design is appropriate to understand how Geography education is used as a tool to instill values of sustainable development in the Malawian citizens.

3.5 STUDY SITE, POPULATION, SAMPLE, AND SAMPLING TECHNIQUES

3.5.1 Site and Population of the Study

This study was conducted in selected Secondary Schools in two districts (Mzimba north and Nkhatabay) in the Northern Education Division (NED). The two districts have been opted for based on convenience to the researcher considering limited resources such as mobility costs and time. The targeted population was Geography teachers currently teaching both in secondary schools in Mzimba and Nkhatabay districts. In addition, the study also involved former Geography students working in various fields.

3.5.2 Sample and Sampling Techniques

A sample in research is described as a group of participants from whom data is obtained (Fraenkel & Wallen, 2003). Participants to be involved in this study were selected through purposive, snowballing as well as random sampling techniques.

3.5.2.1 Purposive Sampling

Purposive sampling is defined by Wilson and Maclean (2011), as a technique in which individuals are selected by virtue of belonging to a pre-defined group. These participants were included because they meet some criterion for inclusion, not just as mere representation. In this case, these teachers were chosen because they teach Geography in such classes. In addition, former Geography students working in various fields were selected with the view that they may acquire and apply geographical values.

3.5.2.2 Snowballing Sampling

According to Fraenkel and Wallen (2003), Snowball sampling is a non-random sampling technique that uses a few cases to help encourage other cases to take part in the study, thereby increasing sample size. This approach is most applicable in small populations that are difficult to access due to their closed nature. In this case, the researcher used this technique where some former Geography students helped to identify and encourage fellow former students who studied Geography in their secondary school education.

3.5.2.3 Random Sampling

In terms of schools, the researcher used simple random sampling in selecting secondary schools of any category in the northern region that teach Geography in all classes (Forms 1 up to 4). In this technique, the school names in the two selected districts in NED were written on pieces of paper and then fold them. These names were put in a box and mixed them. From the box, selected pieces of paper were drawn out, which became sampled participating

schools. Simple random sampling was chosen because it gave an equal chance of being selected as participants. In addition, Systematic random sampling was also used to supplement the choice of participating schools. A convenience sampling technique was used where the randomly sampled schools are difficult to reach.

3.5.3 Sample Size

This section presents two sets of sample sizes that were used in this study. Quantitative part of the study had its own study sample, and qualitative part also had its own study sample as discussed in details below.

3.5.3.1 Quantitative Study Sample

In the quantitative part of the study, the researcher used a formula to arrive at a sample size that was required to participate in responding to questionnaires in the two selected districts in NED. The statistical formula which was used to find sample size is $N = \frac{no}{1 + \frac{no-1}{N}}$. Hence the

total number of 69 schools from the two districts (Mzimba north = 41 and Nkhata Bay = 28)

was used to find sample schools. $N = \frac{67.6}{1 + \frac{67.6-1}{69}}$, which gives $N = 35$. The sample of 35 was

used to calculate the sample size in each district using the formula

$\frac{\text{no.of schools in a district} \times 35}{\text{total no. of schools in two districts}}$. Thus, in Mzimba north the sample of schools was $\frac{41 \times 35}{69} = 21$

schools and in Nkhatabay the sample of schools was $\frac{28 \times 35}{69} = 14$ schools.

In view of some limitations, such as mobility challenges due to topography as well as resources, like finance and time among others, convenient sampling technique was used to select participating schools accessible to the researcher. A chance was given to all secondary schools. In terms of teacher participants, an average of two experienced Geography teachers were purposively sampled from each selected school. This gave a number of 70 Geography teachers who provided a suitable sample size for a quantitative study (Cohen et al., 2005).

Further, 30 former Geography students were also purposively sampled to respond to questionnaires from secondary schools that were randomly and conveniently sampled. A total of 35 schools were systematically selected from each district. This provided a suitable and convenient sample size for quantitative data (Cohen et al., 2005). As such, these Geography teachers and former Geography students provided enough participants for the mixed study.

Table 3.1: Summary of sample participants from the target population

Sample Location	Target schools	Sample schools	Sample of Geography teachers	Sample of former Geography students
Mzimba (N)	41	21	42	15
Nkhatabay	28	14	28	15
Total	69	35	70	30

3.5.3.2 Qualitative Study Sample

Cohen et al. (2005) argue that in a qualitative research design, the sample size should not be too small nor excessive, but should be manageable enough as determined by time and financial resources. He further explains that a range of 8 to 15 would be ideal to fulfill the requirements of efficiency, reliability, and flexibility. Considering the nature and the scope of this study, the qualitative part involved a total number of 16 participants. Of these participants, 8 were Geography teachers from 4 sampled secondary schools from two districts in NED, and 8 participants were former Geography students that were sampled using purposive, convenient, and snowballing sampling techniques. These participants were interviewed on how they address SDVs through Geography teaching as well as how they apply these values in real life, respectively.

Table 3.2: Summary of sampled interviewees

Study sample	Number of interviewees
Teachers	8
Former Geography students	8
Total	16

3.6 DATA COLLECTION

This section discusses methods and instruments that were used to collect data for this study. Data was collected using various methods and tools for the purpose of triangulation and validating the findings.

3.6.1 Data Collection Methods

The researcher used three different methods to collect both quantitative and qualitative data. These data collection methods that have been discussed in details below include document analysis, interviews as well as questionnaires.

3.6.1.1 Document analysis

This is one of the methods the researcher used in order to collect the required data. O’Leary (2004) defines document analysis as a systematic procedure for reviewing and evaluating documents either in print or electronic form. This data collection method assisted to evaluate and analyse how secondary school Geography syllabi (both junior and senior) help to instill values, particularly SDVs in Malawian citizens. It assisted to triangulate information which provides a convergence of evidence that breeds the credibility of the study at hand (Bowen, 2009). As such, two documents that were purposively selected by the researcher were analysed. These included junior and senior secondary school Geography syllabi.

3.6.1.2 Questionnaire

This is a data collection method where the researcher mainly collects quantitative data to be expressed in form of numerical values, percentages, and graphs (Creswell, 2014). Both open and closed-ended items were administered in order to collect more relevant data. Open-ended questions allowed respondents to give information in depth by expressing themselves fully about what they know about the questions being asked (Fraenkel & Wallen, 2003). In this case, Geography teachers were given chance to openly express themselves on how they address SDVs through Geography teaching. Former Geography students also freely expressed themselves how they apply SDVs in their communities.

3.6.1.3 Interviews

This is a research method that involves the collection of data through direct verbal interaction between the interviewer and the interviewee (Mack et al., 2011). The interviews enabled the researcher to probe further into the challenging areas so that the respondents can explain their views and ideas contrary to the questionnaire which is inconsistent. Mertens (2005) shows the importance of the interview in his definition of the research interview, as a two-person conversation initiated by the interviewer for the specific purpose of obtaining research-relevant information, focused by the interviewer on the content specified by research objectives of systematic description and interpretation.

In this study, interviews were used to collect data from teachers who are teaching Geography in the selected secondary schools. Besides that, former Geography students were also interviewed on how they use SDVs they acquired through secondary education in their societies. These interviews were conducted between September and November, 2022 and each interview took about 8 minutes on average. Soon after each interview, the voice data collected was transcribed and organised in readiness for analysis.

The use of interviews in this study helped the researcher to have an understanding of how Geography teachers prepare and conduct their lessons to address SDVs through the teaching of Geography. As such, interviews produced data that deals with a topic in detail, requires simple tools, and was built on the conversational skills of the researcher. On top of that, the researcher gained valuable insight grounded on the depth of the information gathered and the knowledge of the key informants.

3.6.2 Data Collection Instruments

Different tools were used to collect both quantitative and qualitative data. These data collection instruments that have been presented and discussed in details below include documents analysis guide, interview guides as well as questionnaires.

3.6.2.1 Documents Analysis Guide

A document analysis guide/protocol was used as a tool to collect both quantitative and qualitative data (refer to appendix C). A guide provides and keeps a record of information collected from the selected official documents for analysis, without manipulating them (O'Leary, 2004). In case of this study, junior and senior secondary school Geography syllabuses were analysed to check if their success criteria help to address SDVs or not.

3.6.2.2 Questionnaires

A questionnaire was used as a tool in order to collect quantitative data (refer to appendices D and E). Using this instrument, numerical data was collected from both Geography teachers and former Geography students. Questionnaires allowed respondents to provide data in depth by expressing themselves fully about what they know in relation to the study (Fraenkel & Wallen, 2003).

3.6.2.3 Interview Guide

An interview guide was constructed to capture supplementary qualitative data for triangulating information that was obtained from respondents through other data collection tools (refer to appendices F and G). This guide was developed to ask questions and guide face to face interviews with Geography teachers and former Geography students. The guide contained open-ended questions and some closed-ended questions. The set questions were prepared in advance to guide the interviews. In the process, voice recorders and note pads were used to capture actual voices and collect field notes from the respondents, respectively. These tools helped to gather and keep the actual qualitative data from the mouths of the respondents (Mack et al., 2011).

3.7 DATA MANAGEMENT

After data collection using different methods such as document analysis, questionnaires, and interviews, all data was kept in safe storage facilities ready for analysis.

3.7.1 Quantitative Data

Igwenagu (2016) describes quantitative research as the one that explains the phenomena by collecting numerical data that are analysed using mathematically based methods. In a mixed method research like this one, where the researcher was looking at how the teaching of Geography in secondary schools instills SDVs in learners, Newby (2014) explains that in descriptive studies data analysis may involve little or more than a simple tabulation of counts and percentages. According to the author, this includes the representation of figures of respondents. As explained by Henning (2004), the researcher used descriptions that form the basis for data analysis methods. According to this research, descriptive methods were required for the researcher to describe the answers given by the respondents to different questions given. In addition to this, Statistical Package for Social Scientists (SPSS) was also

used for analysing numerical data. Where there was a need to compare numbers for the respondents, the researcher used numerical representations that required numerical methods like graphs, tables, and charts (Mgomezulu & Kalua, 2013).

3.7.1.1 Validity and Reliability

The validity of the research instrument refers to the extent to which the instrument measures what it is supposed to measure (Creswell, 2014). To ensure the validity of the research instrument, the researcher used the research supervisors in the university to check and verify the instruments. According to Ndengu (2012), reliability can be referred to as the extent to which findings can be replicated to obtain the same results in the study, even with changes in time and context. In this case, reliability was done through pilot testing with respondents. The pilot-tested scores were correlated using the Pearson Product Moment Correlation Coefficient and the computed results reached the minimum reliability index of 0.7. The instruments were then regarded as reliable (Creswell, 2014).

3.7.2 Qualitative Data

Qualitative data was collected, transcribed, and arranged based on the specific objectives of the study (Creswell & Clark, 2007). The researcher analysed data from interviews by transcribing verbally, following the order-specific objectives as indicated in the interview schedule. The audio recordings collected from respondents were played several times to ensure accuracy (Mertler, 2009). Thereafter, the transcribed data was put in possible categories where they were described and analysed thematically, in terms of their ability to answer the research objectives.

3.7.2.1 Credibility and Trustworthiness

To ensure the credibility and trustworthiness of the research findings, several data collection methods and tools were used to triangulate the results (Marques & McCall, 2005). In brief,

the research results were truthful and generalisable because mixed methods allowed corroboration of the findings through triangulation in terms of methods, data collection instruments, as well as sources (Creswell, 2014). Findings are more dependable as they were confirmed from several independent sources, and by more than one instrument measuring the same phenomena (Cohen, Manion & Morrison, 2007; Creswell & Plano-Clarke, 2007).

3.8 DATA ANALYSIS

Data analysis is a process of analysing and interpreting data to make meaning of it (Kurmar, (2011). According to Cohen et al. (2005), data from qualitative research can be analysed using different approaches and through different steps. This view is also shared by Ndengu (2012) who further argues that the steps used in qualitative data analysis are not linear, but fluid. The objective of data analysis is to bring order, structure, and meaning out of the large volume of the generated data (Woods, 2006). This can be done through different methods and steps. Therefore, the researcher analysed data which was collected through document analysis, interviews, and questionnaires as explained below.

3.8.1 Data from Document Analysis

Like other analytical methods in qualitative studies, document analysis requires that data should be examined and interpreted in order to elicit meaning, gain understanding and develop empirical knowledge (Dominiko, 2016). For that reason, the researcher thematically analysed data that was collected from analysing both, junior and senior Geography syllabuses.

3.8.2 Data from Questionnaires

This was quantitative data in nature. As such, the researcher analysed this data using SPSS computer software in order to produce tables, graphs, and percentages of respondents who answered various questions (Creswell, 2014).

3.8.3 Data from Interviews

Interpretive phenomenological analysis works with texts generated by participants in any form of data collection method used (Sharp, 2012). Data from interviews was analysed soon after collection. This was done by transcribing the recorded interview data. Transcribing is making sense of the data collected to identify patterns or trends in relation to a specific phenomenon based on the arrangement of specific objectives of the study. The themes in this study involved breaking down and reassembling data collected to identify the data and allocate them to a particular system of categories and sub-categories based on specific objectives (Ndengu, 2012; Burton, et al., 2008). The process of theming continued until all the data had been transcribed and identified, to generate meaning from the data that address specific research objectives.

3.8.4 Triangulation

Triangulation can refer to the use of multiple researchers, multiple theories, or perspectives to interpret the data; multiple data sources to corroborate data, and multiple disciplines to broaden one's understanding of the method and the phenomenon of interest (Walliman, 2011). In this study, multiple methods of collecting data were used which produced multiple sources of data. The different methods of data collection used in this research, such as document analysis, interviews, and questionnaires, provided different insights which increased the credibility of the findings. As Cohen, Manion, and Morrison (2007) observe, these multiple sources of data allow for triangulation.

3.9 ETHICAL CONSIDERATIONS

According to Creswell (2014), ethical consideration is about the protection of the participants and the trust between the researcher and the researched. For this reason, the researcher made sure that he obtained permission and ethical clearance from the relevant authorities such as

MZUNIREC, Mzuzu University postgraduate coordinator's office, and EDM's office before encountering earmarked participants. Secondly, as suggested by Ramrathan, Grange and Shawa (2017), informed consent was obtained from the participants and no force was involved to allow the participants to provide the needed data. Participants were also informed that they were free to withdraw from participating in the interview at any point of the study if they feel uncomfortable continuing.

The researcher reassured the participants that the information provided would be for academic purposes only and would be treated with utmost confidentiality. The right to privacy of the participants and schools involved need to be highly respected (Ramrathan, Grange & Shawa, 2017). As such, for the sake of confidentiality, all participants and participating schools were given pseudonyms for identification instead of their real names. The researcher gave consent letters to the head teachers, teachers, and former students for them to sign before collecting data (Miller & Bell, 2012). Generally, the researcher considered all ethical matters such as voluntary participation, informed consent, confidentiality, and anonymity of the respondent.

3.10 CHAPTER SUMMARY

In a nutshell, this chapter has discussed the design of this study which is a case study and falls under a mixed research approach. It adopts a pragmatic research paradigm. The chapter has also highlighted Data collection methods and tools that govern the study, which have also been conferred with relevant justification for their use. Explanations on the site, population, sample sizes, and sampling techniques have also been included. The chapter that follows focuses on presenting the findings of the study.

CHAPTER 4: PRESENTATION OF DATA AND FINDINGS

4.1 CHAPTER OVERVIEW

This chapter presents both quantitative and qualitative research findings of the study that were collected through questionnaires, interviews as well as document analysis. Quantitative data was collected from 70 Geography teachers currently teaching Geography in secondary schools and 30 former Geography students. On the other hand, qualitative data was collected from 8 Geography teachers and 8 former Geography students. The study took place in the two districts of Nkhata bay and Mzimba North of the Northern Education Division (NED).

