DEDICATION

I dedicate this dissertation to my father and mother, rison Zikanika Gundamwala Phiri and Bernadette Kapanda Tembo Phiri.
ACKNOWLEDGEMENTS

This dissertation would not have been possible without the support of so many people. My heartfelt gratitude goes to Dr. Charles Mwendabai Namafe, my supervisor and mentor, for the support, guidance and encouragement. Many thanks also go to Mr. Bernard Chileshe, Mrs. Moonga and my colleagues-Christopher Kamocha, Mafupa Banda, Manoah Muchanga, Kaiko Mubita, Lillian Chipatu, Matildah Nakazwe, Lukonde Chileshe, Pauline Monde and the rest of my programme mates for their constant encouragement. Appreciation also goes to Ms Regina Chimba for helping to edit my work. Finally, I acknowledge God, my parents – Harrison Zikanika Phiri and Bernadette Kapanda Phiri; without whom I wouldn’t exist, and my siblings – Emerensiana, Misozi, Dalitso, Innocent and Anne-marie for being there for me through and through. To all these, and those whose names I might have inadvertently forgotten to mention, I am truly indebted.
TABLE OF CONTENTS

Cover page.................................i
Notice of Copyright..........................ii
Declaration..................................i
Certificate of Approval............................iii
Dedication..................................iv
Acknowledgement................................v
List of Figures................................ix
List of Tables...................................x
List of Appendices...............................xi
List of Acronyms................................xii
Abstract.......................................xiv

CHAPTER ONE: INTRODUCTION TO STUDY........................................1
1.1 Background.................................................................1
1.2 Statement of the Problem..................................................4
1.3 Purpose of the study.........................................................5
1.4 Specific Research Objectives..............................................6
1.5 General Research Question.................................................6
1.6 Specific Research Questions...............................................7
1.7 Significance of study.......................................................7
1.8 Description of the Study Area..............................................8
1.9 Specific Location of Study Area..........................................10

CHAPTER TWO: LITERATURE REVIEW........................................12
2.1 Definition of ESD............................................................12
2.2 Genesis of ESD...............................................................14
2.3 Relevance of ESD to Society and Local Communities..................19
2.4 Why make High School Pupils’ the Target of ESD..........................21
2.5 Main Aim of Geography in Zambian high schools...........................25
2.6 Unique Relationship between Geography as a Subject and ESD............27
2.7 Case Studies of the Implementation of ESD Globally at high school level....29
2.8 Case Studies of the Implementation of ESD in Africa at high school level.....33
2.9 Case Studies of Implementation of ESD in Zambia at high school level........36
2.10 Summary of Literature Review................................................................. 40

CHAPTER THREE: METHODOLOGY.................................................................. 41

3.1 Study Design.................................................................................................. 41
3.2 Study Population............................................................................................ 42
3.3 Sampling Methods.......................................................................................... 43
  3.3.1 Cluster Sampling and Lottery Sampling.................................................. 43
  3.3.2 purposive Sampling Method and Lottery Sampling Method.................... 45
3.4 Methods of Secondary Data Collection........................................................ 46
3.5 Methods of Primary Data Collection.............................................................. 46
  3.4.1 Questionnaires......................................................................................... 47
  3.4.2 Focus Group Discussions......................................................................... 47
3.6 Data Processing and Analysis......................................................................... 48
3.7 Test of Validity.............................................................................................. 49
3.8 Limitations..................................................................................................... 49

CHAPTER FOUR: RESEARCH FINDINGS.......................................................... 50

4.1 Characteristics of pupil respondents.............................................................. 50
4.2 Potential Contribution of ESD to Geography................................................ 52
4.3 Pupils’ Attitudes to Geography...................................................................... 61
4.4 Areas of Possible Improvement in Geography............................................... 69
4.5 Characteristics of the Geography Heads of Section....................................... 71
4.6 Section Heads’ Feedback on Potential Contribution of ESD to Geography.... 72
4.7 Section Heads’ Feedback on Attitudes of Pupils towards Geography............ 74
4.8 Section Heads’ Areas of Potential Improvement in Geography...................... 80
4.9 Feedback from Geography C.D.C specialist.................................................. 83

CHAPTER FIVE: DISCUSSION OF FINDINGS................................................... 87

5.1 Areas in Geography to which ESD can make a contribution.......................... 87
5.2 Attitude of Pupils towards Geography.......................................................... 100
5.3 Areas in Geography that need Improvement................................................ 109
5.4 The Significance of Targeting the Youth in High School............................... 118
5.5 Extent to which Research Questions were addressed by the Study ..................120

CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS ..................................123

6.1 Conclusion ........................................................................................................123

6.2 Recommendations ............................................................................................130

6.3 Future Research .................................................................................................133

References ..............................................................................................................134

Appendices ..............................................................................................................137
LIST OF FIGURES

Figure 1. Map of the location of Lusaka District in Lusaka Province.........................9

Figure 2. Map of Lusaka City Showing the Schools Sampled for Study..........................11

Figure 3. Age Group of Respondents from Selected High Schools of Lusaka City..............52

Figure 4. Contribution of Geography to Pupils’ Needs..............................................53

Figure 5. Influence of Geography on Pupils’ Perceptions of their Cultures and Tribes........55

Figure 6. Contribution of Geography to Pupils’ Opportunities to Learn from their Grandparents and Parents.................................................................57

Figure 7. Influence of Geography on Pupils’ Personal Hygiene and Health.....................58

Figure 8. Involvement of Outdoor Activities in the Learning of Geography.....................59

Figure 9. Importance of Field Projects to Geography..................................................60

Figure 10. Contribution of Geography to Pupils’ Career Prospects.............................62

Figure 11. Pupils’ Modes of Choosing Geography as a Subject....................................64

Figure 12. Pupils’ Sources of Environmental Information...........................................65

Figure 13. Number of Times the Pupils went for a Field Trip in the Three Years of their High School.................................................................67

Figure 14. Use of Role-Play Teaching Method during Geography Lessons...................68

Figure 15. Coverage of Geography Syllabus before Examinations..............................70

Figure 16. Section Heads’ Distribution by Gender.........................................................72

Figure 17. Section Heads’ Awareness of ESD ..............................................................74

Figure 18. Performance of Grade 12 Pupils in Geography Final Examinations...............77

Figure 19. Attitude of Pupils towards Geography Field Projects...................................78

Figure 20. Modes of Selection of Topics for Field Projects..........................................79

Figure 21. Role of Field Projects in the Localization of Geography..............................81

Figure 22. Coverage of Geography Syllabus in High School.......................................82
LIST OF TABLES

Table 1. Details of the Study Population and Stratum................................................................. 42
Table 2. Schools Selected for Study.................................................................................................. 44
Table 3. Gender of Pupils’ in the Research Sample................................................................. 51
Table 4. Status of Geography syllabus in Relationship to the Local Environment of the Pupils....54
Table 5. Frequency and Percentages reflecting Choices of Geography as a Classroom Subject....63
Table 6. Influence of Geography on Pupils’ Perception on Sexual Education..............................64
Table 7. School Grade in which Work on Field Project Begun.....................................................71
Table 8. Teaching Methods most Preferred by Pupils.................................................................75
Table 9. Attitude of Pupils towards Geography as a Subject.........................................................80
LIST OF APPENDICES

1. Questionnaire for Grade 12 Pupils..................................................137

2. Questionnaire for Heads of Section..................................................141

3. Questionnaire for CDC geography Specialist..................................144

4. Group Discussion Guide for Grade 12 Pupils.................................147

5. Introductory Letter from Permanent Secretary for Ministry of Education.....149
## LIST OF ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
</tr>
<tr>
<td>APU</td>
<td>Afternoon Production Unit</td>
</tr>
<tr>
<td>ASPnet</td>
<td>Associated Schools Project Network</td>
</tr>
<tr>
<td>CDC</td>
<td>Curriculum Development Centre</td>
</tr>
<tr>
<td>CSO</td>
<td>Central Statistical Office</td>
</tr>
<tr>
<td>DESD</td>
<td>Decade of Education for Sustainable Development</td>
</tr>
<tr>
<td>EE</td>
<td>Environmental Education</td>
</tr>
<tr>
<td>EPD</td>
<td>Environment and Population Education and Information for Human Development</td>
</tr>
<tr>
<td>EPPCA</td>
<td>Environmental Protection Pollution Control Act</td>
</tr>
<tr>
<td>ESD</td>
<td>Education for Sustainable Development</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
</tr>
<tr>
<td>IEEP</td>
<td>International Environmental Education Programme</td>
</tr>
<tr>
<td>LCC</td>
<td>Lusaka City Council</td>
</tr>
<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>MoE</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td>SADC</td>
<td>Southern Africa Development Community</td>
</tr>
<tr>
<td><strong>SADC REEP</strong></td>
<td>Southern Africa Development Community Regional Environmental Education Programme</td>
</tr>
<tr>
<td>SD</td>
<td>Sustainable Development</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNCED</td>
<td>United Nations Conference on Environment and Development</td>
</tr>
<tr>
<td>UNDESD</td>
<td>United Nations Decade for Education for Sustainable Development</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environmental Programme</td>
</tr>
</tbody>
</table>
**UNESCO** - United Nations Educational, Scientific and Cultural Organisation