4.2 QUANTITATIVE DATA

Below is the presentation of findings from quantitative data that was collected through document analysis and questionnaires. The data has been presented based on the arrangement of the specific objectives of the study as outlined in chapter one above.

4.2.1 Quantitative Data from Document Analysis

4.2.1.1 Examining how Geographical values are addressed in secondary school Geography syllabus

Both junior and senior secondary school Geography syllabuses were analysed on how they help in instilling geographical values in students. The analysis was based on whether action verbs used in the success criteria are designed in such a way that they can help students to acquire geographical values in the process of learning Geography or not.

Table 4.1: Summary of document analysis of success criteria in the **junior** secondary school

Geography syllabus

S/N	SYLLABUS TOPICS	SUCCESS CRITERIA ADDRESSING GEOGRAPHICAL VALUES	SUCCESS CRITERIA NOT ADDRESSING GEOGRAPHICAL VALUES	TOTAL
		<i>f</i>	<i>f</i>	<i>f</i>
1.	Population	3	16	19
2.	Environment	0	6	6
3.	Natural disasters	2	6	8
4.	Fishing in Malawi	1	6	7
5.	Ecosystem	0	5	5
6.	Forestry	0	5	5
7.	Trade in Malawi	3	5	8
8.	Atmosphere	0	4	4
9.	Weather & climate	1	4	5
10.	Natural resources	1	4	5
11.	Industries in Malawi	0	4	4
12.	Hydro-electric power in Malawi	0	4	4

13.	Soil	0	4	4
14.	Wildlife	1	3	4
15.	Hydrosphere	1	3	4
16.	Energy	0	3	3
17.	Transport in Malawi	2	3	5
18.	Minerals	0	2	2
19.	Tourism	2	2	4
TOTAL (<i>f</i>)		17	89	106
PERCENTAGE (%)		16	84	100

Key: *f* = frequency; S/N = Serial number

Data in Table 4.1 above indicates that 16% of success criteria of selected topics in the junior secondary school Geography syllabus address social as well as environmental values while 84% of them do not address the said values in learners. The topics were purposively selected because they are related to sustainable development issues. As such, if well framed these success criteria would help such topics to instill values of sustainable development in learners.

Table 4.2: Summary of document analysis of success criteria in the *senior* secondary school

Geography syllabus

S/N	SYLLABUS TOPICS	SUCCESS CRITERIA ADDRESSING VALUES	SUCCESS CRITERIA NOT ADDRESSING VALUES	TOTAL
		<i>f</i>	<i>f</i>	<i>f</i>
1.	World agriculture	1	7	8
2.	Minerals	0	7	7
3.	World Fishing	2	5	7
4.	Population dynamics	3	5	8
5.	World Fishing	2	5	7
6.	Irrigation farming	1	5	6
7.	Intensive animal farming in Denmark	1	5	6
8.	Climatic regions and world vegetation (biomes)	0	4	4
9.	Waste management	0	4	4
10.	Regional and international trade blocks	0	4	4
11.	Irrigation farming in Israel	0	4	4
12.	Plantation farming	0	4	4

13.	Environmental issues	1	3	4
14.	Wetlands in Malawi	1	3	4
15.	Wildlife in Malawi	0	3	3
16.	Settlements	0	3	3
17.	Energy	1	3	4
18.	Urbanisation	3	3	6
19.	Tea plantation in Malawi	0	2	2
20.	Desertification	1	2	3
21.	Climate change	1	2	3
22.	Intensive rice farming in S.E. Asia	1	2	3
23.	Responses to climate change	1	0	1
24.	Industrialisation	1	1	2
25.	Tourism in Africa	3	1	4
TOTAL (<i>f</i>)		24	87	111
PERCENTAGE (%)		22	78	100

Key: *f* = frequency; S/N = Serial number

Data in Table 4.2 above show that 22% of success criteria addressing selected topics in the junior secondary school Geography syllabus address social as well as environmental values while 78% of them do not address the said values in learners. The topics were also purposively

selected since if well taught, they would help to instill values of sustainable development in learners.

4.2.2 Quantitative Data from Teacher Respondents through Questionnaires

4.2.2.1 Demographic Data of Teacher Participants

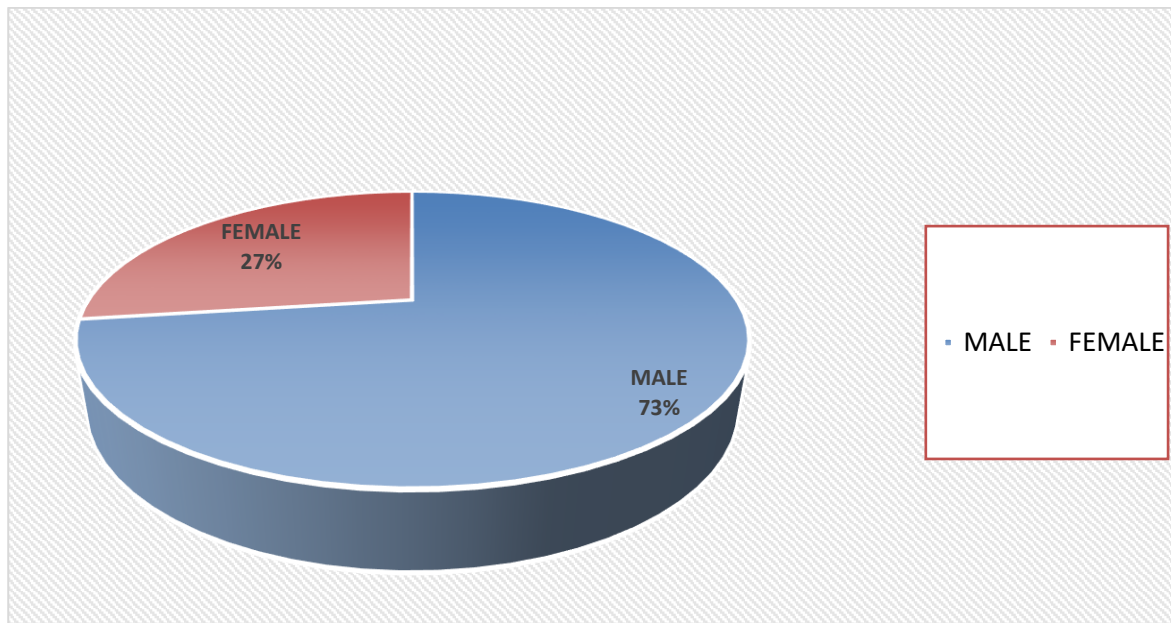


Figure 4.1 Distribution of teacher respondents by gender

Data on the gender of respondents show that 51 out of 70 teacher respondents were male, representing 73%. On the other hand, 19 of 70 teacher respondents were female, representing 27% as indicated in Figure 4.1 above. This is the case because it was noticed that female teachers are more concentrated in urban schools, where they follow their husbands leaving rural schools that were visited in large numbers with more male Geography teachers. This gender disparity has a slight bearing on the results as males and females view issues of sustainable development (social and environmental issues) differently.

4.2.2.2 Years of Service of Teacher Respondents

Table 4.3: Percentage of ranges of years of service

S/N	Ranges years of service (<i>r</i>)	Frequency (<i>f</i>)	Percentage (%)
1	1 to 10 years	25	36
2	11 to 20 years	24	34
3	21 to 30 years	15	21
4	30 and above	6	9
	Total	70	100

Key: S/N = Serial number

Data on teachers' years of service indicate that accumulatively, more teacher participants (64%) had a good experience with more than 10 years of teaching experience in teaching Geography. As Figure 4.3 indicates, only 36% had less than 10 years of experience. Therefore, it shows that most teacher participants had adequate knowledge and skills on how best they could teach Geography so as not only to impart knowledge and skills to learners, but also instill geographical values.

4.2.2.3 Teachers' Highest Qualification

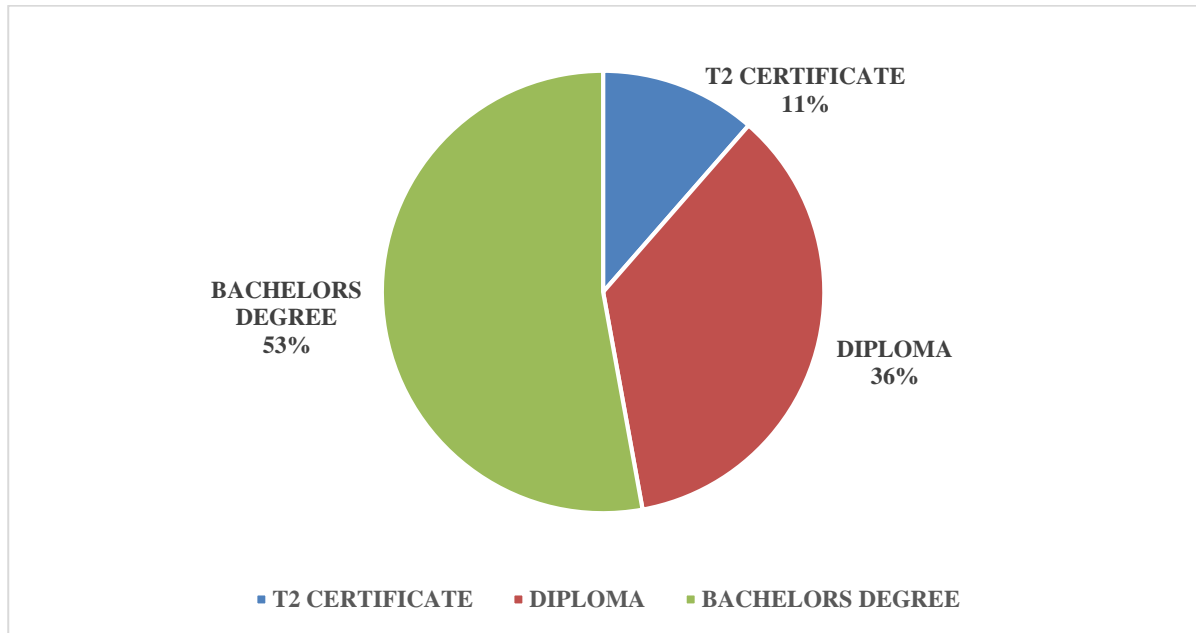


Figure 4.2: Teachers' highest qualification

Data in Figure 4.2 indicates that 53% of Geography teachers who participated in the study were degree holders, 36% were Diploma holders and 11% were holders of T2 teaching certificates. This data shows that most teacher participants were well qualified. As such, they had enough knowledge and skills on how they should teach Geography and handle learners, in order to impart geographical knowledge, skills as well as values to them.

4.2.2.4 How Secondary School Geography Teachers address Geographical Values through the Teaching of Geography

Table 4.4: Summary of teachers' views on how frequently they use selected teaching methods

S/N	TEACHING METHODS	Always		Often		Rarely		Never		Total	
		<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
1	Lecturing	14	20	26	37	23	33	7	10	70	100
2	Discussion	35	50	30	43	5	7	0	0	70	100
3	Question & answers	44	63	24	34	2	3	0	0	70	100
4	Debate	2	3	18	26	45	64	5	7	70	100
5	Case study	5	7	32	46	32	46	1	1	70	100
6	Project	0	0	3	4	48	69	19	27	70	100
7	Field trip	0	0	7	10	45	64	18	26	70	100

Key: *f* = frequency; % = percentage; S/N = Serial number

The results in Table 4.4 shows that most Geography teachers prefer to use question and answer as well as discussion when teaching Geography. This is the case because 63% and 50% of the teacher participants indicated that they always use question and answers as well as discussion methods as teaching methods, respectively. On the contrary, most Geography teachers indicated that they do not prefer using teaching methods like project, fieldwork, case studies, and debate. For example, Table 4.4 shows that none of the teachers always preferred

to use project and field trips while 64%, 46%, 69%, and 64% indicated that they rarely use debate, case study, and project as well as field trips, respectively.

Table 4.5: summary of how teachers address geographical values when teaching Geography

S/N	ITEM	YES		NO		TOTAL	
		<i>f</i>	%	<i>f</i>	%	<i>F</i>	%
1	Do Geography teachers understand geographical values?	57	81	13	19	70	100
2	Do Geography teachers promote geographical values in learners?	62	87	8	11	70	100
3	Do Geography teachers explain geographical values to learners?	38	54	32	46	70	100
4	Do Geography teachers plan practical work?	38	54	32	46	70	100
5	Do Geography teachers explain sustainable development to learners?	55	79	15	21	70	100
6	Do Geography teachers select success criteria that promote geographical values?	51	73	19	27	70	100
7	Do Geography teachers select resources that promote geographical values?	52	74	18	26	70	100
8	Do Geography teachers select methods that promote geographical values?	41	59	29	41	70	100

9	Do learners understand the importance of acquiring geographical values?	34	49	36	51	70	100
10	Will learners practice SDVs?	52	74	18	26	70	100
	Total (<i>f and average %</i>)	480	69	220	31	700	100

Key: *f* = frequency; % = percentage; S/N = Serial number

Findings in Table 4.5 reveal that most Geography teachers address social as well as environmental values which intrinsically help to instill SDVs in learners. For instance, 69% of all teacher respondents agreed that they address issues of SDVs as they teach Geography. On the other hand, 51% of them revealed that their learners do not have an understanding of the importance of acquiring geographical values which shows that there is a problem with their lesson delivery in terms of imparting values to their learners besides geographical knowledge and skills.

4.2.2.5 Challenges that Geography Teachers face when addressing Geographical Values through the Teaching of Geography

Table 4.6: Summary of teachers' views on challenges they face when addressing geographical values through the teaching of Geography

S/N	Challenges	Agree		Not sure		disagree		Total	
		<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
1	Size of the class	61	87	2	3	6	9	70	100
2	How teachers select methods	59	84	3	4	8	11	70	100
3	How teachers select resources	59	84	4	6	7	10	70	100
4	How teachers plan schemes and lessons	50	71	11	16	9	13	70	100
5	How the Geography curriculum has been designed	51	73	9	13	10	14	70	100
6	Teachers' knowledge and perception of values education	56	80	8	11	6	9	70	100

Key: *f* = Frequency; % = Percentage; S/N = Serial number

Data in Table 4.6 show that Geography teachers agree that they are facing a lot of challenges when trying to address geographical values through the teaching of Geography. For example, 87% of teacher participants agreed that the size of the class has a negative impact on values education through the teaching of Geography. In addition, 84% agreed that how teachers select teaching methods and resources also affects the proper instilling of SDVs through Geography education in each case. Furthermore, 71%, 73%, and 80% of the respondents also

agreed that the way Geography teachers plan their work, the way the Geography curriculum has been designed as well as teachers' knowledge and the way they perceive values education respectively have significant bearing on imparting values through Geography education.

4.2.3 Quantitative Data from Former Geography Students

4.2.3.1 Demographic Data of Former Student Participants

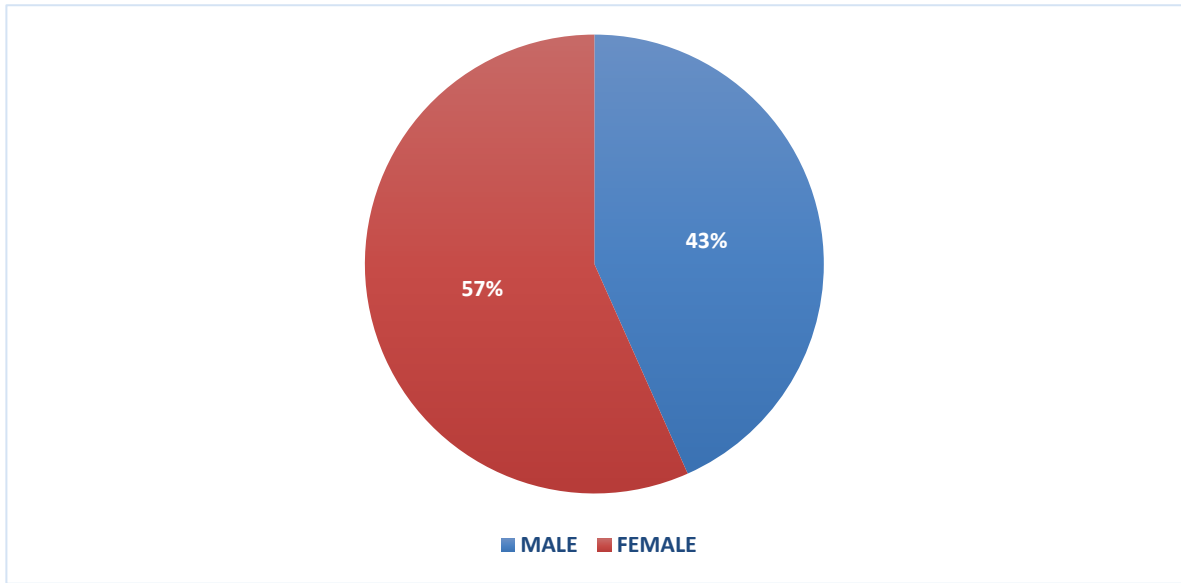


Figure 4.3: Distribution of Former Student Respondents by Gender

Results on the gender of former Geography students show that 43% of former student respondents were male, while 57% of them were female, as indicated in Figure 4.3 above. This gender disparity has a slight bearing on the results since males and females have different attitudes and views regarding social and environmental issues.

4.2.3.2 Former Geography Students' Last Class Attended

Table 4.7: Last Class Attended by Former Geography Students

Class	Frequency (<i>f</i>)	Percentage (%)
Form 2	1	3
Form 3	1	3
Form 4	28	94
Total	30	100

Data on former Geography students as presented in Table 4.7 indicate that 94% of the selected participants went up to Form 4 during their secondary school education. This signifies that the majority of these former students covered enough Geography work that is supposed to be covered at secondary level which would help them acquire Geographical values. These students were purposively selected based on the knowledge that they underwent through secondary school Geography courses that would necessitate the acquisition of the values in question.

4.2.3.3 How some Geography students apply geographical values in their societies

Table 4.8: Application of geographical Values by Former Geography Students

S/N	VALUES	Agree		Not sure		disagree		Total	
		<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
1	I do not pollute the environment	26	87	0	0	4	13	30	100
2	I plant trees around my home and workplace	15	50	5	17	10	33	30	100
3	I am responsible to take care of all forms of life	27	90	3	10	0	0	30	100
4	I teach people about maintaining a clean environment	13	43	6	20	11	37	30	100
5	I practice safe agricultural methods	15	50	5	17	10	33	30	100
6	I protect nature from wanton destruction	12	40	8	27	10	33	30	100
7	I make sure that wastes are properly disposed of	15	50	11	37	4	13	30	100
8	I ensure the sustainable economy of our country	27	90	1	3	2	7	30	100
	TOTAL (<i>f and average %</i>)	150	63	39	16	51	21	240	100

Key: *f* = Frequency; % = Percentage; S/N = Serial number

On application of value by former Geography students, data presented in Table 4.8 show that 63% of the respondents were able to apply most of the social and environmental concepts in their everyday life, 16% were not certain and 21% were not able to apply them in their homes

and workplaces. This signifies that most former Geography students had acquired the SDVs and can practice them. Yet, the question was whether these values were acquired from secondary school Geography or not. Figure 4.4 below presents some of the sources of such SDVs that some former Geography students claimed to practice.

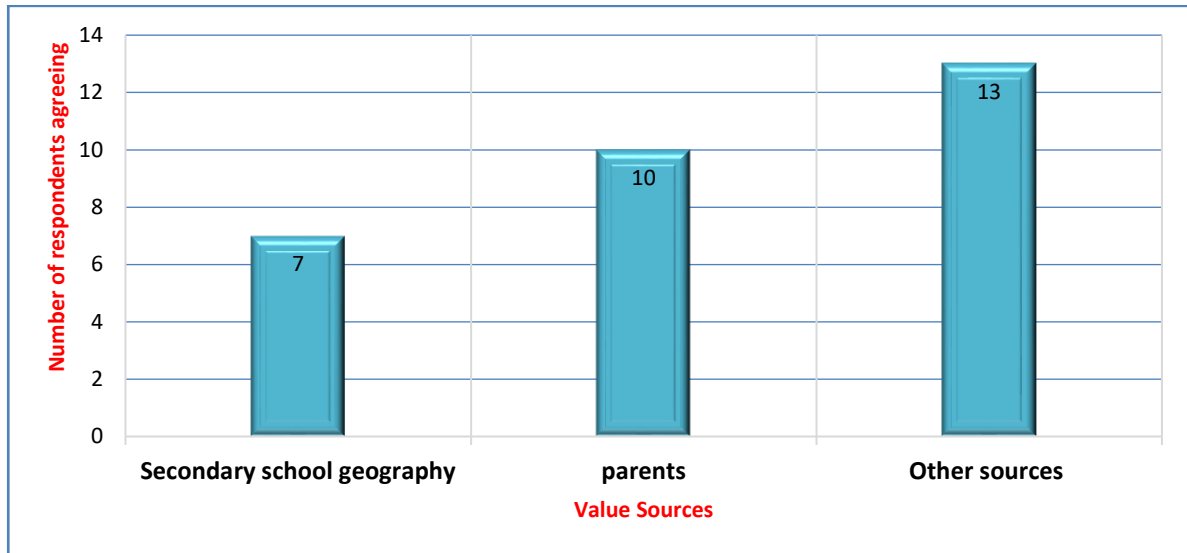


Figure 4.4: Sources of values for former Geography students

Respondents were asked to indicate the source of the values that they are now applying in their real life. Data presented in Figure 4.4 above reveal that 7 of 30 respondents representing 23% agreed that they acquired the SDVs they were using through secondary school Geography, while 10 of 30 respondents, which is 33%, said that they acquired these values from their parents. On the other hand, 13 of 30 respondents, which is 43% of the former student respondents, cited that they acquired the SDVs they are applying in their everyday life from other sources besides parents and secondary school Geography.

4.3 QUALITATIVE DATA

This section presents qualitative data collected through interviews involving 8 Geography teachers currently teaching in secondary schools as well as 8 former Geography students. In the first place, interviews were conducted in different secondary schools where eight

Geography teachers currently teaching Geography in such schools gave different views on how secondary school Geography address geographical values. These teacher respondents were identified by letters A, B, C, D, E, F, G, H, and former Geography students were identified by letters S, T, U, V, W, X, Y, Z in the order of the time of interview beginning from 26th August to 25th September 2022. The qualitative data is presented based on the objectives of the study and some emerging themes.

4.3.1 How Geographical Values are addressed in Secondary School Geography Syllabus

Regarding how values are addressed in the syllabus, respondents held different views. Some Geography teachers agreed that the Geography syllabuses, both junior and senior, address some Geographical values. Other respondents contradicted and said that the Geography syllabuses do not address values, but focus much on knowledge and skills, especially in the success criteria. They said that success criteria do not promote geographical values as most of them begin with action verbs that can only impart knowledge and skills, and not values. For instance, Respondent C held a strong view and said;

“The syllabus much focuses on knowledge and skill. We don’t have success criteria that focus on values. They much focus on students must be able to; for example, define ecosystem, explain climate change but not how they are going to apply this. So, there should be success criteria which should say okay by the end of this lesson, students must be able to use or apply knowledge of climate change to everyday life”.

From the responses above, it can be noticed that Geography teachers agree that the Geography syllabuses do not address some Geographical values.

4.3.2 How Secondary School Geography Teachers address Geographical Values through the Teaching of Geography

On how Geography teachers address values, interviews revealed that teachers who are currently teaching Geography in secondary schools had varying views. Participants were asked to give their views in terms of how they plan for Geography lessons, how they select and use teaching and learning methods and resources as well as other teaching strategies in line with values education. They were also asked to express their confidence in their students if they have transformed mindsets and can apply what they learn in Geography lessons in their lives outside school.

4.3.2.1 During Planning

Respondents were asked how they plan their Geography lessons, and whether they are mindful of geographical values besides imparting knowledge and values or not. Most teachers narrated that they do not plan for values as they only focus on knowledge and skills which would help learners during examinations. They said that values are not assessed and are not even indicated in the syllabus for teachers to take note of them when planning, hence it is very difficult to plan for them. Some teacher respondents cited issues of time that hinder them to plan for values, as such, they only consider knowledge and skills. For example, the following are remarkable views held by some of the respondents:

Respondent C: *Mmmh frankly speaking as a teacher, when I am planning schemes and lesson plans, usually, I just focus on knowledge and skills. Values are not assessed and it is very difficult because the work is not indicated in the syllabus so that when the teacher is planning, should also take note of the values to be included.*

Respondent E: *Values mmmh, no time 'amwene', our periods are not enough. I can't do all that stuff in 35 minutes, that's difficult.*

4.3.2.2 Teaching and Learning Methods

Respondents were also asked about teaching and learning methods that they select and use as they teach Geography and if at all they are mindful of geographical values besides imparting knowledge and values. Some teachers revealed that they select and use teaching and learning methods depending on the objectives of the lesson to be achieved, regardless of whether values will be promoted or not. In addition, the results indicated that most teachers use common methods such as discussion, question and answer, as well as explanation or lecturing methods. Most of them indicated that they do not use projects and field trips citing that such methods require time and resources to prepare and use. For instance, Respondent B clearly said that he doesn't use fieldwork because his main focus is on knowledge to make them pass, values may require time which may not be available. This is what he said in a separate interview:

“The most common ones I use are brainstorming, Question and Answer, sometimes lecturing. Discussion rarely, when there is a need. I should be honest with you no field work and projects. I just want to impart knowledge (Laughter).”

On the contrary, some teachers indicated that in exceptional cases, they sometimes use field trips as they are conducting Geography lessons. For example, Respondent E had the following views in which he believed his learners acquired environmental values that would help them in their home:

“I use learner-centered methods such as group work, field visits, and a bit of accelerated learning due to short-terms we have. For instance, we recently had a trip to Vwaza game reserve where we visited the game reserve and Lake Kazuni. After covering topics like climate change, biomes of the world, and desertification, we went there to learn about the conservation methods that happen there. So, students learnt a lot of things that they

are not necessarily asked during examinations, but will help them on how to take care of the environment and wild life”.

Generally, the findings indicate that most teachers do not consider issues of promoting values when selecting and planning for teaching and learning methods to be used in a Geography lesson.

4.3.2.3 Teaching and Learning Resources

In terms teaching and learning resources that Geography teachers select and use, the results showed that most teachers do not consider promoting values when selecting and using the resources in a Geography lesson. They cited issues of scarcity, costs, and time, among others. Some teachers said that they only aimed at achieving success criteria as stipulated by the syllabus regardless of whether they address values or not. The following are the views held by Respondents C and G, respectively:

Respondent C: *I use locally available resources, for example, local environments, vegetation, springs, chart papers and illustrations from students' books due to scarcity of improved ones. I just select them for knowledge's sake.*

Respondent G: *When selecting and using these resources as I said, basically the focus is on achieving success criteria and not values. I use them mainly to achieve the success criteria. So, whether it is going to achieve values or not depends on the nature of success criteria to be achieved.*

4.3.2.4 Other Teaching and Learning Strategies

Geography teachers were also asked about other teaching and learning strategies they use either inside or outside the classroom, that may help to instill geographical values in learners. Findings showed that many teachers do not find time to plan and organise anything besides

classroom activities in attempt to promote geographical values in their students. For instance, Respondent B had the following views:

“For the sake of imparting values mmm no (Laughter) ..., I don't consider values, it's all about time, its serious business, no time to play. So, values take time for learners to learn. Honestly, Values are taken as time wasters”.

However, exceptional cases some teacher respondents indicated that there are attempts that they make outside the classroom that may help to promote geographical values such as having trash bins and reusing some waste materials like bottles. For example, this is what Respondent E said:

“If we talk about hidden curriculum, yes, we have trash bins around and we tell them not to put plastic materials in them because they don't decompose. We also tell them to reuse some of the materials that have already been used, for example, I always reuse my water bottle to refill water that I drink. In that way, we are indirectly instilling values of environmental conservation”.

Therefore, data on other strategies that Geography teachers deliberately might use to address geographical values shows that most teachers do not make other attempts besides classroom activities in order to promote such values.

4.3.2.5 Teachers' Confidence that their students have Acquired Values

On how confident that their students have acquired values and can apply in their real life what they learn in class, findings indicated that most teachers are not confident that their students have been transformed, which can help them practice what they learn in the classroom in their societies. Almost all the respondents were citing that their main focus and that of their students is on content coverage which would help them during examinations. Hence, the

teaching of Geography is more exam-oriented than transformative. For instance, Respondent C had the following views:

“Am partly confident but it is very difficult for students to apply that knowledge outside because when teaching we just emphasise examinations. We just say work hard so that you should pass examinations. As such, I doubt if they can apply what they learn at school”.

In the same spirit, Respondent D made the following comment:

“I am 30% confident that my students will apply what they learn in class, the reason may be the way our concepts are outlined in the curriculum, and most of them are not considering issues of values”.

4.3.3 Challenges faced when addressing Geographical Values through the Teaching of Geography

In a series of interviews with Geography teachers currently teaching Geography in schools, various questions were asked on the challenges that they face when trying to address geographical values through the teaching of Geography. In the process, these Geography teachers were able to suggest ways on how to improve values education through the teaching of Geography in secondary schools.

4.3.3.1 Challenges Facing Promoting Values Education through the Teaching of Geography

Teacher respondents were asked to explain the challenges that they face when trying to address geographical values through the teaching of Geography in secondary schools. Results show that despite attempts to instill geographical values in one way or the other, Geography teachers seem to face a lot of challenges. The common challenges the data has revealed include lack of teaching resources, lack of teachers’ understanding of values education,

inadequate Geography teachers in schools, the curriculum that puts less emphasis on values but is more exam-oriented, lack of learners' interest in values, learners' abilities, and inadequacy of time, among others. These challenges compromise the endeavours to instill geographical values through Geography education. For instance, the following were the notable views held by different respondents:

Respondent A:Another challenge could be lack of understanding of teachers which requires in-service training for them to beef up knowledge.

Respondent C: Yeah the first thing that acts as a barrier is content found in the syllabus or in books, don't emphasise values. Secondly, teachers when they are trained in various colleges, there should be a certain time they should be trained based on values. This is because, when the teacher is applying values, it will be very easy for him or her to impart those values in learners.

Respondent E: one of the challenges is lack of teaching resources in schools as such, teachers opt for 'dry lessons'. So, by the end of the day students don't acquire what they are supposed to. And sometimes you may want to visit a place which is far, so if there are no resources, it may be difficult to acquire values.