**UNZA** - University of Zambia

**WCED** - World Commission on Environment and Development

**WSSD** - World Summit Sustainable Development

**ZAWA** - Zambia Wildlife Authority
ABSTRACT

Education for Sustainable Development (ESD) is a new approach to education that seeks to balance human economic well-being with cultural traditions and respect for the earth’s natural resources. Five years into the United Nations decade of Education for Sustainable Development (2005-2014), this approach to education is yet to be fully implemented at high school level in Zambia. Geography is one of the subjects offered in all Zambian high schools and this study, therefore, aimed to ascertain the relevance of ESD to Zambian high school geography.

The study sought to determine the aspects of geography that are compatible with ESD, to ascertain the attitude of high school geography pupils towards geography and determine ways in which the geography syllabus could be improved vis-à-vis the need for pupils to be empowered to thrive in their local environments.

The study’s research design was a normative or descriptive survey. This research design had both quantitative and qualitative aspects. It captured the views and experiences of respondents from which quantitative and qualitative data was derived. The Statistical Package for Social Scientists and Microsoft Excel were used to process the field data. The study used the cluster, purposive and random sampling methods to select its respondents. It focused on high schools of Lusaka City in Lusaka Province of Zambia.

To gather primary information, questionnaires were prepared for pupils, geography heads of section and the geography curriculum development specalist respectively. Focus group discussions were also conducted to gather data from pupils that may not have been captured by the questionnaires that were issued.

The study established that geography as a subject was appropriate for ESD incorporation because of its unique ability to amalgamate aspects of the social sciences and natural sciences. It offered numerous linkages to ESD through its social, economic and biophysical facets. The study found that ESD could make a contribution to geography in the areas of field projects, personal hygiene and health, sex education, inter-generational transmission of knowledge, use of indigenous knowledge and localization of the geography syllabus. In relation to the dominance of foreign topics at the expense of local topics, the study established that the geography syllabus is still influenced by western inclinations and perspectives which have been part of the education system since the pre-independence colonial times and early post independence era. The study found that though pupils were interested in geography, as reflected by the general performance of pupils in examinations, negative attitudes, nonetheless, existed towards geography because of its detachment from pupils’ personal environments, excessive use of teacher-centred teaching methods and the bulky nature of the syllabus. It disclosed that interest alone could not compensate for positive attitudes which are motivated by sustainable behaviour.

The study further established that the predominant teaching methods which were used at the time of the study in the year 2010, were the lecture as well as question and answer methods in which the bulk of questions were asked by the teachers and not the pupils. These teacher-centred methods were used at the expense of recommended pupil-centred methods such as field trips, debates and role-play. The study also established that the inclusion of more Zambian topics into the revised geography syllabus in the year 2000 did not suffice as a way of localizing the syllabus. This was so because the topics were not directly attached to the
pupils’ local environment and daily experiences and the content of geography dealt with the content of geography in a superficial, detached and generalized manner.

In view of such findings, the following recommendations arose from the study: geography requires the use of more pupil-centred methods to inculcate positive values and attitudes. The role of field projects, the role-play teaching method and other pupil-centred teaching methods as tools for bringing pupils closer to their local environment and empowering them with relevant skills and knowledge has to be revisited to make it possible for such methods to play a greater role in the delivery of geography content. Field projects have to be more grounded directly into the local realities of pupils, knowledge oriented and skill oriented instead of being largely examination oriented. Examinations must incorporate creative ways of examining ESD related aspects which are relevant to pupils’ local experiences and environments. The geography syllabus has to be made leaner for easy overage. The syllabus’ localization should include inter-generational learning as a key component. Aspects of personal hygiene, sex and moral education should be added to the syllabus so that pupils are empowered to face the daily emerging challenges of the world we live in, such as HIV and AIDS, Malaria, Cholera and Climate Change. Geography should offer an opportunity for pupils to deal comprehensively with major problems such as the HIV and AIDS pandemic that is devastating our local communities.

The following areas were found to have potential for future research:
   a) Need to ascertain how ESD could be incorporated into the Zambian high school curriculum through geography.
   b) Incorporation of ESD into pupils’ learning experiences at high school, basic, primary and kindergarten levels.