4.3.3.2 Ways of Improving Values Education

In the process, respondents also suggested ways of improving values education through the teaching of Geography in secondary schools. The findings revealed several suggestions on how the teaching of Geography in secondary schools may help to promote Geographical values in learners. For example, respondents suggested that the syllabus should not be exam oriented as is the case now and that curriculum designers should be able to follow and check the implementation of the curriculum. Further, another respondent had the view that the whole Geography curriculum should be reframed in order to include strategies on how geographical

values can be promoted as well as the Government and other stakeholders should be able to provide enough resources in schools that may help to advance values education through the teaching of Geography. In addition, it was also suggested that Geography teachers should use as much field trips as possible to expose their students to the outside world which may help to transform their mindset. Lastly, respondents also suggested that the Government should train and deploy more Geography teachers in schools to increase manpower so that Geography teachers should be able to find time to plan thoroughly for their lessons. The following were some of the remarkable views emerging from the participants' responses:

Respondent A: *I think the most important thing is that our syllabus should not be exam-oriented. Normally, we teach for the exam not for the values. Curriculum designers should also be able to follow up whatever they have designed to check if it is achieving its intended purpose.*

Respondent E: *There should be mechanisms where students should be able to move around and be able to learn outside the classroom. Schools, division offices even the ministry of education should be able to encourage and fund field trips and educational visits to expose learners to different situations that may help to transform their thinking towards the environment.*

4.3.4 How Some Former Geography Students Apply Geographical Values in their Societies

Qualitative data was also collected from 8 former Geography students on the application of geographical values they thought they acquired through learning Geography at secondary school level. They were also asked to suggest other sources of geographical values they are applying now besides secondary school Geography.

4.3.4.1 Application of Values by Former Geography Students

Findings on the application of values showed that some former Geography students can apply selected geographical values in their homes and work places. For instance, some respondents indicated that most of the environmental issues that they undertake today were learned from secondary school Geography such as avoiding the burning of fossils, protecting and conserving aquatic life, as well as avoiding deforestation so as not to disturb the hydrological cycle. Nevertheless, it has been noticed that there are a number of intervening factors that influence the application of such values. Accordingly, other respondents believe that circumstances in life make them apply such values and not school. As such, they think Geography has failed to instill values in them. Some feel that common sense and instinct help him to use environmental and social values. The following were some of the notable views held by respondents:

Respondent V: *...I may apply values but may not be from the background of Geography but there may be just circumstances that have made me to take that action at that time, not basically from Geography. I would say no, Geography has not helped me much. If we see geographical problems such as climate change, it suggests how Geography has failed. You will notice that many who are now destroying the environment are those who learnt Geography at secondary school, so what does that mean?*

Respondent X: *I do use some of these values we are talking about because it is obvious we are supposed to do them. If I clean my surroundings and dump them rubbish pits, it's because I want to protect myself from infections. It doesn't necessarily take one to learn Geography for them to use a toilet, sometimes it is just about common sense and instincts at play.*

4.3.4.2 Other Sources of Values

The findings have revealed that besides secondary school Geography, environmental and social values that former Geography students are currently applying in their homes and work places, may also come from other sources. Some of the common sources mentioned by the sampled participants include other secondary school subjects like Biology and Agriculture, experiences, common sense and instincts in relation to circumstances, media, training and awareness campaigns by organisations and extension workers as well as clubs and societies in schools. For instance, respondents expressed different views and the following are some of them:

Respondent Z: *Yes, Geography has assisted me a lot, for example, I have planted trees around my home area and I help my fellow community members to do the same. However, it is not only Geography that has played a role, it is a joint effort from different fields such as we learnt the same in Agriculture, sometimes in Biology, we also get some of these information from extension workers, even on radio and TV.*

Respondent V: *I think experience has helped me a lot. Since experience is a great teacher, so through experience one can learn that if I do this, it will have an impact on the environment and so forth.*

4.4 CHAPTER SUMMARY

This chapter has presented and analysed both quantitative and qualitative research findings based on the specific objectives and emerging themes. The data was collected through questionnaires, interviews as well as document analysis. In the coming chapter, the researcher discusses these findings in line with the objectives of the study, the related literature, and the theoretical framework.

CHAPTER 5: DISCUSSION OF THE RESULTS

5.1 CHAPTER OVERVIEW

This Chapter presents the discussion of the results from both quantitative and qualitative data as presented and analysed in the immediate chapter above. The discussion of the results is based on the specific objectives of the study and some emerging themes.

5.2 HOW GEOGRAPHICAL VALUES ARE ADDRESSED IN SECONDARY SCHOOL GEOGRAPHY SYLLABUS

Based on the findings from document analysis in Table 4.1, most success criteria (84%) in the junior secondary school Geography syllabus do not address geographical values. Besides that, it has also been established that 78% of the success criteria in the senior secondary school Geography syllabus do not help to instill SDVs in students. This is the case because the majority of the success criteria are not designed in such a way that they help students to acquire values. For instance, in the junior secondary school Geography syllabus, out of a total of 19 success criteria under the topic ‘Population’ only 3 success criteria were designed to address geographical values while 16 of them were not. Furthermore, out of 7 success criteria in the senior secondary school Geography syllabus under the topic of ‘Minerals’, none of them were devised to address social and environmental values. This therefore, is against the Transformative Learning Theory which holds that learning should help students to acquire necessary values that can make them change their mindset and become conscious of the world around them (Mezirow, 2009).

Nonetheless, a good success criterion that can help to instill values in students is supposed to be more practical, which should engage students in more-hands on activities (Guo et al., 2018). Well-framed success criteria which can engage students in more practical activities

are supposed to begin with action verbs which will help students to learn through practice and apply what they learn outside their classroom. For example, good success criterion should allow students to *use, apply, demonstrate, and practice* outside the classroom what they have learnt at school besides just *defining, describing, identifying, and mentioning*, among others (Wadson, 2020). However, the findings from both junior and senior Geography syllabuses have revealed that a greater percentage of success criteria in such documents start with verbs such as *define, describe, identify, mention, locate*, and others. These verbs cannot help students to learn by doing, but simply acquire information and keep it. Hence, they are not helping to instill geographical values in learners, but just knowledge and skills. On the contrary, in Germany, the success criteria in secondary school Geography syllabi begin with action verbs like *demonstrate, design, analyse, create, evaluate, apply* and *practice* (Grindsted, 2017). These would help students to learn through action which would make them acquire values in the process and eventually transform them into responsible citizens.

In concurring with these findings, Respondent C, who was a Geography teacher, said and was quoted in a separate interview: “*We don’t have success criteria that focus on values. They focus much on students must be able to; for example, define ecosystem, explain climate change but not how they (students) are going to apply this.*”. This implies that even Geography teachers are finding problems with how they can interpret and use the success criteria which have been wrongly framed in relation to values education since the syllabus is a guide for them. This makes it hard for students to use what they learn in schools which is not in line with transformative learning that advocates the acquisition and application of values in everyday life.

However, the content in the syllabi seems to be well designed and selected in such a way that they may help to impart geographical values, especially SDVs in learners and transform them

into responsible citizens. For example, the junior secondary school Geography syllabus has topics like Environment, Ecosystem, Natural resources, Natural disasters, Population, Forestry, Wildlife, Soil, Energy, Fishing in Malawi, Industries in Malawi, among others. In addition, in the senior secondary school Geography syllabus, there are also topics like Climatic regions and world vegetation (biomes), Environmental issues, Desertification, Waste management, Responses to climate change, Settlements, Urbanisation, World agriculture, and Industry among others (MIE, 2013). These topics are more social and environmental related, such that, if well designed and taught, they can help to impart social and environmental values in learners. In concurring with this, Respondent A said: “...*The syllabus itself instills the values because most of the topics we have contain elements or components of values in them. For example, fish farming or fishing itself, climatic regions of the world or climatic regions of Malawi*”.

This denotes that some of the topics in secondary school Geography syllabuses can help to instill Sustainable Development Values in students. However, the problem lies in the success criteria which guide teachers on what to achieve by the end of the lessons, either just knowledge or just skills or just values or all of them. Therefore, the designing of the success criteria should be in line with Transformative Learning Theory which would allow teachers to help learners to practice what they learn at school which would eventually impart values in them and change their mindsets towards their environment and society at large (Mezirow, 2009).

5.3 HOW SECONDARY SCHOOL GEOGRAPHY TEACHERS ADDRESS GEOGRAPHICAL VALUES THROUGH THE TEACHING OF GEOGRAPHY

Results from both quantitative and qualitative data have revealed that there are various ways in which Geography teachers may attempt to address geographical values through the

teaching of Geography in secondary schools. As such, teacher respondents were asked through questionnaires and interviews, how they address geographical values through planning, selection, and use of teaching and learning methods, and resources as well as through different strategies that teachers use inside and outside the classroom. Besides that, they were also asked to express their confidence if their learners can make use of what they learn in class in their everyday life.

5.3.1 During Planning

In Table 4.5, item number 4 shows that 54% of Geography teachers indicated that they include practical activities when they are planning for their Geography lessons. This entails that to a certain extent; some Geography teachers are mindful of instilling Geographical values when they are planning their lessons. This is in line with LePage et al. (2011) who hold that instilling values requires the teacher to plan for lessons that will engage students in more practical activities that will make their mind absorbed in what they are doing. As such, this can help students to have transformed line of thinking and become mindful of their environment as advocated by Transformative Learning Theory (Mezirow, 2009).

However, when interviewed to find out if they consider issues of values when planning for Geography lessons, most teachers declined and others were uncertain. For instance, this is what Respondent E said in a separate interview: *“Values mmmh no... Time ‘amwene’, our periods are not enough. I can’t do all that stuff in 35 minutes, that’s difficult”*. This response shows that some teachers do not consider values when they are either writing lesson plans or schemes of work, citing that they have few minutes in a teaching period (that is 35 minutes), as such, they only consider knowledge and skills. In addition, the findings have revealed that some teachers don’t plan for values since during examinations only knowledge and skills are assessed. Hence, there is no need to plan for values that are not even assessed in any way. In

line with the same, this is what Respondent C had to say: *“frankly speaking, as a teacher when I am planning schemes and lesson plans, usually I just focus on knowledge and skills. Values are not assessed and it is very difficult because that work is not indicated in the syllabus so that when the teacher is planning should also take note that here are also values to be included”*. This agrees with Sadie (1999) who discovered that very few Geography teachers plan individual value-laden lessons, let alone a whole unit. This makes teachers only to concentrate on imparting knowledge and skills sidelining and forgetting to embed values in their Geography lessons. As such, this kind of planning is contrary to Transformative Learning Theory which stresses that teachers should plan and use action learning strategies that allow students to learn by doing (Mezirow, 2009). This help learners to develop new values on how they view the world and interact with the environment.

5.3.2 Selection and Use of Teaching and Learning Methods

In terms of teaching and learning methods, Table 4.4 indicates that 50% (item 2) and 63% (item 3) of Geography teachers always use discussion and question and answers respectively. In addition, on item 1, accumulative of 57% of the Geography teachers prefer teaching using the lecturing method when teaching Geography lessons. When asked through separate interviews, most teacher participants said that they prefer using these methods because they are not time-consuming, easy to use, and cheap (that is to say, they do not need a lot of resources). These findings are in line with Ndlovu (2012) who asserts that most teachers prefer using traditional methods of teaching unlike methods like case studies, projects, and experiments which are seen to be time-consuming. Nonetheless, these traditional methods such as discussion, explanation, as well as question and answer cannot help students to learn by doing which help to instill values that they can use in their everyday lives, instead they only aid students to acquire knowledge and sometimes skills. This is in consistence with Thungu (2008) who argues that the lecture method limits student participation in the lesson

and does not promote reasoning abilities in students. These methods are not in line with transformative learning which holds that the learning process should assist students to have a transformed way of thinking and be conscious of the world around them (Mezirow, 2009).

Furthermore, the results in Table 4.4 have also revealed that 64% (item 4) rarely use debate, 46% (item 5) rarely use case studies, 69% (item 6) rarely use projects and 64% (item 7) rarely use field trips. In extreme cases, 27% and 26% of the teacher participants indicated that they never use projects and field trips, respectively. Most respondents alluded to the fact that these teaching methods require a lot of time to prepare, organise and use, as well as they are costly in terms of resources to be used. In this view, in a separate interview Respondent A said: *“I usually use group work, pair work, projects, discussion, but I don’t use these methods all the time. We use them rarely because of the challenge of time and the syllabus is long. If you stick to these methods that means you will not complete the syllabus”*. These teaching and learning methods that most Geography teachers rarely use are transformative in nature since they can allow students to learn by doing, hence develop values in the process. On the contrary, in his study Semali (1999) found that 67% of Geography teachers in secondary schools in Uganda prefer to use case studies when teaching Geography. Case studies may help students to be exposed to different scenarios where they can analyse and interpret circumstances which will eventually instill some geographical values in them. Aydoğdu (2016) also proposes that values education can be established in students through case studies and drama so that positive and desired behaviours and empathy should be encouraged among students.

In terms of field trips, the results revealed that 64% of Geography teachers do not use field trips as a teaching and learning method, citing issues of time and costs to organise and execute. These findings concur with Semali (1999) who found that 87.4% of secondary school Geography teachers in Ethiopia did not use field trips in teaching Geography. However, field

trip is one of the teaching methods that allow students to get exposed to real situations outside classroom theory lessons which gives them an opportunity to make analyses and empathetically draw conclusions from what they see with their naked eyes. This is in agreement with Mezirow (2009) who claims that students can develop values in the process of learning that can transform their convictions about the environment they live in.

In a separate interview, Respondent E had the same opinion and this is what he said: “*We recently had a trip to Vwaza game reserve where we visited the game reserve and Lake Kazuni. After covering topics like climate change, biomes of the world, and desertification, we went there to see the conservation methods that happen there. So, students learnt a lot of things that they are not necessarily asked during exams, but will help them on how to take care of the environment and wildlife*”. This statement shows that there was transformative learning taking place as learners were exposed to real situations outside the classroom setup which helped them to develop some values towards the environment. In agreement with this notion, Mondal (2017) found out that *excursion* is one of the major methods which promote values among students in practical ways. In addition, Semali (1999) agrees with Mkhize (2019) that field trips are excellent strategies for developing the values and attitudes of students. Outside the classroom, students can experience real-life issues which facilitate the development of values and attitudes in them. Likewise, the phenomenology exercise and the visit to the rural village are examples of *action learning*, hence, Mkhize (2019) concluded that “nothing teaches better than action”. This corresponds with Odonoghue (2017) who established that most Geography teachers in South African schools use action learning techniques to address issues of values in students. As a result, learners have their mindsets transformed and become conscious of the world around them as geared by Transformative Learning Theory (Mezirow, 2003).

5.3.3 Selection and Use of Teaching and Learning Resources

In line with teaching and learning resources, on one hand, the findings confirm that majority of teachers do not necessarily plan and select these resources to instill values besides knowledge and skills. For instance, in a separate interview, Respondent C said: *“I use locally available resources, for example, local environments, vegetation, springs, chart papers and illustration from students’ books. I just select them for knowledge sake”*. In agreeing with him, Respondent G also said: *“When selecting and using them, basically I focus on achieving success criteria and not values... So, whether it is going to achieve values or not, depends on the nature of success criteria to be achieved.”* This does not support transformative learning that help to change students’ mindset and grow into responsible citizens as advanced by Transformative Learning Theory (Mezirow, 2003). Further, Sadie (1999) also holds the view that with proper use of teaching and learning materials during the teaching and learning process, teachers can also effectively transfer values in their students. Similarly, Mkhize (2019) also supports that through newspaper article analyses, slide shows, and videos, students can express their values and attitudes clearly.

On the other hand, the results showed that some teachers try to select teaching and learning resources while being conscious of issues of values however, they face a lot of challenges along the way. For example, inaccessibility to the required resources and inability of teachers and schools to source them. In line with this idea, Respondent A had this to say, *“I use pictures, projectors where they are available, film in a flash. However, the challenge is that projectors are not easily found in most schools”*. The most commonly accessible teaching and learning resources in schools are textbooks of which it is very rare and not easy for teachers to use them to address values. In agreement, Aydın and Yaşar (2020) assert that Geography textbooks offer direct teaching of concepts (indoctrination approach) instead of

value explanation (value clarification approach). Consequently, this appears not to assist to transform learners' mindset into responsible citizens as advanced by Transformative Learning Theory (Mezirow, 2003).

5.3.4 Other Teaching and Learning Strategies

On other teaching and learning strategies that Geography teachers try to employ in an attempt to address geographical values in students, the study results have shown that the majority of teachers indicated that they do not plan and use any other strategy in a deliberate attempt to address geographical values besides knowledge and skills. Some cited reasons are that since values are not assessed, so there is no need for them to waste time on values instead of imparting students with knowledge and skills, which they will need during local and national examinations. Evidently, Respondent B had this to say, *“For the sake of imparting values mmm no (Laughter)...., I don't consider values, it's all about time, its serious business, no time to play. So, values take time for learners to learn. Honestly, Values are taken as time wasters”*. This indicates that most teachers focus much on preparing students for examinations and not on what would be helpful to them in their everyday life. This kind of teaching promotes rote learning in which students do not retain information soon after examinations, rather than promoting transformative learning in which they are also equipped with values that should guide their daily endeavours. This practice is contrary with what Freire (1998) affirms that educational approaches should enhance students' confidence and strength to address their problems instead of just accepting information and solutions offered by others.

Nevertheless, in few exceptional cases, some teachers demonstrate the possibility to address geographical values both inside and outside normal Geography lessons. For instance, in an interview, Respondent E had this to say: *“If we talk about hidden curriculum, yes, we have*

trash bins around and we tell them not to put plastic materials in them because they don't decompose. We also tell them to reuse some of the materials they have already been used. In that way, we are indirectly instilling values of environmental conservation". If such practices had been done by most Geography teachers in Malawi, it is highly probable that secondary school Geography would have played a very significant role in transmitting values to students, hence transforming them into responsible citizens as advocated by Transformative Learning Theory (Mezirow, 2003). Agreeably, Co-curricular activities can prove to be an effective tool for the inculcation of values and fostering creative talents if they are planned accurately and accomplished properly (Brooks & Bianca, 2013). For this purpose, clubs like wildlife clubs, environmental conservation clubs, nature clubs, and Geography clubs among others, many run parallel with normal teaching and learning programmes at school to help in values education. In essence, Freire (2005) concludes that education should aim at transforming individuals and not just treating them as mere banks of knowledge. This may help students to acquire geographical values outside the classroom's normal learning process as a result help them to be conscious of the world around them as suggested by Transformative Learning Theory (Mezirow, 2003).

5.3.5 Teachers' Confidence that their students have Acquired Values

In Table 4.5, item number 10, over 74% of Geography teachers responded that their students would practice SDVs outside school. Yet, when asked how confident they are that their students will apply the SDVs in their homes, most Geography teachers were skeptical. For instance, Respondent D said: *"I am 30% confident that my students will apply what they learn in class, the reason may be because of poverty, we are missing a lot of things. Secondly, is the way our concepts are outlined in the curriculum, most of them are not considering issues of values. Our curriculum is just more exam-oriented"*. This agreed with what they responded on item 9 where 51% of Geography teachers denied that their students understand the

importance of acquiring geographical values. Similarly, Respondent D said: “...it is very difficult for students to apply that knowledge outside because their aim and when teaching we just emphasise on examinations...we just tell them to work hard so that they should pass exams”.

Therefore, most Geography teachers expressed a lack of confidence in their students that they could practice what they learn in class when they get to their homes. This is the case because the main focus of both teachers and their students is the regurgitation of knowledge and skills during the examination, and not transforming them in order to apply values in their societies. This agrees with what Wadson (2020) found out that most Geography teachers in Malawi teach mainly to make their students pass the examinations to put their schools on the map since the performance of secondary schools is rated on how students pass and how many are sent to universities. This is contrary to Transformative Learning Theory which require that students should learn to have transformed mindsets that might help them to become conscious of the world around them (Mezirow, 2003).

5.4 CHALLENGES FACED WHEN ADDRESSING GEOGRAPHICAL VALUES THROUGH THE TEACHING OF GEOGRAPHY

5.4.1 Challenges Facing Values Education

Findings on the challenges that the Geography teachers face when addressing geographical values, item 1 of Table 4.6 shows that 87% of respondents agreed that large classes greatly affect values education in secondary schools. This implies that with large classes, teachers may not be able to effectively plan and carry out action learning strategies that facilitate transformative learning, since it requires time for all students to take part in the lesson. As such, teachers simply go for approaches that can easily accommodate all students such as

lecturing methods. Concurrently, Mkhize (2019) also found that other challenges that affect the correct way of teaching SDVs to students include overcrowded and disruptive classrooms.

Other challenges that most Geography teachers agreed that they face include how they select teaching methods and resources. For instance, items number 2 and 3 of Table 4.6 shows 84% and 85% of Geography teachers have revealed that they do not consider issues of values when they are choosing methods and resources to use in their Geography lessons, respectively. These findings agree with Panula et al. (2020) who established that most teachers prefer using traditional methods of teaching which cannot help in transmitting values to students.

Furthermore, item 4 of Table 4.6 indicates that 71% of Geography teachers also agreed that how they plan for their work, that is when drawing schemes of work and lesson plans, is also a hindrance towards values education. This signifies that it is highly probable that Geography teachers do not plan to instill values, but just knowledge and skills. In the same view, Respondent B commented: “...*I don't consider values when selecting and using teaching methods, it's all about time, its serious business, no time to play. So values take time for learners to learn. Honestly, values are taken as time wasters*”. As some teachers consider values as time-wasters since they are not examined, it is difficult for one to consider them when generally planning for a lesson. This becomes a big setback in the attempt to instill geographical values through Geography teaching which, according to Mezirow (2009), disagrees with transformative learning that help students to grow into responsible citizens.

In addition, item 5 of Table 4.6 shows that 72% of Geography teachers agreed that the way secondary school Geography curriculum is designed is also another stumbling block towards achieving values education through Geography teaching in secondary schools. In concurring with this, Geography teachers indicated that the Geography curriculum lacks some emphasis on issues of values. In this regard, Respondent E had this to say: “*The way the curriculum is*

framed it does not put much emphasis on values...” In agreement, Respondent C added and she said: *“Yah the first thing that acts as a barrier is that content found in syllabus or books don’t emphasise values”*. These findings show that the secondary school Geography curriculum in Malawi does not put much stress on values education as compared to knowledge and skills. Although MIE (2013) stipulates that the secondary school Geography curriculum in Malawi is said to address all three domains through imparting knowledge, skills, values, and attitudes to students, in his study, Wadson (2020) observed that Malawi secondary school curriculum is labeled as examination oriented, where schools mainly focus on imparting knowledge and skills. This situation can hardly assist in transforming students in Malawian schools into responsible citizens. Similarly, Sadie (1999) also discovered that the Geography syllabus in South African schools is predominantly content-based; consequently, teachers are driven towards completing the content, in preparation for the examination. Furthermore, Respondent B looked at the amount of content against the allocated time in the curriculum as a barrier to instilling geographical values in students. He said this in a comment, *“Time is also another challenge, I don’t know if they can trim some topics so that we can teach slowly for students to capture values.”* Some Geography teachers felt that the content in the Geography curriculum is too much that they teach in a rush in order to cover the syllabus which retards values education in the process. However, as observed by Kalita (2015), values education must be incorporated into the secondary school Geography curriculum so that citizens are equipped with all the required values which will help to transform their way of thinking for the betterment of the future generations.

Besides, item 6 of Table 4.6 shows that 80% of Geography teachers agreed that their knowledge and perception of values education also negatively affects the effort of instilling values through the teaching of Geography. In concurring with this, Respondent A said: *“Another challenge could be lack of understanding of teachers which require in-service*

training for them to beef up knowledge". This indicates that teachers have limited understanding of what values are and how they can transfer them to their students. The majority of them alluded to a lack of adequate training at college as well as in-service training on values education. In supporting this idea, this is how Respondent C commented: "...*when we, teachers, are trained in various colleges, there should be a certain time they should be trained basing on values*".

The study has further revealed that most Geography teachers have a negative understanding of values education as some of them viewed that values are only time wasters since they are not assessed during examinations. This attitude in turn hinders them to apply action learning techniques which can help to transform their learners. On the contrary, Hanifah et al. (2015) found that despite most teachers do not appreciate the practicability of sustainable development, educators' understanding of the concept of SDVs is pivotal in appreciating how effective their teaching will be for the purpose of transforming students' way of thinking and actions. In addition, Guo et al. (2018) assert that to improve teachers' knowledge and understanding, they should undergo a teacher training programme and build a platform for communicating ideas of SDVs through modern communication technology. The understanding and the attitude of teachers on issues of values lays the foundation for the effective values education and transformation.

Furthermore, other challenges towards addressing values education through the teaching of Geography in secondary schools in Malawi that the study has revealed include a lack of teaching resources in schools that may help to instill values in students. The study has revealed that most Geography teachers just go into classrooms without any teaching and learning resources and start conducting what some respondents called '*dry lessons*' (lessons without resources), as Respondent E said in a comment: "*one of the challenges is lack of*

teaching resources in schools as such, teachers opt for 'dry lessons'. So, by the end of the day students don't acquire what they are supposed to". This statement shows that there is high probability that learners are not transformed during the learning process since the lessons do not focus on equipping learners with values. Contrary to this view, Şahin (2021) holds that with the proper use of teaching and learning materials during the teaching and learning process, teachers can also effectively transfer values to their students.

Another drawback facing values education in Geography teaching is the lack of enough trained Geography teachers in schools, which results in Geography being taught by teachers who did not specialise in the subject. This agrees with Mkhize (2019) who found out that teachers are facing challenges in instilling sustainability-oriented values because there is no correlation between what students are encultured with at school and home. For example, teachers involved in sustainable development initiatives are not necessarily Geography (social sciences) teachers. Such teachers may be deficient of the required knowledge of subject matter, which may affect the way they can instill values in students, as a result they are unable to transform them into responsible and conscious citizens. As such, the study has also shown that lack of interest of some students on issues is yet another setback towards values education. Most students think learning values just delays teachers to cover examinable content. This retards values education in the sense that it affects the implementation of values acquisition initiatives which disrupts the effective teaching of SDVs through Geography education (Hanifah et al., 2015). This situation contradicts with Transformative Learning Theory which holds that learners must have transformed mindset that may help them to be conscious of the world around them (Mezirow, 2003).

5.4.2 Improving Values Education

In the process of responding to different questions, respondents were also able to suggest ways how to improve values education through the teaching and learning of Geography. To smoothly address issues of values, the study has found that there must be serious scrutiny of the Geography curriculum to check how sufficiently and efficiently it assists in addressing geographical values besides knowledge and skills. For instance, Respondent A said: *“I think the most important thing is that our syllabus should not be exam-oriented. Normally, we teach for examinations, not for values.”* In supporting this idea, Respondent B also said, *“The whole curriculum should be reframed in order to come up with other strategies on how values can be imparted and owned once students have learned them”*. This is in agreement with what Sadie (1999) discovered that most syllabus documents, in South Africa and internationally, refer to a threefold breakdown of geographical objectives, which include content, skills, as well as values and attitudes. Yet, values and attitudes appear to be the poor cousin to content and skills, as most South African Geography textbooks lack values exercises. Therefore, the curriculum should be revisited so that it should support transformative learning to help students grow into responsible citizens (Mezirow, 2003).

Furthermore, the study has revealed that there are few Geography teachers in many schools who do not match the number of students the situation that retards the effort to promote values education. In view of this, Respondent D suggested: *“Government should train and deploy more Geography teachers to increase manpower so that Geography teachers should be able to find time to plan thoroughly for their lessons”*. In some cases, the researcher discovered that there are completely no Geography teachers in some schools, and Geography is being taught by teachers who did not study Geography which affects the attempt to instill geographical values in students that help to transform them into responsible citizens. This

concur with Hanifah et al. (2015) who established that teachers involved in sustainable development initiatives are not necessarily Geography (social sciences) teachers which affect the implementation of values acquisition initiatives and disrupt the effective teaching of SDVs through Geography.

The study further revealed that Geography teachers should use field trips as much as possible to expose students to realities outside the classroom setup to improve values acquisition. This can help students to learn by observing and doing in the process instill some values in them which eventually can transform their mindset about the environment in which they live. In this view, Respondent D had this suggestion: *“There should be mechanisms where students should be able to move around and be able to learn outside classroom. Schools, division offices even the ministry of education should be able to encourage and fund field trips and educational visits so as to expose learners to different situations that may help to transform their thinking towards the environment.”* This agrees with the argument by Hoque, Yasin, and Sopian (2022) that field trips are excellent strategies for developing the values and attitudes of students. Outside the classroom, students can experience real-life issues which facilitate the development of values and attitudes in them, as a result, learners become conscious of the world around them as advocated by Transformative Learning Theory (Mezirow, 2003).

5.5 HOW SOME FORMER GEOGRAPHY STUDENTS APPLY GEOGRAPHICAL VALUES IN THEIR SOCIETIES

5.5.1 Application Geographical Values

Based on Table 4.8 of how former Geography students are applying the selected social and environmental values, the results show that the majority of the respondents (63%) indicated that they are able to apply such values in their workplaces and homes. For example, on item

number 1, about 87% of the respondents agreed that they don't pollute the environment in any way and on item number 3, about 90% indicated that they take care of different lives on earth as well as other 90% (item number 8) ensure that there is the sustainable economy in society. These findings show that secondary school Geography in one way or another has instilled some values that former Geography students are applying in their everyday lives. This supports the Transformative Learning Theory which suggests that teaching and learning should assist students to understand the world and develop new values and beliefs about the environment (Mezirow, 2009).

However, the indicated percentages were so significant that raised some follow-up inquiries to validate their claims. When these former Geography students were asked some follow-up questions in separate interviews, the findings revealed that the social and environmental values that they currently use in their everyday undertakings are not all from secondary school Geography lessons they once attended, there are other factors at play. For instance, Respondent X commented: *"I do use some of these values we are talking about because it is obvious, we are supposed to do them. It doesn't necessarily take one to learn Geography for him/her to have and use a toilet, sometimes it is just about common sense and instinct at play."* Furthermore, though some respondents agreed that they learned Geography at secondary school, but still some factors might have affected the acquisition of such values. For instance, Respondent Z said, *"Geography, yes has assisted me a lot, for example, I have planted trees around my home area and I help my fellow community members to do the same. However, it is not only Geography that has played a role, it is a joint effort from different fields such as we learnt the same in Agriculture, sometimes in Biology, we also get some of this information from extension workers, even on radio and television."*

In addition, other findings have conclusively revealed that Geography as a subject had technically failed to assist in instilling the SDVs in students since the environmental problems are still on the rise and that some people who learnt Geography at secondary school are now at the fore destroying the environment. In view of this for example, Respondent V had this in a comment, “...*I may apply values but may not be from the background of Geography, but there may be just circumstances that have made me take that action at that time, not basically from Geography. If we see geographical problems such as climate change, it suggests how Geography has failed. You will see that many who are now destroying the environment are those who learnt Geography at secondary school, so what does that mean?*” This is contrary to the Transformative Learning Theory which proposes that teaching Geography should help students to develop new values and principles about the environment for a sustainable future (Mezirow, 2009). Similarly, UNESCO (2016) also contends that through values education, Geography students would be able to develop characters and values that lead to the sustainability of our environment.

Therefore, it would appear that the respondents were just responding to questionnaires without putting into consideration where and how they acquired the social and environmental values they claimed to apply in their daily undertakings. As a result, besides secondary school Geography, the study has shown that there are other sources where Geography students can acquire some social and environmental values that they use in their everyday life.

5.5.2 Other Sources of Values

Figure 4.4 of sources of values shows that the majority of former Geography students (76%) indicated that they acquired the values they are currently applying elsewhere besides secondary school Geography while only 24% indicated that they acquired the values from secondary school Geography. Out of 76% of those who acquired the values elsewhere besides

secondary school Geography, 33% claimed that they acquired the social and environmental values from their parents, while 43% indicated that they got these values from other sources. When asked during separate interviews, respondents indicated that they acquired the said values from different other sources besides secondary school Geography. These sources include media, experience, instinct, civic education from different government institutions and non-governmental organisations, training and workshops, as well as other subjects that also deal with environmental issues such as Agriculture and Biology. For instance, Respondent Z said: *“Besides Geography, many issues contributed towards value acquisition. We talk of media, school clubs and societies such as wildlife clubs, and awareness campaigns among others”*. Furthermore, Respondent Z added that *“...it is not only Geography that has played a role, it is a joint effort from different fields, such as, we learnt the same in Agriculture, sometimes in Biology, we also get some of this information from extension workers, even on radio and TV.”*

This means that in as far as secondary school Geography plays a role in helping students acquire Sustainable Developmental Values that they apply in everyday life, the study has revealed that it does not contribute enough on its own as it stands. This has been shown by the contradiction made by the former Geography students who indicated that they are applying social and environmental values, when probed through interviews, they revealed that most of the SDVs they are now using are not from Geography. They claimed that there are other different sources they acquired such values from besides secondary school Geography. As such, this is not in line with Transformative Learning Theory which advocates that learners must acquire values in course of their studies so as to have transformed mindsets that helps them to become conscious of the environment (Mezirow, 2003).

5.6 CHAPTER SUMMARY

This chapter has presented the discussion of the study results as guided by the arrangement of the specific objectives. There are four specific objectives that have been fully discussed and addressed in this chapter. In responding to the main objective, the general findings indicate that the secondary school Geography does not fully help to promote geographical values especially the SDVs in the Malawian citizenry. The succeeding chapter presents the summary of the findings, study limitations, recommendations, and suggests areas of further research.

CHAPTER 6: SUMMARY OF THE FINDINGS AND RECOMMENDATIONS

6.1 CHAPTER OVERVIEW

This chapter presents the summary of all the findings based on the study objectives and the conclusion of the study. It also presents the limitations and the delimitations of the study, recommendations, suggested areas for future studies as well as the closing remarks.

6.2 SUMMARY OF THE FINDINGS

6.2.1 How Geographical Values are addressed in Secondary School Geography Syllabus

To address this objective, both junior and senior Geography syllabi were analysed in terms of their success criteria. The findings revealed that most success criteria in both junior and senior secondary school Geography syllabuses do not help to instill geographical values especially SDVs in students since most of the success criteria are of poor quality. The majority of the action verbs used do not encourage action learning that can help students to learn by doing, which can transform them and acquire values in the process.

6.2.2 How Secondary School Geography Teachers Address Geographical Values through the Teaching of Geography

To address this objective, the study has established that although some Geography teachers indicated that they consider issues of values when they are planning for their Geography lessons, findings from interviews have revealed that the majority of Geography teachers mainly focus on knowledge and skills as they don't waste time on values since they are not assessed during examinations. Evidently, it shows that teachers' main aim is to prepare their students for local and national examinations that do not assess the acquisition of values.

In terms of methodology, the study has revealed that the majority of Geography teachers use teaching methods that are not practical in nature. As such, they do not help to instill values in their students. With regard to teaching and learning resources, the study has revealed that most Geography teachers use teaching and learning resources that are at their disposal. It is highly probable that they don't select and use resources with an aim of imparting geographical values. Additionally, the study has revealed that some Geography teachers do not even use any resource when carrying out Geography lessons (*dry lessons*), a practice that retards values education in the process. In terms of other teaching and learning strategies, the study has shown that most of the Geography teachers mainly focus on classroom work (that is, content coverage), which prepares students for examinations but leaves values unattended.

Therefore, the study has unveiled that Geography teachers fail to address geographical values in their lessons through the way they plan their work, the way they select and use teaching and learning methods and resources, as well as other teaching and learning strategies. Such being the case, it is likely that most teachers are not confident that their students are transformed through the acquisition of values and the ability to apply what they learn in class to the outside school setup.

6.2.3 Challenges Faced when Addressing Geographical Values through the Teaching of Geography

To address this objective, the study has shown that there are a number of challenges facing addressing geographical values through the teaching of Geography in Malawian secondary schools. For instance, the study has revealed that with large classes Geography teachers cannot plan and carry out action learning strategies since it requires time for all students to take part in the lessons. For that reason, it is likely that Geography teachers simply go for approaches that can easily accommodate all students such as traditional teaching methods

which in turn do not help to instill the SDVs in students. In addition, the study has also found that Geography teachers do not consider issues of values when they are selecting methods, and resources to use in their Geography lessons, respectively. The study has also demonstrated that Geography teachers lack teaching and learning resources. This affects the implementation of values acquisition and transformative learning initiatives, which disrupt the effective teaching of SDVs through secondary school Geography.

Furthermore, the study has also shown that the Geography curriculum lacks some emphasis on issues of values. It seems that the way the curriculum is designed hinders the attempt to instill geographical values in students. Additionally, the study has also revealed that most Geography teachers accepted that they have a limited understanding of what values are, and how they can impart such values to their students due to lack of adequate training at college as well as in-service training on values education. This hinders the attempt to instill geographical values, including SDVs in students, which consequently does not help to promote transformative learning in students.

6.2.4 How some Former Geography Students Apply Geographical Values in their Societies

In addressing this objective, the study revealed that there was no one clear source from which the former students acquired Geographical values that they were now applying in their daily lives. It is clear that media, experience, instinct, and civic education were said to be the other sources from which individuals learned Geographical values. In other words, it cannot be claimed that secondary education in general, and Geography subject in particular, can be accredited to be the only source of Geographical values. Evidently, it appears that secondary school Geography does not contribute enough towards the promotion of SDVs in the Malawian students. Although this is the case, what is critical for this study is that it cannot be

denied that Geography subject remains to be one of the critical tools for promoting Geographical values in secondary education in Malawi.

6.3 CONCLUSION

This study has clearly shown that secondary school Geography education in Malawi has a lot of challenges in as far as promoting values education, especially the SDVs, is concerned. For instance, although the secondary school Geography curriculum is said to address knowledge, skills, values, and attitude, this study has revealed that more emphasis is channeled on imparting knowledge and skills leaving issues of values and attitudes aside. In addition, the current trend has also shown that Geography teachers do not put much effort in an attempt to address Geographical values when preparing and carrying out their lessons. This retards the efforts to instill values besides knowledge and skills in order to transform students into responsible citizens.

Furthermore, the research has also revealed that there are so many issues that negatively affect the attempt to address Geographical values through secondary school Geography, the most serious one being large classes. Finally, as it stands, most of the geographical values that former students apply are not necessarily acquired from secondary school Geography. The study has revealed that there are other sources where students can learn some geographical values. As such, secondary school Geography does not contribute enough towards values education. However, secondary school Geography course in Malawi still remains a tool through which values particularly SDVs can be transferred to students. Therefore, it remains the obligation of Government through MoE and MIE to make sure that secondary school Geography curriculum, as well as the teaching of Geography in secondary schools help learners acquire values besides knowledge and skills, so as to promote transformative learning in schools.

6.4 RESEARCH LIMITATIONS AND DELIMITATIONS

6.4.1 Research Limitations

There were several factors that limited the study. For instance, some of the sampled schools did not have qualified Geography teachers to fill out the questionnaires, and respond to interview questions which made the researcher visit more schools than planned. Some respondents were also reluctant to fill out questionnaires since they were expecting to be given something for the task. For this reason, some research participants, especially former Geography students, refused to respond to interview questions, saying nothing for free. The researcher was supposed to observe some Geography lessons to establish how teachers address issues of values in the course of teaching and learning. Nevertheless the pilot study showed that most teachers were reluctant and felt uncomfortable having their lessons observed. As such, this data collection method was not used by the researcher, instead document analysis, questionnaires and interviews were opted for.

6.4.2 Research Delimitations

This study on values education in the teaching of Geography in the Malawian secondary schools was involving secondary schools in two districts of Nkhatabay and Mzimba only in the Northern Educational Division (NED). These districts were purposefully selected on the basis of the proximity and demographic similarities of their schools. The study involved Geography teachers and former Geography students only as study participants.

6.5 RECOMMENDATIONS

Based on the results of the study, the following are what the researcher can recommend:

- MIE should consider revising the success criteria of both, junior and senior Geography syllabuses so that they promote learning through practice. Success criteria should start

with action verbs that can help to transform students and hence instill in them values in the process;

- MIE & MoE should revisit the entire Geography curriculum so as to put more emphasis on values and values education;
- Teacher training colleges and universities should consider imparting teaching skills in teachers on how to teach values besides knowledge and skills;
- The ministry of education through divisional offices, secondary schools managements, and other relevant educational authorities and stakeholders should encourage and support field trips and educational visits to expose Geography students to the real practical world rather than just mere theoretical classroom-based lessons;
- Geography teachers should also be encouraged to use more learner-centered teaching and learning methods that can allow students to learn through practice such as demonstration, experiments, projects, and case studies, among others. These teaching and learning methods help to instill Geographical values in students;
- MoE should train and deploy more Geography teachers in secondary schools so that Geography should not be taught by teachers who did not specialise in the subject;
- MoE and other stakeholders should also provide more resources in schools that may help to promote values education in students.

6.6 SUGGESTED AREAS FOR FUTURE RESEARCH

The following are areas that may require future research:

- Comparative study on values education through the teaching of Geography between public and private secondary schools in Malawi;
- Evaluating the preservice and in-service trainings of secondary school Geography teachers in addressing values education through the teaching of Geography;

- Examining the policy documents in relation to the teaching of the SDVs through Geography Education.

6.7 CLOSING REMARKS

The results have shown that secondary school Geography in Malawi has generally failed to address Geographical values. As evidenced in other parts of the world, promotion of Geographical values would empower learners to become informed future caretakers of our environment and therefore, ensure sustainable development for themselves and the future generation. Lewis (2016) ably gives credence to the centrality of values in education and testifies that “Education without values, as useful as it is, seems rather to make man *a more-clever devil*.” In other words, man would become a clever devil in terms of failing to control their actions of destroying the environment. This kind of behaviour is unacceptable and needs to stop because “We don’t inherit the earth from our ancestors, we borrow it from our children” (Chief Seattle, 2016).

REFERENCES

- Arora, N. (2010). *Educational philosophy*. Delhi: Saurabh publishing house.
- Aydın, H., & Yaşar, O. (2020). Comparison of Geography textbooks written according to 2005 and 2017 Geography lesson curriculum in terms of values education. *Journal of Social and Humanities Sciences Research*, 7(60), 2826–2842. <http://dx.doi.org/10.26450/jshsr.2099>
- Aydoğdu, B. (2016). Values education from perspectives of classroom teachers. *European Journal of Social Sciences Education and Research*. 2(430) DOI: 10.26417/ejser.v7i1
- Bandura, A. (1977). *Social learning theory*. New Jersey: Prentice Hall.
- Banik, D. (2020). Sustainable development in Malawi. *Centre for development and the environment*. Oslo SDG Initiative. Oslo SDG blog.
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study, design and implementation for novice researchers. *The qualitative report*. 13(4) 544-559.
- Berkowitz, M. W. (2011). What works in values education? *International Journal of Educational Research*, 50, 153–158.
- Borg, C., Gericke, N., Huglund, H., & Bergman, E. (2012). The barriers encountered by teachers implementing education for sustainable development: Discipline-bound differences and teaching traditions. *Research in Science & Technological Education*, 30(2), 185-207.
- Bowen, G. A. (2009). Document analysis in qualitative research method. *Qualitative Research Journal*, 9(2), 27-40. Doi: 10.3316/QRJ0902027

- Brooks, B., & Bianca, A. (2013). Extra-curricular activities and the development of social skills in children with intellectual and learning disabilities. *Psychological Theses*. Paper 108 submitted to Department of Psychology, Georgia State University.
- Burton, N., Burdett, M., & Jones, M. (2008). *Doing your education research project*. London: SAGE Publications.
- Carr, D. (2011). Values, virtues and professional development in education and teaching. *International Journal of Educational Research*, 50, 171–176.
- Carson, D. (2001). *Qualitative research Marketing research*. London: SAGE Publications.
- Chief Seattle (2016). *We don't inherit the earth from our ancestors, we borrow it from our children*. www.denbow.com
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education*. London: Routledge.
- Creswell, J. W. (2014). *Research design. Qualitative, Quantitative and mixed methods approach (4th ed.)*. California: Sage Publications, Inc.
- Creswell, J. W., & Plano-Clarke, V. L. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage Publications.
- Dominiko, T. (2016). A Qualitative Study on Internal Migrants in Ethiopia: Causes, Experiences, Perceptions, Challenges and Future Life Orientations. *Journal of Social Economics*, 3(2) 2016, 54-72.
- Emas, R. (2015). The concept of sustainable development: Definition and defining principles. *Introduction to Successes and shortcomings in the implementation of national*

- sustainable development strategies: From the greening of governance to the governance of greening*. PhD dissertation, Florida International University, Miami.
- Fien, J., & Slater, F. (1980). Exploring values and attitudes through group discussion and evaluation. *Classroom Geographer*, 4, 22-25.
- Fraenkel, J. R., & Wallen, N. E. (2003). *How to design and evaluate research in education*. New York; McGraw-Hill Higher Education.
- Freire, P. (2005). *Pedagogy of the oppressed*. New York, NY: Continuum.
- Freire, P. (1998). *Pedagogy of the freedom: Ethics, democracy, and civil courage*. Lanham, PA: Rowman & Littlefield.
- Grindsted, T. S. (2017). *The Matter for Geography in Education for Sustainable Development. Transformative Approach to Sustainable Development: Case of Secondary Schools in Germany*. Cham Publications.
- Guo, F., Lane, J., Yushan, D., & Stoltman, J. P. (2018). Sustainable development in geography education for middle school in china. *Sustainability*, 10, 3896. DOI: 10.3390/su10113896
- Halvorsen, T., Ibsen, H., & M'kumbuzi, R. P. (2015). *Knowledge for sustainable world: A southern Africa-Nordic contribution*. South Africa: African minds.
- Hanifah, M., Shaharudin, I., Mohmadisa, H., Nasir, N., & Yazid, S. (2015). Transforming sustainability development education in Malaysian schools through greening activities. *Review of International Geographical Education Online*, 5(1), 77-94.
- Henning, E. (2004). *Finding your way in qualitative research*. Pretoria; Van Schaik Publishers.

- Hernando, A. (1998). Values in geography education and teacher training. *International Research in Geographical and Environmental Education*, 7(2), 168-174.
- Holliday, A. (2002). *Qualitative research*. London: Sage Publications.
<https://www.unicef.org/media/59856/file/UNICEF-education-strategy-2019-2030>.
- Hoque, F., Yasin, R. M., & Sopian, K. (2022). Revisiting education for sustainable development: Methods to inspire secondary school students toward renewable energy. *Sustainability*, 14(14), 8296.
- Huba, M. (2006). *Values for a sustainable future vs. global problems and threats*, Bratislava, Olomouc.
- IEF, (2002). *Values for sustainable development – position paper for the world summit on sustainable development*, Johannesburg.
- Igwenagu, C. (2016). *Fundamentals of research methodology and data collection*. Nsukka: Enugu state University of science and technology.
- Kalita, K. (2015). Need of value education and teacher's role. *International Journal of Social*.
- Kurmar, R. (2011). *Research methods: A step by step guide for beginners*. London: Sage.
- LePage, P., Akar, H., Temli, Y., Şen, D., Hasser, N., & Ivins, I. (2011). Comparing teachers' views on morality and moral education, a comparative study in Turkey and the United States. *Teaching and Teacher Education*, 27, 366–375.
- Lewis, C. S. (2016). *Education without values, as useful as it is, seems rather to make man a more- clever devil*. www.quotehd.com
- Lindsay, M. (2010). *Philosophical underpinnings of Social Research*. Polyglossia, 19.

- Liu, L. (2011). Where in the World of Sustainability Education is US Geography? *Journal of Geography in Higher Education*, 35:2, 245-263, DOI:10.1080/03098265.2010.548086
- Lorr, M. (2012). *Defining urban sustainability in the context of North American cities*. New York: Berghahn.
- Lovat, T. (2011). Values education and holistic learning: Updated research perspectives. *International Journal of Educational Research*, 50, 148–152.
- Mack, N., Woodson, C., Macqueen, K. M., Guest, G., & Namey, E., (2011). *Qualitative research methods: A data collector's field guide*. www.fhi360.org
- Malawi Institute of Education (MIE), (2013). *Geography syllabus for Forms 1 and 2*. Zomba: Malawi.
- Malawi Institute of Education (MIE), (2013). *Geography syllabus for Forms 3 and 4*. Zomba: Malawi.
- Marques, J. F., & McCall, C. (2005). The application of inter-rater reliability as a solidification instrument in a phenomenology study. *The Qualitative Report*, 10 (3), 439-462.
- Mertens, D. (2005). *Research and Evaluation in Education and Psychology (2nd ed.)*. London: Sage Publications Ltd.
- Mertler, C. A. (2009). *Action Research, Teachers as Researchers in the Classroom*. London: Sage Publications Ltd.
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco: Jossey Bass Publishers.

- Mezirow, J. (1997). Transformative learning: Theory to practice. *New Directions for Adult and Continuing Education*, 74, 5-12.
- Mezirow, J. (2003). Transformative learning as discourse. *Journal of Transformative Education*, 1(1), 58-63. <https://doi.org/10.1177/1541344603252172>
- Mezirow, J. (2009). An overview on transformative learning. *Lifelong learning: Concepts and contexts*, 24-38.
- Mgomezulu, V. Y., & Kalua, F. A. (2013). *A guide to academic writing for beginners*. Mzuzu: Mzuni Press.
- Miller, T., & Bell, L. (2012). *Ethics in qualitative research*. London: Sage.
- Mkhize, B. T. (2019). *Teaching strategies used by geography teachers to teach sustainable development in Pinetown district*. University of KwaZulu-Natal, Durban, South Africa.
- Mondal, K. (2017). Promoting value education among school students' through geography: *Scholarly Research Journal for Humanity Science & English Language*, 6(28), www.srjis.com
- Morgan, J., & Lambert, D. (2005). *Geography: Teaching school subjects, 11–19*. London: Routledge.
- Ndengu, D. M. (2012). *Designing and conducting qualitative research: A guide for post graduate students in the social sciences*. Mzuzu: Mzuni press.
- Ndlovu, N. (2012). *The quality use in SA classrooms: Strategies to overcome poverty and inequality*. Johannesburg: University of the Witwatersrand.
- Newby, P. (2014). *Research Methods for Education (2nd ed.)*. Abingdon, Oxon: Routledge.

- Newman, L. (2012). *Basics of social research: Qualitative and quantitative approaches* (3rd ed.). Upper Saddle River, NJ, Pearson Publishing.
- O'donoghue, T. (2017). *Understanding contemporary education: Key terms and Issues*. London: Routledge.
- O'Leary, Z. (2004). *The essential guide to doing research*. London: SAGE Publications.
- Omwuegbuzie, A., & Teddlie, C. (2003). *Handbook of mixed methods in social behavioural research*. Editors: A. Omwuegbuzie & C.Teddlie. Thousand oaks, California: SAGE Publications.
- Panula, E. Y., Jeronen, E., & Lemmetty, P. (2020). Teaching and learning methods in geography promoting sustainability. *Educational Science* 10(5); doi: 10.3390/educsci10010005
- Quina, J. (1989). *Effective secondary teaching: Going beyond the bell curve*. New York: Harper and Row.
- Quoquab, F. (2018). *Sustainable development values: What do we know from developing country perspective?* DOI: 10.4018/978-1-5225-2912-5.ch011
- Ramrathan, L., Granger, L. L., & Shawa, L. B. (2017). Ethics in education research. *Education studies for initial teacher development*, 431-442, <https://www.researchgate.net>
- Rokeach, M. (1973). *The nature of human values*. New York: Free press.
- Sadie, S. (1999). *Values education in a South African Geography classroom*. University of the Witwatersrand, Johannesburg: SA.

- Sagiv, L., & Schwartz, S. H. (2022). Personal values across cultures. *Annual Review of Psychology*, 73, <https://doi.org/10.1146/annurev-psych-020821-125100>
- Şahin, B. (2019). Values and values education as perceived by primary school teacher candidates. *International Journal of Progressive Education*, 15(3), Pamukkale University Doi: 10.29329/ijpe.2019.193.6
- Şahin, B. (2021). The Development of values education in the Turkish high school geography curriculum. *Review of International Geographical Education (RIGEO)*, 11(2), 574-604. doi: 10.33403/rigeo.885750
- Schwartz, S. H. (2021). A Repository of Schwartz Value Scales with Instructions and an Introduction. *Online Readings in Psychology and Culture*, 2(2). <https://doi.org/10.9707/2307-0919.1173>
- Schwartz, S. H., Cieciuch, J., Vecchione, M., Davidov, E., Fischer, R., Beierlein, C., Ramos, A., Verkasalo, M., Lönnqvist, J. E., & Demirutku, K. (2012). Refining the theory of basic individual values. *J. Personal. Soc. Psychol.*, 103, 663–688.
- Seguin, R. (2015). The elaboration school textbooks methodological guide: *Division of educational science, contents and methods of education*. UNESCO.
- Semali, L. (1999). Community as classroom: Dilemmas of valuing African indigenous literacy in education. *International Review of Education*, 45 (3-4): 305-319.
- Sharma, S. P. (2013). *Moral and value education*. New Delhi: Kanishka Publishers, Distributors.
- Sharp, J. G. (2012). *Success with your education research project* (2nd ed.). London: SAGE.
- Shukla, R. P. (2004). *Value education and human rights*. New Delhi: Sarup & Sons.

- Slater, F. (2001). Values and values education in the Geography curriculum in relation to concepts of citizenship. In David Lambert & P. Machon (Eds.), *Citizenship through Secondary Geography* (pp. 42–67). Routledge Falmer.
- Solomon, D., Watson, M., Battistich, V. A. (2001). Teaching and schooling effects on moral/prosocial development. In V. Richardson (Ed.), *Handbook of research on teaching* (4th ed.), 566–603. Washington, D C.
- Thornberg, R., & Oğuz, E. (2013). Teachers' views on values education: A qualitative study in Sweden and Turkey. *International Journal of Educational Research*, 1(59), 49-56.
<http://dx.doi.org/10.1016/j.ijer.2013.03.005>
- Thornberg, R. (2008a). The lack of professional knowledge in values education. *Teaching and Teacher Education*, 24, 1791–1798.
- Thornberg, R. (2008b). Values education as the daily fostering of school rules. *Research in Education*, 80, 52–62.
- Thungu, J. (2008). *Mastering PTE*. New York: Oxford University Press.
- Tirri, K. (2011). Holistic school pedagogy and values: Finnish teachers' and students' perspectives. *International Journal of Educational Research*, 50, 159–165.
- Tonga, D. (2016). Transforming Values into Behaviours: A study on the application of values education to families in turkey. *Journal of Education and Learning*, 5(2)
Canada: Springer.
- UNESCO, (2016). *Global Geoparks: A Strategy towards global understanding and sustainability*. Paris: UNESCO.
- UNICEF, (2019). *Every child learns UNICEF education strategy 2019–2030*.

- Venu, V. P. (2018). Importance of value education. *International Journal of Innovative Research & Studies*, 8(1), 114–123.
- Wadson, D. (2020). *Teaching as a vehicle for achieving some of the SDGs: Examining Geography teaching in some secondary schools in Malawi*. Malawi: Mzuni.
- Walliman, N. (2011). *Research methods: The basics*. London: Routledge.
- Wilson, K. G., & Murrell, A. R. (2004). *Values work in acceptance and commitment therapy*. London: McGraw-Hill.
- Wilson, S., & Maclean, R. (2011). *Research methods and data analysis for psychology*. London: McGraw-Hill.
- Woods, P. (2006). *Qualitative research*. Plymouth: University of Plymouth.
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). 21(6), 1117- 1122
- Zbar, V. (2003). *The Values education study, final report*. Australia: Curriculum Corporation.
- Zengin, M. (2017). Values education in Australian schools as a model case. *The Journal of International Social Research*, 10(52), 866–883. <http://dx.doi.org/10.17719/jisr.2017.1943>

APPENDICES

APPENDIX A: BUDGET PROPOSAL

NO	ACTIVITY	QUANTITY	AMOUNT
2	Printing and photocopying	100 copies X K40	4,000
3	Printing and photocopying thesis drafts	100 pages X K40	4,000
5	Transport	5 trips X 4000	20,000
6	Food	10 days X 2000	20,000
7	Accommodation	10 days X 2000	20,000
9	Binding cost	15,000 X 2	30,000
	Total		98,000
9	Contingency	10%	9,800
	Total		107,800

APPENDIX B: TIMELINE

No	MONTHS	ACTIVITY
1	7 th December 2021	<ul style="list-style-type: none">• Proposal presentations
2	12 th December 2021	<ul style="list-style-type: none">• Submission to MZUNIREC
3	3 rd January 2022 – 31 st May 2022	<ul style="list-style-type: none">• Data collection and analysis
4	1 st June 2022- 31 st August 2022	<ul style="list-style-type: none">• Thesis writing
5	4 th July 2022 – 30 th September 2022	<ul style="list-style-type: none">• Colloquium on thesis report
6	November 2022 – December 2022	<ul style="list-style-type: none">• Submission for examination

APPENDIX C: DOCUMENT ANALYSIS GUIDE FOR GEOGRAPHY SYLLABUSES

TOPIC	SUCCESS CRITERIA	DOES IT ADDRESS SDVs		COMMENTS
		YES	NO	
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

APPENDIX D: QUESTIONNAIRE FOR TEACHERS



Dear Respondent, I am a postgraduate student at Mzuzu University pursuing a Master of Education programme (Teacher Education). I am currently carrying out a study on **Geography teaching as a tool for enhancing values education: a case of promoting Sustainable Development Values in selected secondary schools in NED**. You are kindly requested to respond to all items in the questionnaire to the best of your knowledge. All information will be treated with the utmost confidentiality and will be used for this study only. *Do not write your name or that of your institution.*

A. Teacher's Profile

Tick in the box that represents your option;

1. Your sex: a. male b. female
2. Your years of service: a. 1-10 b. 11-20 c. 21-30 d. above 30

3. Your qualification: (*tick against your highest qualification*)

a.	Certificate (T2)	<input type="checkbox"/>
b.	Diploma	<input type="checkbox"/>

c.	Bachelor's degree	<input type="checkbox"/>
d.	Master's degree	<input type="checkbox"/>

Table below shows examples of **Geographical values**. Refer to it to respond to questions that follow:

Environmental Values	Social Values
Conserve & care for Malawi's natural resources.	Love for our communities and country.
Concern for responsible tourism in Malawi.	Moral & ethical responsibility towards our resources.
Care for environment through proper waste disposal.	Social & personal responsibility for our environment.
Sustainable agricultural practices by local farmers.	Cooperative behaviour towards our natural resources.
Concern for, adaptation & mitigation of impacts of climate change in Malawi.	Concern for rapid population growth & its impact on the Malawi's natural resources.
Care for aquatic life & marine resource in our water bodies like responsible fishing in lake Malawi.	Spirit of tolerance toward sustainable development our country – Malawi.

B. Examining how Geographical values are addressed in secondary school Geography syllabus

1. To what extent do you agree that the following elements in secondary school Geography syllabus (both Junior & Senior) help you as a Geography teacher to impart Geographical values in students?

(Tick the number representing your response in the boxes below using the key provided)

Key: 5=Strongly Agree, 4=Agree, 3=Not Sure, 2=Disagree, 1=Strongly Disagree

Syllabus Elements	5 <i>SA</i>	4 <i>A</i>	3 <i>NS</i>	2 <i>D</i>	1 <i>SD</i>
Many Success criteria are framed to address social and environmental values.					
Many Suggested teacher and student activities promote social & environmental values.					
Many outcomes of core elements promote environmental and social values.					
Suggested Teaching & learning methods promote environmental and social values.					
Suggested Teaching & learning resources promote environmental and social values.					

C. Investigating how secondary school Geography teachers address geographical values through the teaching of Geography;

1. How frequently/often do you use the following teaching and learning methods in a Geography lesson in order to promote environmental value and social values in students?

(Tick in the box representing your response in the table below)

	4	3	2	1
Items	Always	Often	Rarely	Never
Lecturing				
Question and answer				
Discussion				
Debate				
Case study				
Project				
Field trips				

2. The following statements show how you as a Geography teacher and your students address environmental and social values through Geography lessons. *Agree or disagree with them by ticking YES or NO against the statements in the box below;*

STATEMENTS	YES	NO
I have clear understanding of what geographical values are.		
I appreciate the importance of promoting geographical values in our students.		
I have taken time to explain what geographical values are to my students.		
I always plan practical work in a way that will also promote geographical values.		
I have taken time to explain to my students what sustainable development is.		
I select my success criteria to promote geographical values.		
I select my teaching & learning resources to promote geographical values.		
I deliberately select my teaching and learning methods in order to promote geographical values amongst students.		
My students fully understand the importance of acquiring geographical values.		
I am sure my students will practice sustainable development values in their lives after school.		

D. Exploring challenges that Geography teachers face when addressing geographical values through the teaching of Geography

1. To what extent do you agree that the following negatively affect the effective promotion of values when you are teaching Geography?

Key: 5=Strongly Agree, 4=Agree, 3=Not Sure, 2=Disagree, 1=Strongly Disagree

Items	5 SA	4 A	3 NS	2 D	1 SD
The size of the Class (number of students in a classroom).					
How teachers select teaching & learning methods in relation to values education (instilling geographical values).					
How teachers select & design teaching & learning resources in relation to values education.					
How teachers plan their schemes of work & lessons in line with values education.					
How Geography curriculum/syllabus is designed in terms of values education.					
Geography teachers' knowledge & perception of values education.					

End of questionnaire

Thank you for your participation.

APPENDIX E: QUESTIONNAIRE FOR FORMER GEOGRAPHY STUDENTS



Dear Respondent, I am a postgraduate student at Mzuzu University pursuing a Masters of Education programme (Teacher Education). I am currently carrying out a study on **Geography teaching as a tool for enhancing values education: a case of promoting Sustainable Development Values in selected secondary schools in NED**. You are kindly requested to respond to all items in the questionnaire to the best of your knowledge. All information will be treated with utmost confidentiality and will be used for this study only.

Do not write your name.

A. PROFILE

Tick in the box representing your option

1. Your sex: a. male b. female

2. How far have you gone with secondary education?

(Tick against class you last attended at secondary school)

a.	FORM 1	
b.	FORM 2	

c.	FORM 3	
d.	FORM 4	

*Below are some examples of **geographical values**. Refer to them when responding to questions below:*

	Environmental Values	Social Values
1	Conserve and care for Malawi's natural resources.	Love for our communities and country.
2	Concern for responsible tourism in Malawi.	Moral and ethical responsibility towards our resources.
3	Care for environment through proper waste disposal.	Social and personal responsibility for our environment.
4	Sustainable agricultural practices by local farmers.	Cooperative behaviour towards our natural resources.
5	Concern for, adaptation and mitigation of impacts of climate change in Malawi.	Concern for rapid population growth and its impact on the Malawi's natural resources.
6	Care for aquatic life and marine resource in our water bodies like responsible fishing in lake Malawi.	Spirit of tolerance toward sustainable development in our country – Malawi.

B. Evaluating the Acquisition of Geographical Values by Students

1. To what extent do you agree that learning of Geography at secondary has helped you to acquire the following values? *(Tick the number representing your response in the boxes below)*

Key: 5=Strongly Agree, 4=Agree, 3=Not Sure, 2=Disagree, 1=Strongly Disagree

	Values	5 SA	4 A	3 NS	2 D	1 SD
A	Care for our environment through proper waste disposal.					
B	Concern for proper agricultural practices.					

C	Care for aquatic life and resources in our water bodies.					
D	Love for nature of our surrounding.					
E	Concern for Malawi's future generation through responsible development.					
G	Concern that Malawi population is too big for our resources.					
H	Concern that there is careless destruction of our vegetation.					
I	Concern that there is serious pollution of our water bodies.					
J	Concern that there is serious pollution of our atmosphere through emission of gasses.					

C. Assessing the Application of Geographical Values in Societies

Instructions

- Below are some statements that describe a person. Read them carefully and respond to how each statement relates with you as a person. Rate your responses on a scale of 1-5, where '5' means 'Strongly Agree' with the statement, & '1' implies 'Strongly Disagree' with the statement.' Tick in the box representing your response below;

Key: 5=Strongly Agree, 4=Agree, 3=Not Sure, 2=Disagree, 1=Strongly Disagree

	STATEMENT	5 SA	4 A	3 NS	2 D	1 SD
A	I try not to pollute water bodies and aquatic life in my area.					
B	I try to protect our nature from wanton destruction e.g. charcoal burning, wood & timber production among others.					
C	I always make sure that waste material that I generate is properly disposed of.					
D	I always try to teach the people around me at my work place about maintaining a clean environment.					
E	I always practice agricultural methods that do not damage the environment.					
F	I have planted trees around my home.					
H	I believe it is my responsibility to take care of all forms of life.					
J	I believe it is my responsibility that I should play my part in developing Malawi into a sustainable economy.					

End of questionnaire

Thank you for your participation.

APPENDIX F: SEMI-STRUCTURED INTERVIEW GUIDE FOR TEACHERS



A. Biographic Data

1. District:
2. School:
3. Participant's pseudonym:
4. Participant's sex:
5. Participant's age:
6. Qualification:
7. Experience:

B. Examining how geographical values are addressed in secondary school Geography syllabus;

1. In your own understanding as a Geography teacher, do you think the secondary school geography curriculum design in general helps to instill geographical values especially SDVs in students?
2. If yes, briefly explain how? If no, briefly explain why?
3. Besides knowledge and skills, in what way do you think secondary Geography syllabi help to advance geographical values in students?

C. Investigating how secondary school Geography teachers address geographical values through the teaching of Geography;

1. Do you inculcate issues of values when you are planning your Geography lessons?
2. If yes, how? If no, why?

3. What teaching methods do you use that may help to instill geographical values in your students?
4. What teaching aids do you use that may help to instill geographical values in your students?
5. How best do you use these teaching methods and resources in order to facilitate values education in a Geography lesson?
6. Are there other teaching and learning strategies that you as a teacher use in a Geography class that may help to enhance values education especially SDVs.
7. In your opinion, do you think the teaching of Geography in secondary schools helps to instill geographical values in students besides knowledge and skills? Explain your answer.

D. Assessing challenges Geography teachers face when trying to address geographical values through Geography education

1. As a teacher, what challenges do you face when trying to address geographical values through Geography education? Explain your answer?
2. In your opinion, what do you think should be done so as to improve values education through the teaching of Geography in secondary schools?

APPENDIX G: SEMI-STRUCTURED INTERVIEW GUIDE FOR FORMER GEOGRAPHY

STUDENTS



A. Biographic Data

8. District:
9. School/institution:
10. Participant's pseudonym:
11. Participant's sex:
1. Qualification:

B. Assessing acquisition of geographical values

1. How far did you go with secondary school Geography education?
2. Do you think learning of Geography at secondary school helped you acquire social and environmental values?
3. If yes, what are some of the values that you think you acquired through the learning of Geography at secondary school?

C. Investigating how some Geography school leavers apply geographical values in their societies

4. Briefly explain how you think the acquired values help you in your everyday life for your sustainable living.
5. How do you think your daily activities including your current job help you apply geographical values you acquired at secondary school?

6. Would you site some examples of how you use some of the values you think you acquired through Geography?
7. Are you confident that Geography has helped people to live a sustainable life they are living today? Explain.
8. What are other sources of geographical values that you are using today besides secondary school?

APPENDIX H: LETTER OF APPROVAL FROM MZUNIREC



MZUZU UNIVERSITY

DIRECTORATE OF RESEARCH

Mzuzu University
Private Bag 201
Luwingu
Mzuzu 2
MALAWI
TEL: 01 320 722
FAX: 01 320 648

MZUZU UNIVERSITY RESEARCH ETHICS COMMITTEE (MZUNIREC)

Ref No: MZUNIREC/DOR/22/10

28/03/22

Asher Nkhata,
Mzuzu University,
P/Bag 201,
Mzuzu.
Email: ashacleva@gmail.com

Dear Mr. Nkhata,

RESEARCH ETHICS AND REGULATORY APPROVAL AND PERMIT FOR PROTOCOL REF NO: MZUNIREC/DOR/22/10: GEOGRAPHY TEACHING AS A TOOL FOR ENHANCING VALUES EDUCATION: A CASE OF PROMOTING SUSTAINABLE DEVELOPMENT VALUES IN SELECTED SECONDARY SCHOOLS IN NED

Having satisfied all the relevant ethical and regulatory requirements, I am pleased to inform you that the above referred research protocol has officially been approved. You are now permitted to proceed with its implementation. Should there be any amendments to the approved protocol in the course of implementing it, you shall be required to seek approval of such amendments before implementation of the same.

This approval is valid for one year from the date of issuance of this approval. If the study goes beyond one year, an annual approval for continuation shall be required to be sought from the Mzuzu University Research Ethics Committee (MZUNIREC) in a format that is available at the Secretariat. Once the study is finalised, you are required to furnish the Committee with a final report of the study. The Committee reserves the right to carry out compliance inspection of this approved protocol at any time as may be deemed by it. As such, you are expected to properly maintain all study documents including consent forms.

Committee Address:

Secretariat, Mzuzu University Research Ethics Committee, P/Bag 201, Luwingu, Mzuzu 2; E-mail address: mzunirec@mzuni.ac.mw

Wishing you a successful implementation of your study.

Yours Sincerely,



Gift Mbwele

MZUZU UNIVERSITY RESEARCH ETHICS ADMINISTRATOR

For: CHAIRMAN OF MZUNIREC

APPENDIX I: LETTER OF INTRODUCTION FROM MZUNI



MZUZU UNIVERSITY

Department of Teaching, Learning and
Curriculum Studies

Mzuzu University
Private Bag 201
L u w i n g a
M z u z u 2
M A L A W I

Tel: (265) 01 320 575/722
Fax: (265) 01 320 568
mdolo.mm@mzuni.ac.mw

29th March 2022

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

LETTER OF INTRODUCTION: MR ASHER NKHATA

Mr Asher Nkhata is a registered Master of Education (Teacher Education) Program student at Mzuzu University. He has been cleared by the Mzuzu University Research Ethics Committee (MZUNIREC) to collect data for the research study he is conducting as a requirement for the program.

Kindly assist him accordingly.

Yours faithfully,

Dr Margaret M. Mdolo
Program Coordinator

APPENDIX J: LETTER OF INTRODUCTION FOR EDUCATIONAL DIVISION MANAGER



From: Mr. Asher K.C. Nkhata, Mzuzu University, Private Bag 201, Luwinga, Mzuzu 2

To: Educational Division Manager (NED), P. O. Box 133, Mzuzu.

RE: LETTER OF INTRODUCTION

I am Asher K.C. Nkhata a post graduate student at Mzuzu University pursuing master's degree in education (Teacher Education). I am currently a holder of bachelor's degree of education (BED).

I want to conduct an Educational research study on the topic *Geography Teaching as a Tool for Enhancing Values Education: A Case of Promoting Sustainable Development Values in Selected Secondary Schools in NED.*

During my study, I intend to involve Geography teachers and students as research participants. The participation in this research project is voluntary, confidential and rights of all participants will be highly protected.

I will appreciate your time you will put aside to support and guide me in this important project.

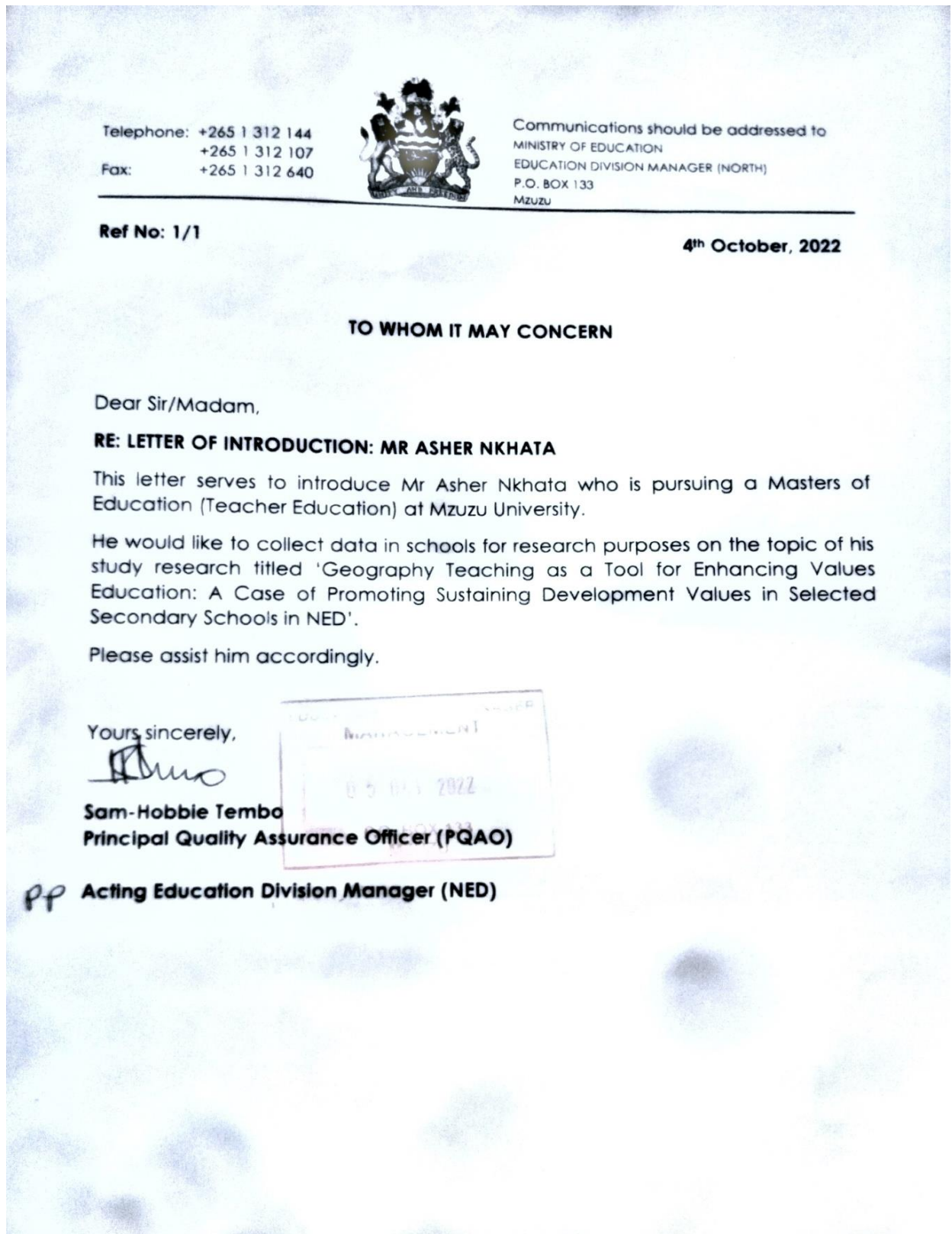
Yours sincerely,



ASHER NKHATA.

APPENDIX K: LETTER OF INTRODUCTION FROM EDUCATIONAL DIVISION MANAGER

(NED)



APPENDIX L: LETTER OF INTRODUCTION FOR HEAD TEACHERS



From: Mr. Asher K.C. Nkhata, Mzuzu University, Private Bag 201, Luwinga, Mzuzu 2

To: The Head Teacher

RE: LETTER OF INTRODUCTION

I am Asher K.C. Nkhata a post graduate student at Mzuzu University pursuing master's degree in education (Teacher Education).

I want to conduct a research study of a Master of Education in Teacher Education on the topic *Geography Teaching as a Tool for Enhancing Values Education: A Case of Promoting Sustainable Development Values in Selected Secondary Schools in NED*. During my study, I intend to involve Geography teachers as research participants. I would like to work with Geography teachers from your school, from both junior section and senior section and one from both gender if possible. Therefore, I wish you to assist me identify them. The participation in this research project is voluntary and confidential.

I will appreciate your cooperation and time you will put aside to support me in this important project.

Yours sincerely,



ASHER NKHATA.

APPENDIX M: LETTER OF INTRODUCTION FOR FORMER GEOGRAPHY STUDENTS



From: Mr. Asher K.C. Nkhata, Mzuzu University, Private Bag 201, Luwinga, Mzuzu 2.

To: The Former Geography Student

RE: LETTER OF INTRODUCTION

I am Asher K.C. Nkhata a post graduate student at Mzuzu University pursuing master's degree in education (Teacher Education).

I want to conduct a research study of a Master of Education in Teacher Education on the topic *Geography Teaching as a Tool for Enhancing Values Education: A Case of Promoting Sustainable Development Values in Selected Secondary Schools in NED*. During my study, I intend to involve former Geography students in various Geography related fields as research participants. Therefore, I wish you to assist me identify them. The participation in this research project is voluntary and confidential.

I will appreciate your cooperation and time you will put aside to support me in this important project.

Yours sincerely,



ASHER NKHATA.

APPENDIX N: CONSENT FORM FOR PARTICIPATION IN A RESEARCH



CONSENT FORM FOR PARTICIPATION IN A RESEARCH

Dear Sir/Madam,

I want to request for your participation in this research project which is voluntary and confidential. You will not be asked to reveal any information that will allow your identity to be established. If you are willing to participate in this study, please sign this letter as a declaration of your consent. Under no circumstances will the identity of participants be made known to others except me and my supervisor.

The research I want to conduct forms part of a Master of Education in Teacher Education. The study is entitled: **Geography Teaching as a Tool for Enhancing Values Education: A Case of Promoting Sustainable Development Values in Selected Secondary Schools in NED**

I appreciate your cooperation and time you have put aside to support me in this important project.

Yours sincerely,

ASHER NKHATA

Participant's signature: Date:

Researcher's signature: Date: