EVALUATION OF THE IMPLEMENTATION OF THE NEW ZAMBIAN HIGH SCHOOL GEOGRAPHY SYLLABUS IN RURAL HIGH SCHOOLS– THE CASE OF MKUSHI DISTRICT, ZAMBIA.

By

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DECLARATION

I, Habowa Godwin Muleya, declare that this work is my original work and that it has never been submitted to the University of Zambia or any other university for the award of a Master of Education (M. Ed) degree in Geography Education before. All sources of data and literature on related works previously done by others, used in the production of this dissertation have been dully acknowledged. If any omission has been made, it is only because to error is human.

Signature: ----------

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APPROVAL

The University of Zambia approves this dissertation of HABOWA GODWIN MULEYA as fulfilling part of the requirement for the award of the degree of Master of Education in Geography Education.

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Signed..... Date.....

ABSTRACT

In the year 2000 the Zambian Ministry of Education, through its Curriculum Development Centre, published and implemented the New Zambian High School Geography Syllabus. This new syllabus was necessitated by the need to improve the quality of education at High School level as stipulated in the National Policy on Education document called " Educating Our Future", (Ministry of Education, 1996).

This study was aimed at evaluating the implementation of the New Zambian High School Geography Syllabus in three rural- based high schools found in Mkushi district of Zambia. The study sought to investigate views and experiences of Geography teachers in the three high schools who taught the new syllabus and prepared the first shoot of grade twelve candidates for their 2004 final SC/GCE geography examinations. Through this study, it was hoped that common methods employed by teachers at that time would be established as a way of displaying them for some critical evaluation with respect to achievement of the stated objectives of the new syllabus and the National Policy on education. The study further aimed at bringing out the practical challenges encountered by teachers in the course of implementing this new syllabus. This study also sought to find out from the rural based high school geography teachers their perceptions about the new syllabus, in general, and about the geography field project component, in particular. Finally, the study sought to solicit suggestions from the teacher respondents regarding the kind of teaching /learning resources and in- service professional training they would require if they were to effectively teach the new syllabus.

In order to achieve the above stated aims and objectives, ten purposefully sampled geography teachers drawn from three high schools of Mkushi district formed part of the study sample. In addition, thirty-five grade twelve pupils from these three high schools were picked as respondents. A stratified random sampling method was used to arrive at the sampling frame from which a final study sample of 35 pupils was picked using the pick-a-lot random sampling method. From each school, the Head teacher or Deputy Head teacher, as well as one Head of Department (HOD) and one Head of Geography Section were interviewed. The total study sample was 54 beside the key informants from the Curriculum Development Centre (CDC), Examinations Council of Zambia (ECZ) and Dons from the University of Zambia (UNZA) department of Language and Social Sciences Education (LSSE), geography section.
Primary information was gathered using separate questionnaires for each of the three groups of respondents namely teachers, pupils and key informants. A Semi-structured interview schedule was used for Head teacher/ Deputy Head teachers and HODs. Questionnaires had open-ended and few closed items, the latter were mostly capturing the Biodata of respondents. In addition, a non- participatory observation method was used to collect information.

A qualitative research methodology capturing views and experiences of respondents was employed to gather data while a content analysis method was used to analyse the collected data, which was put under major themes. To some limited extent, the number of responses were presented quantitatively by using percentages, graphs or charts.

The study found out that geography teachers from the three high schools of Mkushi district experienced a wide range of challenges in the course of implementing the new syllabus. Teachers were not consulted or oriented about the changes to the syllabus, a factor that could have impeded the attainment of the type of learner and ideals stipulated in "Educating Our Future" (MOE 1996) as well as the goals of high school education in Zambia.

With regard to the type of teaching / learning materials used, this study established that teachers had problems of sourcing or innovating alternative sources of material in the absence of a prescribed textbook. It became apparent that teachers relied heavily on the use of textbooks for their teaching as a major source of information and as a teaching method. Few pedagogical methods beyond those dictated by the textbook were in use. The teaching and learning of geography was discovered to be still examination-oriented aimed at ensuring that pupils passed their final examinations. The use of the questioning method as a possible driving force to the attainment of the ideals of "Educating Our Future" was not explored.

This study also established that the field project component of the geography syllabus posed serious problems to both teachers and pupils. The majority of the teacher respondents (one hundred percent) expressed the need to have an accredited in-service training in various aspects of the subject, in general, and in particular, on the field project component with its various dimensions. This study brought out the various challenges and opportunities that the implementation of the new syllabus had introduced to high school geography in Zambia and, more especially, to the rural based high schools of Mkushi District.

Arising from the findings of this study, various recommendations for consideration have been advanced as possible panacea to the challenges encountered in the course of implementing the new high school geography syllabus in Zambia.

To my HELPMATE ROZINA, and our dear children - Chipo, Chebelo and Alintula. I love you and to you Iam greatly indebted. May the Almighty Lord God bless you. Thanks for your prayers and immeasurable sacrifice.

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To you all, and those significant others that I may have unintentionally not mentioned by name, I am greatly indebted and may the good Lord abundantly bless you and supply all your needs according to his riches in glory by Christ Jesus, (Philippians 4:19).

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MEANINGS OF ACRONYMS USED:

AIDS.....Acquired Immune Deficiency syndrome

CA.....Continuous Assessment

CSO.....Central Statistics Office

CDC.....Curriculum Development Centre

COMESA.....Common Market for Eastern and Southern Africa

CPD.....Continuous Professional Development

DEC.....Development Education Centre Birmingham

DFID.....Department for International Development

DRC..... Democratic Republic of Congo

DSA.....District Situation Analysis

ECZ.....Environmental Council of Zambia

ECZ.....Examinations Council of Zambia

ERIP.....Educational Reform Implementation Project

ESD.....Education for Sustainable Development

GCE .....General Certificate of Education

HIPC.....Highly Indebted Poor Country

HIV.....Human Immunodeficiency Virus

HOD.....Head of Department

IGU.....International Geographical Union

INSET.....In Service Training

LSSE.....Language and Social Sciences Education

MENR .....Ministry of Environment and Natural Resources

MGEYS .....Ministry of General Education Youth and Sport

MLA.....Monitoring of Learning Achievement

MOE.....Ministry of Education

'O' Level....Ordinary level

PAF.....Peoples' Action Forum

SACMEQ...Southern African Consortium for Monitoring Educational Quality

SADC..... Southern African Development Community

SC.....School Certificate

SICO.....Short Intensive Courses

UK.....United Kingdom

UN.....United Nations

UNESCO...United Nations Educational Scientific and Cultural Organization

UNZA.....University of Zambia

ZGA..... Zambia Geographical Association

PREFACE

Mkushi district with a population of about 105,248 [Central Statistics Office (CSO) 2000, and Mkushi District Situation Analysis (DSA) 2004] is one of the six districts in the Central Province of Zambia. It is located 300km from Lusaka, the capital city of Zambia and lies at latitude 13.36S and at longitude 29.24E (Ntalasha, 2005). The district shares an international boundary with the Democratic Republic of Congo (DRC). Mkushi district also shares boundaries with Kapirimposhi on the west, Serenje on the North East, Masaiti to the North and Chongwe and Nyimba to the South East.

Mkushi District has three high schools, namely:

i) Mkushi High School, located approximately 2.5km from the Boma and the Central Business District (CBD).

ii) Mkushi Coppermines High School, which is located approximately 70km from the Boma and

iii) Chalata High School, which is located 32km from the Boma.

All these three high schools are co-education schools. The largest of these is Mkushi High School, which has an enrolment of 994 pupils (Term III-2005 Mkushi High School Enrolment Figures). It is the biggest boarding School in the district. According to the enrolment figures obtained from the Mkushi District Situational Analysis (DSA), Education sector (2005), Mkushi Coppermines High School has a total enrolment of 437 pupils, while Chalata High School has a total enrolment of 211 pupils.

These three high schools are found in a district characterized by commercial farming-the Mkushi farming block.

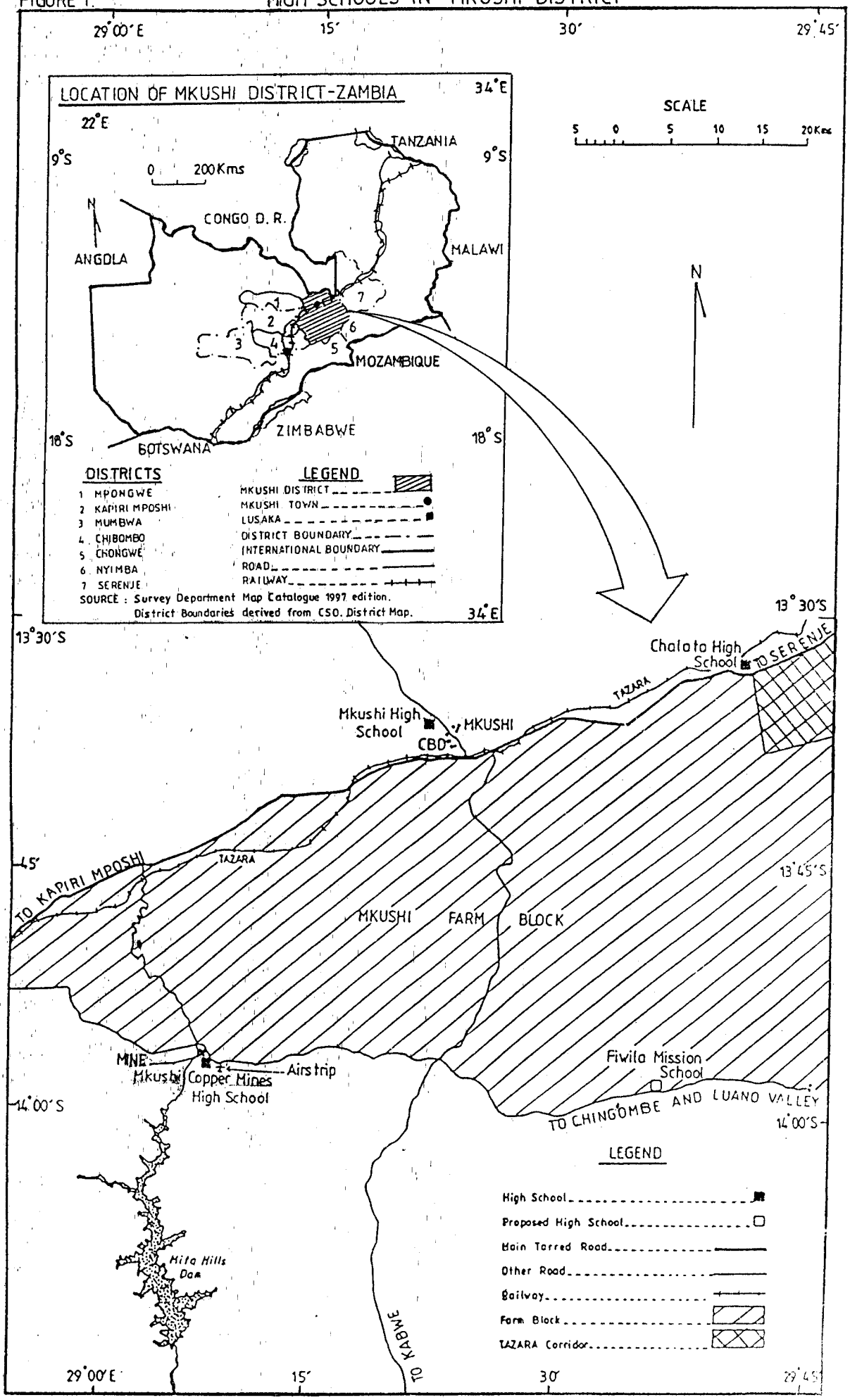
The physical location of the three high schools lies between latitudes 13.30S and 14.00S, and Longitude 29.00E and 29.45E. Figure.1 shows the location of Mkushi district in Zambia and High Schools of Mkushi District.

The definition of a phenomenon that may be considered 'rural' is a matter of great

debate depending, for example, on a range of variables analysed by each researcher. In this study, Mkushi District is considered a 'rural district' primarily because it is in the countryside and the predominant occupation of the majority of the population is agriculture or farming, as illustrated by Figure 1. Secondly, the high schools located in this district are located in an agricultural district with poor provision of commercial, social and educational services as argued by Isobel Robertson (1961) who was cited in Clout (1972 p. 47). The area is also generally remote.

It is against this background of the perceived poor provision of educational services that were rendered to the High Schools of Mkushi District that the researcher chose this district as a study area. Other reasons for the choice of this district as a study area are dealt with in Chapter five.

FIGURE 1. HIGH SCHOOLS IN MKUSHI DISTRICT



SOURCE : 1:250,000 Topographical maps SD-35-8 and SD-35-12 ZS 31 EDITION 1

CHAPTER ONE – INTRODUCTION

1.1 Background

In the year 2000, and after a period of nearly two decades (18years), the Zambian Government through the Ministry of Education (MOE) and the Curriculum Development Centre (CDC) saw it fit to change the then existing senior School Certificate and General Certificate of Education (SC/GCE) Geography syllabus. Prior to this change, Zambian high schools offering Geography used to follow a Geography syllabus which was partly regional in nature, covering North America (the United States and Canada) and Central Africa focusing on Zambia, Malawi and Zimbabwe plus general topics from any other country in Africa. The old syllabus had topics that were regarded to be abstract to pupils, such as glaciation and coral reefs, because these topics were not experienced in Central African countries.

The Ministry of Education through its agency, the CDC, and the Examinations Council of Zambia (ECZ) embarked on drafting a new syllabus that was perceived to be relevant to the Zambian context. The new syllabus had new components which, it was hoped, would be challenging to both teachers and pupils. The new components included, among other topics, the compulsory fieldwork component, the Common Market for Eastern and Southern Africa (COMESA) and Southern African Development Community (SADC) member states such as Kenya, Congo DR, Angola and South Africa as well as the Geography of Africa south of the Sahara, which previously were not taught. In the desire to improve the quality of education as stipulated in the National Educational Policy document-"Educating our future" (MOE, 1996), the new syllabus also addressed contemporary issues of Environmental Education, Gender and Equity, Healthy Education and HIV/AIDS, Family life, Human Rights, Democracy, Reproductive health, Population Education, entrepreneurship and values education.

The change from the old to a new syllabus required the input of all key stakeholders, such as teachers, who are the implementers of syllabi. However, as Chondoka et al (1999) observed, the formation and dissemination of the school curriculum in Zambia,

including that of geography, has all along been highly centralized from the top to the bottom. The change of syllabus also required the re-orientation of the teachers' initial training to enable them to handle the new and, hopefully, challenging components of the introduced syllabus effectively.

Furthermore, a standard prescribed textbook and other teaching-learning materials needed to be provided to schools as the new syllabi were being delivered to schools. At the time of compiling this report in early 2005, the modalities of assessment might still not have been clearly understood and implemented correctly by some teachers handling the new high school geography syllabus.

1.2 Statement of the Problem

From the year 2002, the new high school Geography syllabus had been taught in the high schools of Zambia. Up to early 2005, there was inadequate documented information regarding experiences of Geography teachers from rural high schools about the manner in which the new Geography syllabus was being implemented. So far, there had been no studies undertaken to critically evaluate the impact which the new syllabus had on various actors, especially studies aimed at capturing the rural teachers' views and experiences on such a change at the critical moment of shepherding a grade 12 pupils towards their 2004 final examination. The first cohort of pupils to sit for the final examination under the new high school geography syllabus was the 2004 group. The lack of a study to capture the practical experiences encountered by teachers from 2002 to 2004, being formative years of the new syllabus, deprived various interested people of some valuable information regarding the possible lessons arising from teachers implementing the new syllabus. The present study, therefore, was meant to address this issue.

1.3 Research Questions

The general problem noted above was tackled by addressing the following specific research questions:-

i. What were the various experiences of rural high school geography teachers who taught the new syllabus and prepared pupils for their final examinations in Geography in the year 2004?

ii. What did the rural-based High School Geography teachers of Mkushi district consider to be the major constraints to teaching the newly introduced Geography syllabus?

iii. What did rural high school Geography teachers view as the best ways of teaching the new high school geography syllabus?

iv. What type of teaching-learning resources and in-service training were required for such rural teachers to enable them effectively and competently teach the new components of the syllabus so as to adequately prepare grade 12 pupils for their future examinations?

1.4 General Objective of this Study

The objective of this study was to evaluate the implementation of the new Zambian high school geography syllabus in rural-based high schools found in Mkushi district of Zambia by documenting Geography teachers' views, experiences and challenges faced when teaching and preparing pupils for their 2004 final examinations as well as the views and opinions of the pupils concerned.

1.4.1 Specific Objectives

i. to investigate the views and experiences of teachers who taught the new High School geography syllabus in Zambia's Mkushi district and prepared pupils for their final 2004 examinations.

ii. To seek information on constraints they faced when implementing the new high school geography syllabus.

iii. to find out from the rural-based Geography teachers their desired teaching-learning resources, and professional in-service training.

iv. to determine kinds of teaching methods used by teachers when teaching the new high school geography.

v. to assess Geography teachers' opinions and perceptions about the field project component of the new high school geography syllabus.

1.5 Significance of the Study

It is hoped that this study will provide information on the state of the teaching and learning of the new high school geography syllabus in rural high schools and suggest improvements on the same if need be. Such areas include deciding which aspect of the new syllabus could, and should be improved, as well as the development and evaluation of teaching methods and materials used in schools. This point emphasizes the idea that geography curriculum development is an ongoing process because even the new syllabus will require some revision in order to improve it further.

This study may provide a means for geography teachers to contribute to the development and evaluation of teaching programmes, processes and resources by expressing their 'voice' as teachers implementing the syllabus. In the past, centralized curriculum development paid little, if any, attention to the input of teachers.

The study might also provide data about the real training needs of rural-based geography teachers. Such information may be useful to the Management staff and Lecturers of the various Colleges of Education and the Ministry of Education officials so that they can design strategic in-service Geography teachers' orientation courses based on the views expressed by the teachers.

For Policy makers and Administration, this study may help in the revision of individual school curricula, assessing the availability and/or lack of, or obsoleteness of teaching-learning materials. Based on the pupils' views about the new syllabus, the study may ultimately enhance better pupil learning in future and contribute towards the liking of the subject by pupils. The data may also contribute to quality performance by pupils in their final examinations.

1.6 Operational Definitions of Key Terms

a. A *high school Geography teacher* is one assigned to teach grades 10 to 12 Geography classes whether or not one is a Certificate, Diploma or Degree holder. By regulation, however, grade 10-12 classes are ordinarily supposed to be handled by degree holders only but usually this is not the case in reality

b. A *rural based high school* in this study refers to a high school located in an area which has a relatively small population of less than 100 thousand inhabitants and whose dominant occupation is farming.

c. *Evaluation* is the collection and analysis of data for the purpose of making an informed decision over a number of areas such as course improvement, administrative regulation, and assessing individual pupils' learning. Evaluation in this dissertation incorporates both a goal-based and goal-free evaluation as defined below:-

   A *Goal based evaluation* focuses entirely on the extent to which the geography syllabus has or has not achieved its stated goals, aims and objectives.

   A *Goal free evaluation* views the new geography syllabus/ curriculum as an educational or instructional treatment that attempts to gather data on likely consequences of that treatment irrespective of stated goals and objectives.

   A second aspect of Evaluation as used in this work relates to the examination of teaching-learning materials used, methods and other factors likely to have resulted in consequences or effects of teacher performance that were not intended or even considered by the initiators of the new geography syllabus. These unintended or undesirable outcomes are also called 'the side effects' of the implementation of the new high school Geography syllabus.

d. *Syllabus* refers to the New Zambian High School Geography subject topics which were introduced to, and implemented in, the Zambian high schools in the year 2002.

e. *Curriculum* is a locally or nationally drawn document concerned with transforming the content of a subject into a course of study. A curriculum takes into account all the complexities the total educational experience a learner is

exposed to in an institution of learning, whether they be planned or unplanned, both in and out of the classroom as well as beyond the school. These experiences come mainly from three sources viz;

i) The formal curriculum that is planned by the nation for example the geography curriculum
ii) The co-curricular activities, for example geography education tours and field project
iii) The 'hidden' curriculum that results from school elements as the manner in which teachers interact with each other, with the learners and the community.

In this study, the terms 'Syllabus' and 'Curriculum' have been used interchangeably although it is recognized that the terms differ.

1.7 Delimitation

The study was restricted to the evaluation of the constraints, views and experiences of Geography teachers in Mkushi District, which were encountered when teaching and preparing the first shoot of Grade Twelve pupils who followed the new Zambian Geography High School syllabus for their final 2004 SC/GCE geography examinations.

1.8 Limitations

The researcher was limited by financial constraints, which impeded a large-scale study of other rural and urban district high schools in the province or nation.

Secondly, the study was focused on only three high schools of the district. The results may, therefore, not be generalized to other rural or urban schools, though they (results) may be referred to for other comparative studies of a similar nature.

Thirdly, in some instances, there was resistance from the research respondents who were not willing to take part in the study or provide information without any personal gain. In order to ensure that the study sample was maintained, the researcher used the snowball method whereby the would-be respondents were requested to suggest other respondents from which, information was then gathered.

Fourthly, because the new syllabus was still in its early formative period of implementation, there were very limited documented sources of literature on the study topic, prompting the researcher to rely on personal communication and interviews with selected key informants, some of whom were often too busy with their official duties to spare time.

CHAPTER TWO- LITERATURE REVIEW

Various works have been undertaken to evaluate and review curricula in general at global, regional and national levels. The importance of course evaluation has been underscored by Posner and Rudnitsky (1986) who argued that to know how effective a course is, there is need to gather information and make subsequent decision making which in essence comprises an evaluation aimed at course improvement. In Zambia however, it has been observed by Namafe et al (2001) that there is in general, some paucity of latest documented 'geographical education' literature. This also applies to literature pertaining to the evaluation and implementation of high school geography syllabus aimed at capturing the views, opinions and experiences of the 'Gamesmanship of curriculum innovation', namely, the teachers. Experiences are required especially for teachers of rural areas, who implement the syllabus in order to meet the goals set by the elite, centrally located subject panel specialists at national level. The practice of involving teachers in curriculum decision-making was still quite new in Zambia during the time of writing this report.

Luangala et al (2002) cite several reported cases in literature which show how important it is to secure the consensus of teachers in order for curriculum reforms to succeed. Holmes and Mclean (1989) cite the following as examples of countries where curriculum reforms were slow and difficult due to strong resistance from teachers: England and Wales, France, the USA, the then USSR, Japan, China, India, and Latin American countries. In the case of England and Wales, the reform process had to be re-started in an attempt to take the teachers on board (Qualifications and Curriculum Authority: 1999). In Finland, teacher's lukewarm attitude to curricula reforms resulted in such curricula not being implemented (National Board of Education: 1996). Similar experiences could occur to Zambia if curriculum reforms are not taken with great caution.

In Zambia, there was one geography review project which reported some relatively wide consultation made with teachers and other stakeholders concerning the changes which

needed to be made to school geography curriculum (Namafe et al 2001). However, still within Zambia, Chondoka et al (1999) contended that the formulation, dissemination and implementation of new programmes, such as the current Zambian High School Geography Syllabus, still seem to be a big problem. They argue that this is partly because most of the role players, teachers in particular, are usually left out in the formulation of these programmes. Chondoka et al (1999) further observed that the formulation, design and dissemination of new programmes had all along been highly centralized (rigidly determined) with a one-way approach (top-down), which was behavioural objectives- oriented.

They also noted that subject syllabuses were prepared by subject committees (specialists) at the Curriculum Development Centre (CDC) Lusaka and were designated for countrywide use. A few teachers, mainly from Lusaka, Examinations Council of Zambia (ECZ) staff, School Inspectorate and some lecturers from Primary Teacher Training Colleges and School of Education, UNZA have recently started to participate in the said committees' curriculum activities. Once prepared, the curricula are disseminated from the centre to the periphery.

In short, Chondoka et.al (1999) concluded that most stakeholders did not participate in the design and formulation of the curriculum in Zambia. Regarding training to orient teachers with new changes to the curriculum, the above-cited authors stated that, to their knowledge, there were no such workshops organized nationwide to sensitize key role players regarding new changes to the syllabuses. These authors further observed that there were no textbooks or materials produced to match new syllabuses which teachers could use.

2.1. Antecedents to the current Syllabus

The genesis of the current high school geography syllabus can be traced back to the works of various players on the Zambian scene, who operated within the sub-field of Geography education rather than Geography per se. Such earlier works suggested revisions to the Zambian School Geography in one way or the other. However, it cannot be said that the new Zambian High School geography syllabus under discussion directly

drew elements from such early works. Its designers may not even have been aware of the existence of such early documents. Amongst the earliest was Phiri (1979) who undertook a study concerned with the way the new Zambian High School Geography could be reformed in order to meet the then Zambian society's aspirations. His monograph proposed a new senior geography syllabus and lesson activities, which would reflect the new education goals of the Zambian society. The syllabus which Phiri proposed, it was hoped, could have contributed to the social and economic development of Zambia. The approach he used deviated from the Cambridge university syllabus in two respects; firstly, he avoided listing elements of physical and human geography separately. The aim was to encourage the study of physical features, which relate to socio-economic factors as a unit rather than as separate entities. Secondly, he also avoided a regional approach and, instead, adopted a thematic approach whose main theme was "social and economic development and underdevelopment". Phiri further proposed teaching-learning activities for senior secondary school which included, amongst others, fieldwork activities- a component that is now compulsory in the current syllabus.

In his work on the development of a curriculum-planning model for the Zambian Secondary Schools, Mukoboto (1982) recommended a participatory approach to curriculum development. Such an approach would incorporate the views of teachers, pupils, curriculum specialists, policy makers and other stakeholders such as civil society, non-governmental organizations and employers.

A significant contribution to the introduction of the new high school geography syllabus is that made by Namafe (1986) who suggested various teaching and learning strategies appropriate to the Zambian experiences in the area of environmental education. His study argued for the incorporation of values education in geography curricular. His work focused on the vital role of water in environmental experiences related to the Lozi people of Western Zambia. The monograph brought up a topical issue on the perceptions of water and flooding as being either an 'enemy/ hazard', from the modern perspective such as that held by the Dutch, or flood as a 'friend' or 'resource' as held by the Lozi people of Western Zambia, depicting one of the traditional societies in Zambia.

One feature of any curriculum is its expression of the values and ideals of the society or community in which such a curriculum exists. In his articles entitled, 'Illustrating Values in Geography Education Through an Examination of Research' and ' Citizenship Education Through Secondary Geography: Values and Values Education in the Geography Curriculum in Relation to Concepts of Citizenship', Slater (1998) underscored the importance of incorporation of values in a geography curriculum. An examination of the new high school geography syllabus reveals that there has been an incorporation of aspects of values education, particularly in relation to the attitude of individuals or groups towards appreciation and respect for the environment. This, however, requires massive exploitation especially by the high school geography teachers who are teaching the new syllabus to ensure that this well-intended values education aspect of the new syllabus is translated into reality through, for instance, use of appropriate teaching /learning methodologies.

Between February and June 1986, the Zambian Ministry of General Education, Youth and Sport (MGEYS) geography inspectorate led by Bwalya and Father McGiven conducted a survey of 60 rural and urban schools in the country (Zambia). The general aim of that survey was to study the then existing teaching and examining of geography in secondary schools and identify constraints and issues affecting teacher effectiveness with a view to making recommendations for curriculum change (Bwalya 1989).

Amongst the various findings of the survey were that teachers selected the " geography of Zambia" as the most important part of the syllabus because it was relevant to the students' own environment. The survey also found out that closely related to the "geography of Zambia" was the "geography of the sub-region", namely, Southern and Central Africa. Teachers felt that teaching students about the countries in the region helped students to appreciate and understand problems faced by other people, for example, Zimbabwe, Malawi, Botswana and others (Bwalya 1989). The survey further showed that most of the students, according to the teachers interviewed, preferred

learning about Zambia, which they regarded as being the most important section of the syllabus.

There was, however, a felt need for re-organizing the then syllabus so as to adapt it to the local Zambian environment so that geography could become meaningful to the learner. The schools surveyed also felt that practical work in geography was worth teaching about although it was not examined at that time. The survey, thus, recommended that practical work (field work) in geography should be encouraged and examined. This would ensure that students were taught the basic skills of observation, recording and analysis of information in order for them to understand the spatial relationships of geographical phenomena (Bwalya 1989).

Following that survey report of 1986, the Geography Inspectorate of schools sent a circular number MGEYS/107/7/44 of 23rd January 1989 addressed to all head teachers of senior secondary schools, with special attention to the Heads of Departments (HODs) of geography. The circular had attached to it a copy of the proposed new Geography School Certificate/GCE 'O' level syllabus number 2218. That draft incorporated all the sampled teachers' and pupils' suggestions as reflected in the survey report cited above. The circular urged the HODs (geography) to study the draft syllabus and to send their comments and suggestions to the inspectorate before February, 1989 (MGEYS letter of 23rd January, 1989). The University of Zambia Geography Department, School of Education geography methods section, Nkrumah Teachers' College Geography Department, Zambia Geographical Association (ZGA), Curriculum Development Centre (CDC), a representative from schools and the Inspectorate of schools then met to make the final draft syllabus before presenting it to the Zambia Examinations Council (MGEYS 1989). For the descriptive outline of the draft syllabus produced at that time which, in every respect, is very much like the current syllabus under investigation, refer to appendix 2.

Since the 1990 World Conference on Education for All held at Jomtien, there has been a continued pursuit for quality and relevant curriculum (MOE 1992). As regards senior

geography in Zambia, after the production of the draft syllabus shown in appendix 2, the various stakeholders cited earlier met to produce the final copy which was ready by 1992/1993. In the meantime, in 1992, a curriculum review meeting co-ordinated by Father McGiven from the MOE inspectorate and members of staff from the University of Zambia (UNZA) School of Education, namely, Charles Namafe and Richard Simukoko, and other stakeholders was held. Nothing much of substance to the current, new syllabus came out of this meeting.

Much later in the year 2000, a Higher Education Academic link project to review Zambia's school geography was initiated. This parallel project was not connected to earlier curricula review efforts. The initiator of the project in Zambia and its link coordinator was Dr. Charles Namafe of the school of Education, UNZA. Other linked partners were the Institute of Education, University of London where Dr. Frances Slater was the link coordinator for the United Kingdom. At the Curriculum Development Centre, various participants included the then Director G. Sililo and Beatrice Chimpandu. The Examinations Council of Zambia was represented by George Solami. This academic link was supported by the Department For International Development (DFID) through the British Council. The project produced the "Needs Assessment Report on the Review of Zambia's School Geography Curriculum", (Namafe et al 2001). It was the first of its kind in the area of Geography Education in Zambia, and remains a valuable document to date, although it was not published. This detailed study, which covered various aspects of both the Junior and High school Geography, was conducted by Dr. Charles Namafe and Richard Simukoko both from the University of Zambia School of Education, Department of Language and Social Sciences Education (LSSE) Geography section, and Beatrice Chimpandu from the CDC Lusaka.

Another very valuable product of this link-project was the publication of a monograph by Namafe (2005) entitled "Integrating Development–Environment Issues: Proposed Improvement to the Zambian Basic School Geography Curriculum (Grade 8-9)". This work presents thought-provoking Grade 8-9 learner-centered teaching approach to geography focused on the theme of water from various perspectives aimed at examining

development-environment issues such as the local, national as well as regional and global dimensions. The work also presents the use of enquiry approach in the teaching of geography. Ideas from this monologue could be grafted for use at the high school geography level

In the needs assessment study cited earlier, three questionnaires were used, that is, one for pupils, one for teachers and the other one for various key stakeholders of school Geography. Amongst the findings of this study were that there was need for in-service training of geography teachers as well as actively involving teachers in programmes that deal with curriculum formation. Some pupils suggested that a college be built specifically to train geography teachers. The study was done across the entire country capturing views of sampled teachers and pupils in the various high schools (Namafe et al 2001). This British Council-supported project held few crucial meetings at the CDC. According to the Director of CDC (2001), one such meeting was very important because it was the first geography curriculum review meeting to involve such a wide spectrum of stakeholders of School geography in Zambia, (see appendix 4 minutes of the first geography curriculum review meeting held on 21st February 2001, CDC, Lusaka).

In 1996, there was a national symposium on education whose aim was curriculum review in all subjects. This symposium was organized by the MOE and it involved the civil society. With the new National Education Policy put in place in 1996, the civil society saw it fit to formulate curricula that was going to be in harmony with the ideals of the new policy on education. Consequently, in 1997, CDC formulated "the structure of the school curriculum" which included, amongst others, the High school curriculum grades 10-12 under which the current high school geography syllabus falls as a humanities subject (Chondoka et al 1999).

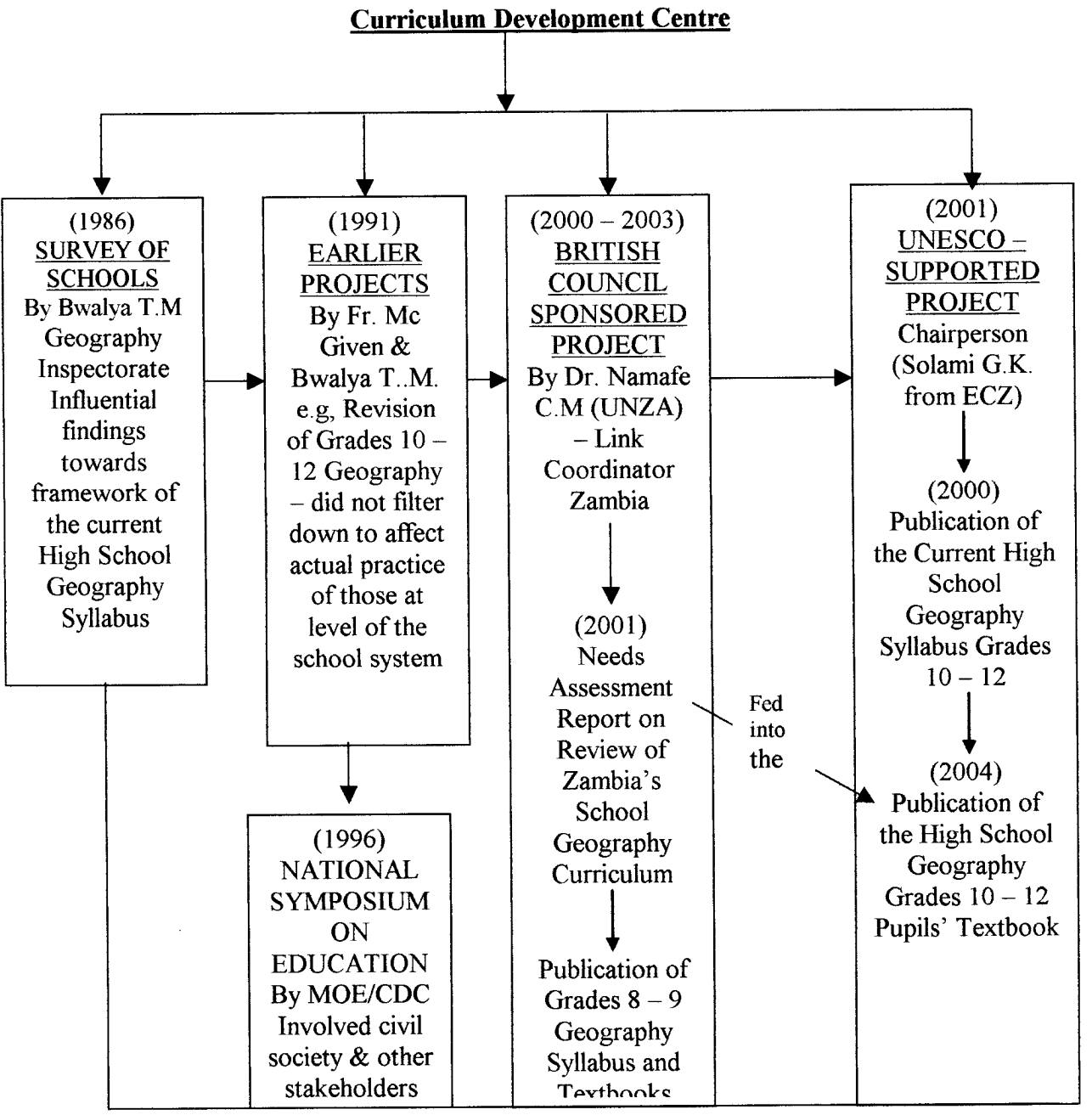
Running parallel and insidiously (at first) to the British Council-supported link project was a UNESCO- supported curriculum review project. Both of these curriculum review projects operated under the aegis of the CDC. The main thrust of the latter project was to produce teaching-learning materials in general, and in particular, the new Zambian High

School Geography Grades 10-12 pupils' textbook. It was the UNESCO– supported project which also directly produced the new Zambian high school geography syllabus of the year 2000. It emerged that CDC was working with two different groups of geography reformers at one and the same time, that is, the British Council-supported link project led in Zambia by Dr. Namafe and the UNESCO-supported group which was led in Zambia by Mr. Solami from the Examinations Council of Zambia. In fact, as already stated above, Mr. Solami also participated in the British Council–supported link project activities. CDC was torn between two forms of allegiance and it openly showed preference for the UNESCO-supported project which eventually proceeded to produce the current High School Geography Syllabus under investigation. This same project also produced a textbook for grades 10-12 pupils.

In producing this textbook, its authors drew information partly from the "Needs Assessment Study" which Namafe et.al (2001) had compiled. In an interview with the CDC curriculum specialist, it was learnt that the book was to cover the identified missing topics from the other textbooks in use then. However, due to financial constraints, the book produced under UNESCO sponsorship was only published in the late 2004 and was distributed to schools in the first term of 2005 after the first shoot of grade 12 candidates who followed the new syllabus had written their final school certificate examinations in 2004. For the development of the New High School Geography Syllabus in Zambia, please refer to Figure 2 over.

It should be noted that the "Needs Assessment Study" and the UNESCO-supported projects ran parallel to each other although some officials, for instance, those from the Curriculum Development Centre were actively involved in both projects.

FIGURE .2 Outline Development of the New Zambian High School Geography Syllabus



The "Needs Assessment Report on the Review of Zambia's School Geography Curriculum could, in future, be a useful document for the review of the new High School Geography Syllabus as well as the review of the grades 10 - 12 High School Geography Pupils' textbook

The study results also help to identify key training needs for geography teachers. It was partly in view of this general context that it was part of the present study's purpose to reveal and document key training needs that rural geography teachers from the high schools of Mkushi district may require. The idea, in this case, would be to compare what Namafe et.al (2001) found and what the present study also found on the subject of teachers' training needs in geography.

2.2 Involvement of Teachers in the Formulation, Dissemination and Implementation of the Syllabus

Writing on the role of the teacher whom he terms as the 'Gamesmanship of curriculum innovation', Kasperson (1967) argued that the process of curriculum innovation depends heavily upon both the teachers who participate in the creation of the material and those who will teach the finished product in the classroom. Kasperson (1967) further pointed out several factors which should be considered in the development of materials. These include, for instance, the motivation of teachers for participating in the project, teacher security in the classroom, teachers' attitudes toward curriculum innovation and the teacher's opportunity for creativity.

Concerning teachers' attitudes toward reform, Kasperson (1967) suggested that at the outset, it was necessary to obtain among co-operating teachers an attitude which is receptive to curriculum innovation. He argued that while educational experimentation was inevitably exciting, it takes place in the teachers' classroom. Moreover, many high school teachers quite justifiably tended to regard the college teacher or inspectors as an 'outsider' who had little or no accurate perception of what was possible at the high school level. The teacher, Kasperson (1967) argued, should be made to feel that he or she was the expert on what was to be successful in the classroom. It was crucial, he concluded, that the cooperating teachers perceived themselves as agents of change rather than as defenders of the established order (Kasperson 1967).

In Zambia the involvement of teachers in research and evaluation of the education system is backed by the MOE (1996 p149), which states that "at the local level,

education boards will be expected to generate information on education provision within their areas of responsibility. They can do so by encouraging teachers and teacher trainers to participate effectively in research, consultancy and evaluation work". As its strategy, the (MOE 1996 p149) further states that at the local level, education boards will facilitate teachers and others in undertaking research, evaluation and consultancy work on relevant educational matters. This is in view of the fact that at the time it (MOE) was in Zambia, there was inadequate information on, for instance, the actual teaching – learning processes within schools and on the constraints experienced by teachers in educational delivery, especially those in rural high schools in the country. The involvement of teachers in curriculum development should, however, take note of what Graves (1980) observed, namely, that practicing geography teachers such as those in Zambia who will be allowed to fully participate in curriculum design and development were busy people with limited time for theoretical reflection.

The importance of teacher involvement in curriculum reform, design, implementation and evaluation cannot, however, be over emphasized. UNESCO (1997) provided a case study example of educational reforms undertaken by the Toronto Board of Education in Canada, which showed that teachers played a pivotal role which ensured either the success or failure of a curriculum. The Toronto Board of Education undertook a reform of its curriculum through a massive community consultation. Thousands of parents, students, staff and members of the public contributed to full day community consultations aimed at exploring how education should respond to the demands of a changing world. UNESCO (1997) further records that much of the success of the Toronto reform was due to the fact that it was not seen to be an effort to change education to meet goals set by the elite or unduly influenced by outside pressures. The impetus to change came from within. UNESCO (1997) further argued that one great advantage Toronto had in implementing its curriculum reform was the availability of well-educated and well-trained teachers. In reality, what students learn is not necessarily what is written in the syllabus, it is "what the teacher delivers in the classroom" (UNESCO 1997 p26). It has, therefore, been discovered that, by far, one of the most frequent causes of curriculum failures is inadequate teacher training. In the Toronto

case, the development of the curriculum itself constituted an informal type of training in which thousands of teachers were involved. This was followed up by more formalized sessions and by systematic provision for teachers to upgrade their qualifications through University courses and other forms of training.

Lessons drawn from the Toronto reforms for Zambia were that efforts to adapt education systems to sustainable development have to consider not only the question " what are the essential messages that must be delivered", but also and equally, that of " how will teachers be trained to put those messages across powerfully and effectively (UNESCO 1997, p 26).

In Australia, Davis (1980) as well as Biddle and Deer (1973) observed that changes in the systems of secondary education in several Australian states, notably Queensland, offered teachers of geography greater responsibility in the field of developing their own semester units. In the United States of America (USA), Kent (2000) observed that it called for personal involvement of some individuals such as Grosvenor to call for a turnabout in attitudes toward Geography. Similarly, it can be argued that the production of the current Zambian high school geography syllabus has been due to personal involvement of some few concerned individuals. Kent (2000) also acknowledged the valuable role that could be played by professional geography associations, individuals, the private sector and other organizations to restore geography to its rightful position.

Teacher orientation to curriculum changes should, however, be taken with great caution. It is reported, for instance, that the commonest method of re-orienting teachers is that of using the cascading model whereby a few teachers are trained for a short while and then asked to go back to their base and teach the others. This method of curriculum reform proved unsuccessful in Finland because the selection of such teachers did not respect subject areas. If the trained teacher was, for instance, a geography teacher, then those from science would not attend the briefing session because they thought there would be nothing relevant to their subject area. In England, it also proved unsuccessful because of

a negative attitude among those to be briefed as they felt that their colleagues would exploit the chance to just show off (Chishimba and Luangala (2002).

Chondoka and Manchishi (1999) conducted a comprehensive study of the historical background to curriculum development in Zambia from 1964 to 1999. The study was meant to educate readers on what had gone on in the area of curriculum development in Zambia. It was hoped the study would help educationists, employers, parents and other stakeholders to influence the direction which the review of the Zambian curriculum in general would take. Nothing in particular about high school geography was tackled in this study.

The Educational Reform Implementation Project (ERIP) of 1986 is also very critical of all the curricula produced after 1964 up to 1986. This document noted that there had been no difference in all the reforms which were done since 1964, as they were all very academic and not relevant to society's needs. This document also explains the rigidity of the curricula and pointed out that they were a top-bottom process, meaning that the curricula were prepared at the MOE headquarters in Lusaka by specialists and were merely distributed to schools without, for instance, teachers' input (ERIP 1986). This is one concern which this study undertook to investigate in the rural high schools of Mkushi district.

2.3 The Field Project Component of the Syllabus

There is very limited available documented literature on the implementation and evaluation of the field project component of the geography syllabus in Zambia. The importance of fieldwork has, however, been underscored by various authors namely: Lenon (1983/88), Pritchard (1984), and Gillet (1986/87). In Zambia, Kalapula (Unpublished) presented a paper on the draft new geography syllabus for School Certificate Examinations. Phiri (1976) also wrote an instrumental article on the types of fieldwork in Senior Secondary Geography. It cannot be verified with clarity whether or not both works had a role in one way or another to the formulation of the field project component of the new High School Geography Syllabus.

Recently, Manda, Fr.McGiven and Silondwa (2002) underscored the value of the fieldwork/field project when they stated that Fieldwork is regarded as an integral part of geographical studies in that it relates what is studied in the classroom to the real world outside the classroom. They further argued that the importance of the fieldwork/ field project is that it induced activity in the learning of Geography. Fieldwork imparted a number of skills which are useful in all walks of life. It teaches skills like: preparation, observation, collecting of data, recording of data and assessing of data. Chapter 5 of their work provides a wide range of suggested aspects and areas of fieldwork which are contained in the new Zambian High School Geography syllabus.

The Examinations Council of Zambia (ECZ) (2003) also conducted a nationwide, one-day seminar for geography teachers to orient them to the Geography Field Project Teachers' Guide. An official from the ECZ met teachers at different centrally located venues. Views of teachers on this seminar are captured in the proceeding chapters of this study.

Apart from this one-day seminar conducted by ECZ officials, the University of Zambia School of Education members of staff comprising Messrs Simukoko and Mweemba initiated a ten-day field project course for high school geography teachers. Training was held at the University of Zambia. Letters of invitation to participants for the course were sent through the offices of the Provincial Education Officers. In an interview with Simukoko, (18th October, 2005 pers. com), who was the course organizer, it was learnt that the turnout was very poor from most provinces as only 24 teachers attended. The Ministry of Education (MOE) had no money to fund teachers so individual schools were asked to sponsor their teachers. This apparent lack of money to sponsor teachers to such a course deprived geography teachers of an opportunity to acquire the much-needed fieldwork skills, which geography teachers are supposed to have in order to implement the new syllabus effectively.

2.4 Pupil Involvement in Evaluating the Implementation of the New Zambian High School Geography Syllabus

Lewy (1977) asserted that while he did not necessarily view pupils as experts in curriculum materials, the students who learnt from the new curricula materials and procedures could be very good observers of their own problems and reactions. Interviews with samples of students are likely to provide useful evidence to the curriculum implementation team. This may be true if the pupil is asked questions about his or her own interactions with the curriculum learning materials and the teaching procedures (Lewy 1977). Consequently, this study incorporated sampled pupils' opinions, reactions and attitudes towards various aspects of the new geography syllabus.

From the literature cited above, it was quite apparent to the researcher that there was, indeed, very limited available documented 'Geographical Education' literature in Zambia that sought to capture the views, experiences as well as opinions and feelings of teachers, especially those in rural high schools, who were involved in the teaching of the new geography syllabus. In line with the ideals of the decentralized system of educational delivery in Zambia, the author took the challenge to evaluate one area of activity where teachers at a local level, through their respective education boards, could play a pivotal role in improving the quality of education, that is, through implementation of the new Zambian High School Geography Syllabus.

CHAPTER THREE

OUTLINE DESCRIPTION OF THE NEW ZAMBIAN HIGH SCHOOL GEOGRAPHY SYLLABUS AND FACTORS THAT PRECIPITATED ITS INTRODUCTION

Prior to the description of the new Zambian High School Geography Syllabus, one needs to appreciate that there were a myriad of factors that precipitated its introduction. It should be noted further that a national or school curriculum is never static. Similarly, a geography syllabus should be reviewed from time to time to reflect the ever–changing educational needs of individuals and society. Society is forever changing and human knowledge is always expanding. New technologies emerge and so do teaching and learning methods. Social development affects changes in perception and policy. Naturally, the syllabus in Geography must reflect such changes. The Geography syllabus for senior secondary (high) schools in Zambia has, therefore, undergone a reform process. In the year 2000 a major review of Zambia's school Geography curriculum, covering grades 10-12 took place.

Such a review of the Geography curriculum was made within the context of changes occurring to the whole Education system in Zambia whose primary focus was raising the quality of educational provision for all by considering, amongst others, issues of equity, gender and learning environment (MOE 1996). In addressing the context of the new high school syllabus, it became clear that there were broader impacts and influences which needed to be considered abreast those directly related to geography, (Namafe et al 2001).

3.1 Factors that Precipitated the Introduction of the New Zambian High School Geography Syllabus

Various factors led to the introduction of the new Zambian high school geography syllabus. In its preface, the Zambian Geography High School syllabus states that the review of that syllabus was necessitated by the need to improve the Quality of Education at high school level as stipulated in the National Policy on Education called "Educating Our Future", (MOE 1996). The same document states that quality Education in turn,

raises standards of living for all. The belief by key stake officers in the Zambian Ministry of Education was that quality education leads to sustainable development both at individual and National levels. From this perspective, it can be safely stated that the National Policy on Education called 'Educating our Future' (MOE 1996) set the stage for the reforms of the Zambian high school Geography syllabus. This point is elaborated next.

3.1.1 The Zambian National Policy on Education as a Factor

The policy states that the overarching aim of school education in Zambia is to promote the full and well rounded development of the physical, intellectual, social, affective, moral and spiritual qualities of all pupils, so that each pupil can develop into a complete person for his or her own personal fulfillment and for the good of society (MOE 1996). This statement implies that education as a basic human right aims at not only developing every individual as much as possible within the limits of their potential, but that it is also a tool for society in its social and economic development. Consequently, the syllabus needed to be changed to respond to the two utilitarian sets of needs, namely, those of an individual and those of society at large (CDC, 2000).

When one examines the broad philosophical or policy statement of any education system, one can further break this down into broad goals, aims and objectives. These, too, had an effect on shaping the New Geography High School Syllabus. The goal of high school education in Zambia is to enable every pupil to become a well-educated person who is useful to society and who is adequately prepared for the furtherance of his or her education or for becoming a self–supporting worker [MOE 1996, pp. 5-9 (i-viii)]. The broad aim of the Zambian high school education is the integrated and comprehensive development of each pupil's potential. On completion of the programme pupils should be accounted as well educated persons who are adequately prepared for the furtherance of their education, through full time or part–time study or for becoming self–supporting workers. They should also be responsible persons capable of making a useful contribution to society and adequately qualified for the adoption of adult roles (MOE 1996). The policy document further states that the education provided in high

schools of Zambia should respond to the needs of the country for individuals who are soundly grounded in communication, mathematics, science and problem solving skills. High school education should also respond to the needs of individuals for a range of post–school vocational choices (MOE; 1996).

Tilbury (1997) observed that the National Curriculum alone does not provide pupils with an education for life in a changing world. In this regard, Geography, which is viewed as being both a powerful medium for promoting the education of individuals and a major contributor to international environmental and development education, needed to be reviewed to match the dynamic changes occurring in the nation. As a school subject, geography in the international sphere had over the years experienced fundamental changes in its nature and the positive elements of these changes had not yet been reflected in the way the subject was taught in Zambia. As Huckle, (1997) argued, school geography was in urgent need of reform, it was time to acknowledge that the subject had distanced itself from change in society and from those developments in academic geography and curriculum theory which could be used to enable us better to meet our ideals.

Zambian school geography tended to largely remain traditional in the mould of the 'capes and bay format'. Teachers largely relied on expository teaching methods and pupils relied on memory and regurgitation of learnt facts, (Namafe et al, 2001). A former deputy director of UNESCO, for instance, once made this remark about the African school which could be related to the then Zambian senior geography that, 'the learning techniques remain the same; the rote method, the technique of cramming, and once the examination menace is passed, of forgetting all these useless impediments...the teaching methods and learning techniques are rusty, cranky and antiquated' (Luma, 1990). It was, thus, inevitable to introduce a new high school geography that would be relevant to the needs of society and individuals in a contemporary context.

3.1.2 Orchestrated Pressure for Change

According to Namafe et al (2001), there was an orchestrated pressure for change of the syllabus from various groupings such as Non-Governmental Organizations (NGOS), Community-Based Organizations (CBOs), Churches, private agencies and so on.

At national level, one reason for revising the geography syllabus was the need to localize the school examinations, which were formerly set by the University of Cambridge Syndicate, United Kingdom (U.K). Localization of the high school examinations had to go hand in hand with the local curriculum, hence, the need to revise the syllabus so that its relevance could be enhanced (CDC 2000). In view of the range and complexity of various issues and viewpoints influencing the school curriculum, it became important for geography specialists to be aware of the potential of their subject to contribute something positive to the education of the citizens and, hence, embarked on revising the syllabus. According to Naish, Rawling and Hart (1987 pp.7-11) several distinct pressure groups which they identified had emerged internationally in education during the past three decades or so and included the following whose relevance to the Zambian curriculum reform process could not be denied: –

a) the Environmental movement; In Zambia this was officially represented by the Ministry of Environment and Natural Resources (MENR) as well as the Environmental council of Zambia (ECZ) who lobbied to have various school subjects, including geography, infuse environmental issues within themselves. To this effect, several workshops conducted in liaison with the CDC were mounted in the year 2000 with intentions to, amongst others, produce Teacher's manuals in environmental education.

b) the need to have a single world approach towards solving various problems like world food supply and human settlements which are covered in the current syllabus.

It was felt that high school geography needed to attend to the kind of knowledge, skills and competencies which were immediately useful for school leavers in the present time. The contemporary issues of national concern which necessitated the introduction of the new syllabus included, among others, the national concern for the ravaging HIV / AIDS

pandemic, environmental education, entrepreneurship and vocational skills, life skills and values education. All these components were not covered in the previous geography syllabus and, therefore, it was prudent to include them in the new syllabus if the ideals of "Educating our Future" were to be realized. It was felt that if Geography's contribution to preparing children for life in a changing world was to be effective, the syllabus needed to be reviewed to accommodate; (i) a future oriented curriculum, (ii) education for sustainability, (iii) education for a technological world, (iv) spiritual, moral, social and cultural dimensions of teaching geography and (v) values education (CDC, 2000).

The new high school geography was envisaged as being part of the future, in that it was intended to be an "agent" of change contributing to shaping a future and better society. The new Geography syllabus, therefore, had to inculcate values and morals of not only respecting and retaining elements of the past but also of being able to assess and develop the type of competencies needed for tomorrow's Zambia. Competencies that needed to be propagated in Geography were reflective reasoning, logical thinking, ability to concentrate, attentiveness and innovativeness.

The quest for relevance was another factor which necessitated the introduction of the new geography syllabus. Prior to this new syllabus, Zambian senior secondary schools used to follow a regional study of either North America (The United States and Canada) or European Geography. As for paper one, there were some topics which were abstract to pupils, such as glaciation. Considering that Zambia had more social and economic intercourse with the SADC and COMESA member states than it had with either Europe or America, it was felt that the new Geography syllabus required to be designed to meet the regional needs of the countries in the neighbouring countries and, hence, the need for the revision of the syllabus to make the subject more relevant and meaningful to both the learner (the pupil) and the Zambian nation or society at large.

A further identified need which led to the change of the Geography curriculum was the requirement to relate theory to reality in the study of geography. This translated into the need to do away with "Armchair Geographers" and, hence, the inclusion of the field work component in the new Zambian high school geography syllabus.

It was, therefore, hoped that a reviewed curriculum in Zambia would raise learning levels in geography by, amongst other things, introducing intellectual skills such as analytical thinking and problem solving, opening up affective and dispositional outcomes such as values and attitudes. Luma (1990) postulated that the African school was directly or indirectly as well as consciously or unconsciously, imparting values, ideas, attitudes and aspirations that were not in the continent's best development interest and concerns. Luma further proposed that Education for Rural or Urban Africans had better be an Education that goes beyond mere schooling. It should be education that was geared towards influencing lives for positive development such as inculcation of beliefs, values, and ideologies, compatible with societal survival. It was, therefore, felt that there was need to put in place a new high school geography which would encourage the development of such values and morals of not only respecting and retaining elements of the past but also of being able to assess and develop the type of competencies needed for tomorrow's Zambia. The New high school geography was envisaged to be an agent of attaining the ideals of education for the future.

3.1.3 International Factors

The curriculum changes in high school geography could be further attributed to Zambia's attempts to adhere to international conventions and declarations, some of which Zambia had ratified. These include the UN convention on the Rights of the child, the Universal Declaration on Human Rights Article 26 (2) and the International Charter on Geographical Education as well as the International Geographical Union (IGU). With reference to the Universal Declaration on Human Rights, Article 26 (2), states that, "Education shall be directed to the full development of human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups and shall further the activities of the United Nations (UN) for the maintenance of peace. In relation to this, it is claimed that Geography Education contributes strongly to the attainment of International Understanding, Co-operation and peace, (UNESCO, 1974). In particular, Geographical Education promotes understanding, tolerance and friendship amongst all nations, racial and religious groups and furthers the activities of the United

Nations for the maintenance of peace; (IGU, 1992 version 4.4 pp. 6-7) by actively encouraging:

(a) an international dimension and a global perspective in the education of people at all levels;

(b) understanding and respect for all peoples, their cultures, civilizations, values and ways of life including domestic ethnic cultures and cultures of other nations.

(c) awareness of the increasing global interdependence of peoples and nations

(d) ability to communicate with others.

(e) awareness not only of the rights but also of the duties incumbent upon individuals, social groups and nations towards each others

(f) understanding the necessity for international solidarity and co-operation.

(g) readiness on the part of individuals to participate in solving the problems of their communities, their countries and the world at large.

Zambia's linkage to the above noted international development target had a role to play towards the introduction of the new Zambian high school geography syllabus. The international world sets targets from time to time which Zambia's Geography is expected to measure up to either because the country is a signatory to certain agreements or because it merely wishes to keep abreast with developments in other countries beyond the regional set up. One such international benchmark to which Zambia pledged its official participation was that which followed the Rio de Janeiro (1993) meeting of Global Heads of State aimed at considering the state of the world environment.

Zambia has had to attend various international conferences organized under the auspices of the United Nations (UN), such as UNESCO, to spell out the central role of education in issues of environment and sustainable development. This, in turn, meant infusing into Geography curriculum issues of environmental education and sustainable development, which previously were not incorporated in the syllabus.

3.1.4 Regional Factors

Zambia is a landlocked country and is a member of the African Union as well as of the regional bodies of SADC and COMESA. Subsequently, the country has obligations to adhere to these continental or regional co-operation agreements. Zambia needed to link up with its neighbours both far and near into common social, economic ventures such as trading, manufacturing, mining, education, health and technology. These activities became increasingly more pronounced within the SADC/ COMESA member states than they were with those of either America or Europe. To illustrate the point further, Zambia needed the challenge of adhering to the SADC regional protocol on education and training of 1997.Through this protocol, Heads of States agreed to act in common pursuit of the objectives related to education and training. Among the various areas of co-operation agreed upon was the need for the secondary education curricula, including geography, to include material on SADC countries in order to promote consciousness about the community which, in turn, would facilitate creation of a fuller awareness of the imperative and process of regional integration. SADC countries also agreed on co-operation and mutual assistance in a number of areas of secondary education such as curriculum design and development (Namafe et al 2001).

3.1.5 Research as a Factor

The curriculum changes in the Zambian high school geography can also be attributed to the 1986 Ministry of General Education Youth and Sport (MGEYS) Inspectorate survey of 60 rural and urban schools in the country (Zambia). The general aim of this survey was to study the then existing teaching and examination of geography in secondary schools and to identify constraints and issues affecting teacher effectiveness with a view to making recommendations for curriculum change, (ZGA, 1989).

Amongst the various findings of this survey, which provided a basis for the new geography high school syllabus, was that teachers selected the topic of the "geography of Zambia" as being the most important part of the syllabus because it was, and still is, relevant to the students' own environment. The survey also found out that the topic on "Geography of Central Africa" which covered the southern African sub-region was an

important one to be taught. Teachers felt that teaching students about the countries in the region helps students to appreciate and understand problems faced by other people, for example, Zimbabwe, Malawi, Botswana and others, (ZGA, 1989). The survey findings further showed that most of the students preferred learning about Zambia, which they regarded as being the most important section of the syllabus. There was, however, an expressed need to re-organize the then syllabus so as to adapt it to the local Zambian environment to make Geography meaningful to the student. A summary of results of the said survey is shown in table 1.

Table 1: Topics of the geography syllabus considered important by teachers in order of frequency

TOPIC	FREQUENCY
1. Geography of Zambia	34
2. Elements of World Human Geography	28
3. Weather and Climate	19
4. Elements of Physical Geography	14
5. Map Reading	13
6. Geography of Central Africa	13
7. Mathematical Geography	6
8. Geography of North America	4

Source: Zambia Geographical Association (ZGA 1989, p10)

Another significant finding of the 1986 survey that formed a framework for the development and implementation of the new Geography high school syllabus was the felt need by all the schools surveyed that practical work in geography was worth teaching, although it was not examined at that time. The survey recommended that practical work (field work) in geography needed to be encouraged and examined. This would ensure that students were taught the basic skills of observation, recording and analysis of information in order for them to understand the spatial relationship of geographical phenomenon (ZGA, 1989).

Following that survey report of 1986, the Geography Inspectorate of Schools sent a circular no. MGEYS/107/7/44 of 23rd January, 1989 addressed to all Heads of Departments (HODs) of Geography. The circular had, attached to it, a copy of the

proposed new Geography School Certificate / General Certificate of Education (SC/GCE) 'O' level syllabus No. 2218 which was cited earlier on.. This draft syllabus incorporated all the teachers' and pupils' suggestions. The said circular urged HODs for Geography to study the draft syllabus and then send their comments and suggestions to the Inspectorate before 20th February, 1989. That research survey may, thus, be viewed as the immediate genesis of the new Geography high school syllabus.

It must be noted, however, that the introduction of the new Zambian Geography high school syllabus was not just necessitated by the new national education policy which was introduced in 1996, but it was also in adherence to other policy documents and circulars such as the Gender policy, the Constitution of Zambia, Act No.1of 1991 and the amendment Act No.18 of 1996, as well as official directives and circulars which were occasionally issued by the Ministry of Education (MOE) or Ministry of General Education Youth and Sport (MGEYS) then.

To illustrate one of the above cited factors, the National Gender Policy in Zambia (2000 p47- 48), for instance, states that in order to redress the gender imbalances and inadequacies in the provision of education, which includes the Geography curriculum, production of education materials, teachers' attitudes and classroom interaction, Government will amongst other measures (k) Integrate reproductive health education in the curriculum to prevent amongst others, early pregnancy as well as HIV/AIDS, (m) review the curriculum and teaching approaches and train teachers to enhance learning achievements among girls and (n) engender curricula, teaching and learning materials.

As a result of the above raised concerns, particularly that of reproductive health and HIV/AIDS, the new high school geography syllabus incorporated such issues as some of the topics to be covered., It can therefore, be stated that the Gender policy had a role to play in shaping the new high school geography syllabus.

3.1.6 Summary

So far, part of this chapter has shown that a myriad of factors, pressures or issues, all working in a complex interplay, precipitated the introduction of the new Zambian high

school geography syllabus. The survey by Bwalya et.al (1986) formed the proximate foundation of the current high school geography syllabus. The involvement of the subject association - the Zambia Geographical Association (ZGA), the personal effort by various individuals such as Dons from the University of Zambia, Geography subject specialists from the Curriculum Development Centre (CDC) and Examinations Council of Zambia (ECZ), as well as financial support from UNESCO to facilitate undertaking of the curriculum review project all, in one way or another, contributed to the introduction of the new syllabus.

In addition, the quest for quality education, for relevance and the need for the localization of the curriculum also had their role to play in the introduction of a new syllabus. With a new national education policy put in place in 1996, it became necessary to formulate a curriculum which was going to be in harmony with the new policy. Hence, in 1997, CDC formulated "the structure of the school curriculum" which included, amongst others, the high school curriculum grade 10 –12 under which the new geography high school syllabus falls as a Humanities subject. At the international or Global scale, the change was necessitated by the need to adhere to international conventions and declarations, some of which Zambia ratified. Such conventions called for the infusion of ideals of democracy, gender and equity, human rights and values education to mention but a few, which were not adequately addressed in the previous syllabus.

At the regional level, the increased interdependence in trade, technologies, social and economic activities between Zambia and the SADC/ COMESA member states, necessitated a shift from the Regional Geography of Europe or North America (United States and Canada) to the regional Geography of the SADC and COMESA member states, with reference to Zambia. The latter geography would facilitate ideals of regional integration for Southern African Countries. Key ideas mentioned in 3.1 above would, in this regard, be expected to feature in the text of the new high school geography of Zambia in one form or the other. This point is discussed in the next subsection

3.2 Outline Description of the New Zambian High School Geography Syllabus

The New Zambian High School Geography Syllabus was developed after consultations were made with teachers in the field. The content emphasizes the Geography of Zambia, Africa South of the Sahara and the world at large. The topics of the syllabus are related to the home area (Zambia) and the regional areas of study including Zambia, COMESA/SADC countries such as Angola, Kenya, Malawi, South Africa, Democratic Republic of Congo (DRC) Zimbabwe and Namibia. The syllabus also focuses on the physical, economic, social and political forces currently evolving in Africa South of the Sahara, which have greatly affected the sub – region. The syllabus addresses themes of population, settlement, natural and human environmental issues and their possible solutions (CDC 2000).

The syllabus includes a section on the geography field project, which is compulsory. It is hoped that this component of the syllabus will encourage pupils to think logically as well as to interpret and evaluate statistical data, graphs and tables. Pupils are expected to read and interpret topographical maps to the scale of either 1:250,000 or 1:50,000. The learner will also acquire knowledge and skills through direct observations in the environment in order to make valid and reliable conclusions about real life situations (CDC 2000).

3.2.1 General Aims of the New Zambian High School Geography Syllabus

The general aim of the New Zambian High school Geography syllabus is to present a course of study which will allow candidates to acquire skills, knowledge, appreciation and application of principles related to the:

(i) basic Geographical character of the pupils' local Environment.

(ii) systematic geography of the "home" area as a part of a more general study of the wider region of which the "home" area forms a part.

(iii) major issues of a geographic nature arising from people's relationships with their environment.

(iv) provision of opportunities for every person to acquire values, attitudes, commitment and skills needed to protect and improve the environment and

(v) creation of new patterns of behaviour among individuals, groups and the society as a whole towards the environment, (CDC 2000).

A close examination of these aims reflects the extent to which the aims and objectives of High School Education stipulated in the MOE (1996 pg 51-52) have been incorporated at least by intent. It is hoped that on completion of the high school Geography syllabus, pupils should be educated persons who are adequately prepared for the furtherance of their education through full–time or part–time study, or to be self–supporting workers. They should also be responsible persons capable of making a useful contribution to society and adequately qualified for the adoption of adult roles.

The particular aims and objectives of High School Education that shaped the new high school Geography syllabus were the desire to;

a) develop desirable intellectual skills and Qualities such as reflective reasoning, logical thinking, ability to concentrate, attentiveness to detail, and objectivity in appraisal of Evidence. Geography plays a unique role in realizing this objective. In the words of Huckle,(1997 p.241) school geography is such a powerful medium of education that it has the potential to develop young people's understanding of their 'place' in the world and so to help them form their identity. Balderstone and Lambert (2000) also argued that geography enabled young people to perceive the structures and processes which help and hinder their development and can also foster their commitment to social justice and democracy, and the conserving, participatory and critical forms of citizenship, and thereby help to create a better world.
b) foster creativity, imagination, resourcefulness, and innovativeness, and provide occasions for their exercise.
c) promote extensive knowledge, exact skills, and accurate understanding of chosen areas in... the social sciences...

d) provide Educational experiences that will nurture skills that will enable pupils to take charge of their own learning.
e) awaken concern for the promotion of civil liberties and human rights for the equitable distribution of global and national wealth, and for sustainable human development in Zambia and elsewhere.
f) develop desirable attitudes and qualities of personal, national and international peace and understanding, (MOE, 1996).

In the new high school geography syllabus, the above stated aims and objectives have been taken care of, in the content, structure and expected processes of teaching to be employed in the teaching of the subject. The introduction of the project component is yet one other area that the new high school geography syllabus has addressed objectives (a)-(d) stated above. However, the extent to which the above stated aims and objectives shall be realized depends on various factors, amongst which is the caliber of the teaching staff and the extent to which these teachers will interpret the stated aims and objectives in a real classroom situation.

3.2.2 Scope of the Syllabus

The syllabus is divided into three parts. The first part covers topics for paper one-examination questions. The second part covers topics for paper two examination questions while the third part covers the field project component.

PART 1 of the Syllabus – This part of the syllabus has three parts namely; sections A, B, and C. The topics in all these three sections are meant for paper one-examination.

SECTION 'A'- Map Reading

This section of the syllabus is meant to equip pupils with basic techniques and skills in map reading and mathematical Geography.

The map reading component covers the traditional topics of interpretation of topographical maps on a scale of either 1:25000 or 1:50,000, Grid references (four and six), conventional signs, calculating gradients, measurement of distance and area, bearings and directions.

The syllabus also requires pupils to relate human settlements and activities to relief and drainage features of a given map extract such as land – use, settlement patterns, communications, and the inter–relationships between these features. This section of the syllabus requires pupils to make simple interpretation of sources of information such as diagrams, maps, graphs, charts and statistics.

The mathematical geography component covers calculation of latitude, longitude, location of places on the map (Globe) using latitudes and longitudes, calculation of time and angles of elevation.

SECTION A of the new Geography high school syllabus has, therefore, not changed in any way from the previous syllabus. The challenge is for the teachers to go beyond the level of merely teaching to acquire skills and to ensure that pupils apply these skills to real life situations such as being in a position to choose a site for settlement, for farming or for construction of an industry having considered the various features of both the physical and human on a given map extract. In this way, the new geography syllabus could be said to implement the stipulation that the learner will also acquire knowledge and skills to enable him/her to make valid and reliable conclusions about real life situations (CDC 2000).

SECTION 'B'- Elements of Physical Geography

This is the only section where physical Geography is covered in the new syllabus. In the subsequent topics of individual countries such as the geography of Zambia, Malawi, Zimbabwe or that of any other country in the sub – region, the syllabus does not seem to emphasize the study of relief and drainage, or the weather and climate aspects of these countries, yet the human economic activities taking place in these countries are, to a large extent, influenced by the relief and drainage as well as weather and climate features. So, the syllabus adopts a traditional approach of separating human from physical geographic aspects and yet these are inextricably linked.

The physical Geography Elements have been narrowed down to those found on the continent of Africa south of the Sahara, and has eliminated alien topics such as Glaciation which are considered to be abstract to pupils of Africa. This situation is debatable because Africa occasionally experiences aspects of glaciation, for example, on mountaintops of Kilimanjaro, or in Kenya and Lesotho.

Under physical geography topics, pupils are expected to learn the earth as a planet and its structure. Pupils are expected to learn various landforms resulting from earth movements, folding, faulting, volcanic activity and earthquakes. The syllabus also requires pupils to cover weathering in temperate regions. This topic is, however, not very clearly defined as this could tempt some teachers to still cover weathering in cool temperate regions – which includes 'Glaciation'. The physical geography component also requires pupils to learn about river processes (erosion, transportation and deposition), and the resulting landforms such as the development of river valleys, flood plains, deltas and the impact of human activities in catchment areas.

This section of the syllabus also covers WEATHER STUDY based on local observations and the use of weather instruments. Pupils are expected to have knowledge about basic cloud formation, relief, convection and frontal rainfall. Pupils are expected to study the formation, structure and effects of tropical and temperate storms (hurricanes, tornadoes, typhoons, cyclones, whirlwinds) with major emphasis on those found in Africa, namely Equatorial, Savanna (tropical grasslands), Desert and Temperate zones as well as Mediterranean and Temperate Grasslands. In addition, this section covers the positive and negative impacts of NATURAL ENVIRONMENTAL HAZARDS such as floods, dust storms, drought, earthquakes, avalanches, rock falls, landslides, volcanoes and tropical storms, and possible solutions to these hazards.

Twenty (20) multiple-choice questions involving mathematical computations, weather, climate and landforms are set based on this section of physical geography

SECTION 'C'— Elements of Human Geography –This section covers amongst other topics; the distribution, transportation and uses of sources of fuel and energy, location and use of major iron and steel industrial regions of the world.

PART 2 of the Syllabus –This paart covers topics for paper two of the final examination and it has three sections, namely;
Section 'A' covering topics on Zambia, Section 'B' with topics on 'The Sub-Region' and Section 'C': Settlements and Population Studies.

PART 3 of the Syllabus covers the Field Project Component.

Conclusion:
While the new syllabus has certainly introduced topics which are familiar to the learner and, are thus, relevant and meaningful to the Zambian context, it is debatable why some topics have been left out. For instance, topics on coral reefs, costal landforms and glaciation have been left out of the new syllabus yet candidates are expected to cover countries within the sub-region of Africa which have coastal features like Angola, Namibia, South Africa and Kenya. In addition, countries like Tanzania, Kenya and Lesotho with mountain peaks often experience ice and snow conditions on mountain peaks, which learners need to know about. It is also debatable as to how unique this new geography syllabus is to Zambia given that the world is now living as a global village and, therefore, our pupils need to be equipped with knowledge and skills that can make them think and adapt at global level. The introduction of the new high school geography syllabus has clearly brought in challenges to the teaching and learning of geography in High Schools of Zambia.

The next chapter describes the various models and designs which may have influenced the development and design of the new geography syllabus in Zambia.

CHAPTER – FOUR

MODELS OF CURRICULUM DEVELOPMENT USED TO DESIGN THE NEW ZAMBIAN HIGH SCHOOL GEOGRAPHY SYLLABUS

Readers will, by now, appreciate that this study focused on evaluating the implementation of the new Zambian high school geography syllabus among the high schools of Mkushi district. Implementation of the syllabus by high school teachers is a reflection of the curriculum design models used. In other words, models of curriculum design often influence the implementation approaches adopted by teachers. In this regard, readers will be greatly assisted in their appreciation of implementational experiences of teachers of the models of curriculum design which were used are clarified. This is what this present chapter aims to do. In this regard, this chapter briefly explains the meaning of curriculum development and gives a description of some of the major curriculum models and designs that might have shaped the development and design of the new high school geography syllabus of Zambia. The term curriculum, in this work, is interchangeably used with the term syllabus, although the two terms are admittedly different.

4.1 The Meaning and Purpose of Curriculum Development

4.1.1 The meaning of Curriculum Development

Like any other term in academics, Curriculum Development has been defined in various ways by different authors. According to Taylor and Richards (1979) curriculum development is considered as comprising those deliberately planned activities through which courses of study or patterns of educational activity are designed and presented as proposals for those in educational institutions. This definition shows that curriculum development is a purposefully planned undertaking which involves syllabus construction and other curriculum material construction for teaching purposes. It is this course of planned learning activities or syllabus as it were, such as the new high school geography syllabus, which is sent to schools countrywide and is used for teaching and learning purposes.

Johnson (1966) viewed curriculum development as the process whereby a set of learning outcomes is derived from an educational institution. This definition implies that curriculum development is about coming up with learning objectives which at the end of the day, school authorities or education officials should be in a position to measure and determine whether or not the intended objectives have been achieved.

Both definitions provided so far are inadequate as they are at best, only complimentary to each other. However, what comes out clearly from the two definitions of curriculum development is that curriculum development, as Salia-Bao (1987) concluded, is a systematic and rationally planned activity that takes into consideration the child, society, subject, teaching and learning assumptions and ideologies. What Salia-Bao (1987) meant here was that, curriculum development should start first with the study of the society, the children and the subject and an examination of the philosophical and psychological foundations that can be used as a basis for the course design.

4.1.2 The purpose of a curriculum development

The purpose of curriculum development is basically to improve knowledge and understanding, as well as skills and attitudes of students. The aim is to enhance students' abilities to find meaning in life and also contribute to national development. In line with this principle, one of the dimensions along which the new Zambian high school geography syllabus was designed was a hope that it would provide its users with a sound premise on the basis of which meaningful and effective learning experiences would be developed in order to provide a good foundation for further study in this subject area (CDC 2000). Upon examination of the aims of the new geography syllabus under discussion, one notices the emphasis it puts on the perceived range of skills, knowledge, attitudes, values and creation of new patterns of behaviour among individuals, groups and society as a whole towards the environment.

4.2 Levels of Curriculum Development

According to Salia-Bao (1987), Curriculum development occurs at different three levels with different intentions, namely:

(a) *National-based curriculum development*- this type of curriculum development occurs in a centrally controlled education system where the Ministry of Education or its agency, for example the Curriculum development Centre in the case of Zambia, develops curriculum and disseminates it throughout the country. The intention is to introduce a common curriculum that can control the maintenance of standards and quality of education throughout the country.

(b) *State-based curriculum development* could be enlikened to a Provincial or Regional-based curriculum if Zambia had such curricula. This is a de-centralized type of curriculum development whereby each State or Provincial Ministry of Education and agencies develop curricula in certain subject areas for the whole state or province with the assistance of the Teachers' Resource Centres. The objective at this level of curriculum development is to maintain quality and standards and retain an effective control of the programme at that particular State, Province or Region.

(c) *School-based curriculum development*: This type of curriculum development occurs when, through the initiative of a teacher, headmaster, Education officer, State Government or Provincial leadership of Central Government, a school decides to develop curriculum in any subject area. This is commonly practiced at University level where each school would develop its own curriculum. But curriculum development in schools where pupils learn is non–existent in Zambia because curricula are top-down impositions from the CDC to all schools.

In addition to the three levels of curriculum development described Salia-Bao(1987) suggested that curriculum development could be either a wholesome or piece-meal project.

Wholesome is where the national government decides to change all the curricula in the schools in order to achieve a new policy of education. It is centrally controlled and it affects all subjects and schools.

In Zambia, following the ideals of democracy and liberalization of the economy introduced by the Movement for the Multiparty Democracy (MMD) party all subject curricular were revised in an attempt to suit the party's new National Policy on Education called "Educating Our Future" (MOE 1996). In this regard the project was wholesome to some extent.

When a curriculum development involves only a modification and reshaping of syllabus in a few subjects giving clear explanation of the various elements comprising the syllabus, then such an approach is said to be a piecemeal development of curriculum.

The conclusion drawn by Salia-Bao (1987) can not be over-emphasized namely that despite the different types of curriculum development discussed, there is need to adopt a holistic approach to deliberately and purposefully plan and come up with decisions about the content, teaching and learning materials which learners should follow.

Having discussed what curriculum development is all about, the next subsection examines the different models and designs that might have guided the development of the new high school geography syllabus in Zambia.

4.3 Curriculum Development Models and Designs, used to come up with the New Zambian High School Geography Syllabus

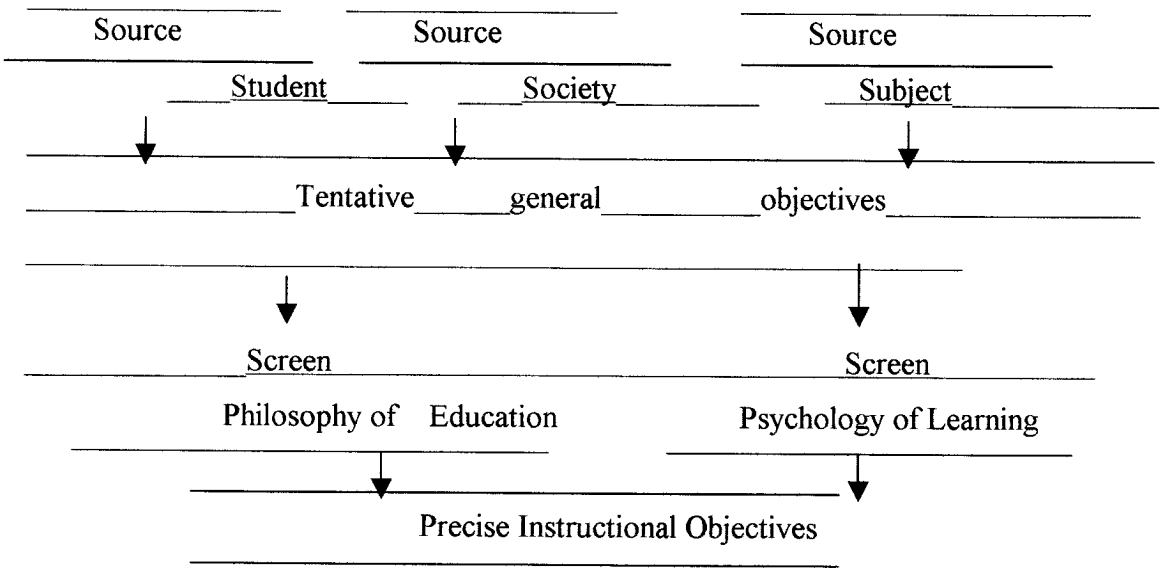
It is not easy to categorically pin point any one particular model that could have been used to design the current high school geography syllabus of Zambia. This is because the syllabus bears a combination of characteristics derived from various models. The new high school geography syllabus in Zambia might have been produced under the guidance of the following three principal curriculum models.

The Classical Behavioural Approach or the Objective Model

This model of curriculum design emphasizes the stating of specific behavioural objectives which are often measurable. This model was greatly influenced by behavioural psychology and systematized into coherent rationale by Ralph Tyler and was popular in the United States of America. This model, also known as the TYLER

RATIONALE, centres on four major stages which Tyler considers essential in the development of any curriculum. The first of these involves clarifying goals, that is, what it is hoped the curriculum will achieve. Statements of goals need to indicate both the kind of behaviour to be developed in the pupil and the area of content to which the behaviour is to be applied. Such closely formulated statements of intent are termed objectives (Salia-Bao, 1987). According to this scheme, the curriculum maker looks at three sources- student, society and subject- from which he or she derives general objectives. The developer then screens these tentative goals by means of his philosophy of education and psychology of learning. Next, he/she states the objectives that survive this screening in precise terms of measurable learner behaviour. These precise objectives serve as the ends for which the teacher designs effective instructional means (Salia-Bao 1987). Tyler's Curriculum Rationale is illustrated by figure 3.

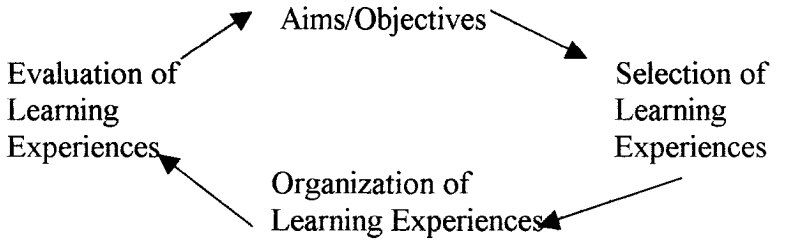
Figure 3.Tyler's Curriculum Rationale



Source: Salia-Bao (1987 p 63)

The learning experiences offered to children are selected at stage two. At the third stage these experiences are organised to reinforce one another and to produce a cumulative effect. The last stage is that of evaluation which examines the extent to which the objectives are realized in practice, thereby indicating in what respects the curriculum is

effective and in what respects it requires modification. This basic four-stage model which is *cyclic*, in that evaluation feeds back to objectives, is often termed the *rational planning* model on the grounds that it is rational to specify the ends of an activity before engaging in it. An alternative term sometimes used is *means- end* planning as illustrated below:



Source: Salia-Bao (1987 p64)

There have been modifications of Tyler's model by some authors. Notable among such authors are Bloom and his associates who came up with *The Taxonomy of Educational Objectives* (1956), which is characterized by three domains of educational objectives, namely, the cognitive or intellectual domain, the affective or emotional domain, and the psychomotor or learning of physical skills domain.

An examination of the new high school geography syllabus reveals that it was designed after the objective model as it emphasizes the stating of specific measurable behavioural learning objectives. Furthermore, the syllabus has the three domains of educational objectives embedded in it. For example, the statement that the syllabus presents a course of study which will allow candidates to acquire knowledge, to think logically, to evaluate statistical data and to apply principles related to various phenomena, defines the cognitive domain. In order to address the affective domain the syllabus is designed in such a way that it aims to equip learners with values, attitudes, appreciation of environment, and creation of new patterns of behaviour among individuals, groups and society as a whole towards the environment.

The field project component of the new syllabus was intended to carter for the psychomotor domain, as pupils would be engaged in practical work outside the classroom that would involve touching objects, direct observations, measuring,

recording and application of knowledge and skills acquired from a classroom situation. In this regard, the new high school geography syllabus can be said to have been designed after the Objective model, and also follows the Taxonomy of Educational Objectives model as illustrated by Bloom and his associates (1956).

The second major model of curriculum development model which might have influenced the development and design of the new high school geography syllabus is the PROCESS MODEL developed by Stenhouse(1971). Stenhouse(1971) argued that a process model was more appropriate than an objective model in areas of the curriculum which centre on knowledge and understanding. In this design the 'process' is specified, that is, the content being studied, and the methods being employed. Stenhouse (1971) believed that it was possible to design curricula rationally by specifying content and principles of procedure rather than by specifying the anticipated outcomes in terms of objectives.

According to Stenhouse (1971), the content selected should represent a particular form of knowledge which is intrinsically worthwhile. In other words, the content should reflect the form of desired knowledge and skills that a learner should acquire irrespective of whether the material is meaningful or not to the learner. The approach is subject centred and not learner centred. Taylor (1970) stressed that the approach is concerned with teaching context. This approach deals with themes such as war, poverty, education and relations between the sexes (gender). In this approach, discussion is used as the teaching methodology and the teacher plays a neutral role. Behavioural objectives are absent and the teacher does not promote any particular point of view. In place of objectives, the emphasis is put on defining acceptable principles of procedure.

The third major curriculum development model which may have shaped the design of the new Zambian high school geography syllabus, is the SITUATIONAL MODEL by Shilbeck(1976). This model has its roots in cultural analysis. The model puts curriculum design and development within a cultural framework in that it views such designs as a means whereby teachers modify and transform pupil's experience through providing

insights into cultural values, interpretative frameworks and symbolic systems. The model underlines the valuable nature of the design process and its inevitable political character as different pressure groups and ideological interests seek to influence the process of cultural transmission.

The model is based on the assumption that the focus for curriculum development must be the individual school and its teachers, that is, that the school-based curriculum development is the most effective way of promoting genuine change at school level.

The situational model has five major components namely:

i. situational analysis, which involves a review of the situation and an analysis of the interacting elements constituting it. It considers external factors such as ideological shifts, parental and community expectations, the changing nature of the subject disciplines and the potential contribution of teacher-support systems such as colleges and Universities. Internal factors considered during the situational analysis include, amongst others, pupils and their attributes, teachers and their knowledge, skills, interests materials, resources and school ethos or culture.

ii. goal formulation with the statement of goal embracing teacher and pupil activities. Such goals are derived from the situational analysis done in stage (i)

iii. Programme building which comprises the selection of subject matter for learning, the sequencing of teaching, the development of staff and the choice of appropriate supplementary materials.

iv. Interpretation and implementation where practical problems involved in the introduction of a modified curriculum are anticipated and then hopefully overcome as the curriculum is being put in place and as it proceeds

Monitoring, assessment, feedback and reconstruction which involves a much wider concept of evaluation than determining to what extent a curriculum meets its objectives. Tasks include providing n-going assessment of progress, a wide range of outcomes (including pupils' attitudes and the impact on the school organization as a whole), (Taylor and Richards 1979).

The situational model is flexible, adaptable and open to interpretation in the light of changing circumstances. It simply encourages teams of curriculum developers to take into account different elements and aspects of curriculum development process, to see the process as an organic whole and to work in a moderately systematic way.

An evaluation of the new geography syllabus reveals some characteristics of this model, in one way or another. For instance the syllabus contains a lot more of the content or subject material which was considered to be of greater relevance to the Zambian context, hence its emphasis on the geography of Zambia and that of the sub-region as opposed to the then Geography of either Europe or America. The syllabus also spells out the various ranges of skills, attitudes and values expected of a learner. The syllabus is also situational in that it was in response to the need to improve the quality of education at high school level as stipulated by the national education policy document, after wide consultations were made with key stakeholders who included the civil society, teachers, subject specialists and academic staff from Colleges of Education and the University of Zambia.

So far, this chapter has described the major models of curriculum development that might have been referred to in the course of developing and designing the new high school geography syllabus of Zambia. Arising from the above prescriptive models, the panel adopted appropriate curriculum designs or organization. What seems to come out clearly from the study of the new high school geography syllabus of Zambia is that, to a greater extent, a child-centred approach rather than the subject centred approach was the adopted design, and that the "Objectives" model predominated the other models.

However, a closer examination of the syllabus suggests that several other alternative approaches were used to design this new syllabus. For instance, the syllabus can be deemed to have a REGIONAL APPROACH as it covers regional studies of the SADC and COMESA member states and the sub region south of the Sahara. The New Zambian High School Geography Syllabus requires pupils to cover the Sub-Regional topics of

Agriculture, Forestry, Mining, Power, Processing and Manufacturing Industries, Transport and Communications, Tourism and Fishing with reference to SADC and COMESA countries such as Angola, Kenya, Malawi, South Africa, Zimbabwe and Democratic Republic of Congo, (CDC 2000, p.xi)

The syllabus may also be considered to be a CONCENTRIC MODEL as proposed by Briault and Shave (1960), and by Gopsill (1966).
Gopsill (1966) stated that when planning the geography syllabus, one principle that should be used is that a child should be very well informed about his home country and sufficiently informed on other countries which have close associations with it (either culturally, politically or economically) to be able to understand the way they affect one another. The remainder of the world should be dealt with in lesser detail, probably through the medium of selected samples which are typical of the wider regions which contain them (Gopsill (1966). The concentric approach commences with studies in the local district, moves on to studies of regions in the home country, to regions in the home continent and then to regions in the more distant parts of the world.

A closer look at the current syllabus depicts this approach. Pupils are required, for instance, first to be taught the geography of a local school, then of the local Boma or Township, before teaching them the geography of the province, the country, the Neighboring countries, Africa as a Continent and then World Geography topics.

It can also be deduced from the syllabus that a THEMATIC APPROACH was used to design this syllabus. This assertion was confirmed in an interview with Beatrice Mweene (11th August, 2005, pers.com) who was the CDC geography principal curriculum specialist in Zambia. The thematic approach often has a regional base and may be classified as; a) *systematic*, b) *Issues- based* and c) *systems –based.*
According to the IGU (1992), *Systematic approaches* are concerned with (i) *physical* and (ii) *human geography*.

Physical geography may include geomorphology, hydrology, climate geography biogeography and physical Issues based geography.

In the new syllabus, Geomorphology aspects include the study of landforms resulting from earth movements, folding, faulting, volcanic activity and earthquakes, avalanches, rock falls, types of rocks and their formation. However, there is little emphasis on the topic of rocks and yet rocks determine to a great extent the type of soil, vegetation and even the mining activities that candidates are expected to cover in detail.

The hydrology component of the syllabus requires candidates to study river processes (erosion, transportation and deposition) and the resulting landforms, the development of river valleys, flood plains and deltas and the impact of human activities in catchment areas. This component is adequately catered for in the new syllabus.

The meteorology part of the new syllabus is covered under weather study involving local observations and the use of weather instruments, basic cloud formation, relief, and convectional and frontal rainfall. It also includes the study of the formation, structure and effect of tropical and temperate storms (hurricanes, tornadoes, typhoons, cyclones and whirlwinds). The climatology component is covered under major characteristics of climate and natural vegetation with special emphasis on those found in Africa such as the Equatorial, Savanna, Desert and Temperate zones. This section also covers the biogeography component as it deals with vegetation and animal life in these climatic regions.

Human geography, for example, covers behaviour, humanistic, welfare or radical geography. It includes population, economic, urban, social, historical, cultural, and rural and political geography. The current syllabus addresses all these topics though with some varying depth of coverage.

Issues based geography, for example, involves environmental quality, socio spatial disparities, hazards and disasters, HIV/AIDS gender, hunger, sustainable development and energy. The current syllabus has a component on hazards and disasters. The Natural environmental hazards included in the syllabus are Floods, dust storms, drought,

earthquakes, tropical storms, avalanches, rock falls, landslides and volcanoes, their positive and negative impacts, forecast and possible solutions. The issues of HIV/AIDS, environmental education and gender have taken the foci of teaching and learning in all Zambian subjects, including geography.

The energy component is adequately catered for under Section C of the syllabus, namely, ELEMENTS OF HUMAN GEOGRAPHY, which covers the distribution, transportation and uses of sources of fuel and energy (CDC 2000 Pg43). .

Systems approaches are concerned with teaching about physical systems, human systems and ecosystems.
According to the IGU (1992) physical systems include geomorphic systems, soil systems, climatic systems, hydrological systems and biotic systems. In the new syllabus, there seems to be little attention paid to the geomorphic systems and soil systems. For instance, topics on rocks and rock formation which have a bearing on the soil type and, ultimately, on the type of natural vegetation have been left out. However, the new geography syllabus covers the climatic systems and the hydrological systems. The latter is included in the topic on river processes (erosion, transportation, and deposition) and the development of river valleys, flood plains and deltas.

The human systems include the social and cultural processes in human organization such as agricultural systems, Industry and service systems, settlement systems, transport and trade systems, and societal systems (IGU, 1992). The new syllabus puts a lot of emphasis on this section of the syllabus as each aspect of the human systems stated above has been dealt with in detail.

The current concern for sustainable development has also been addressed by the new syllabus to some degree. This is by its intent to integrate human and natural systems within ecosystems. According to the CDC (2000), one of the aims of the new syllabus is to present a course of study which will allow candidates to acquire skills, knowledge, appreciation and application of principles related to the major issues of a geographical

nature arising from people's relationships with their environment. The syllabus further aims to provide opportunities for every person to acquire values, attitudes, commitment and skills needed to protect and improve the environment and create new patterns of behaviour among individuals, groups and society as a whole towards the environment (CDC 2000 p iii).

It may also be argued that the current high school geography syllabus in Zambia has its theoretical framework derived from the works of the pragmatist John Dewey and it is similar to that advanced by Herbert Spencer who, when answering the question ' What knowledge is of most worth?' stated, " that knowledge which enables young people to tackle problems and prepares them to solve the problems they are likely to meet as adults in a democratic society, identification and analysis of worthwhile problems". Spencer further stated that the problems associated with healthy living, earning a living, family life, civil participation, and the making of moral decision were the most important, (Spencer in Holmes and Mclean 1989 pp14-15). The equipping of pupils with skills, knowledge, attitudes, and values which enable young people to tackle problems and prepare them to solve the problems they are likely to meet as adults in a democratic society were the perceived ideals of introducing the new Zambian high school geography.

The author suggests that the various *themes* of the current high school geography syllabus were partly shaped by the political and economic situation prevailing in Zambia and the sub region then. These themes include those of the advancement of democratic ideals and good governance, regional economic integration, water and its management, environmental management as well as sustainable development, conflict and its resolution. To this extent, the syllabus can be said to have used the situational model of curriculum development.

According to Luangala et al (2002) the model used to orient teachers to curriculum reforms, which may include the geography syllabus under discussion, was the CASCADING MODEL. This is where officials from the top-the Ministry of Education

or Examinations Council of Zambia or Curriculum Development Centre- would conduct the orientation to the officials at the Province and then falling downwards to the classroom teacher, the implementer of the curriculum. This is the Top-Down approach.

In summary, it can be argued that given the various characteristic features of the new high school geography syllabus of Zambia as depicted above it is, indeed, difficult to pin point any one particular model or design as having single handedly been used to develop and design this new syllabus. Because the syllabus portrays several, carefully selected attributes of different models and designs of curricula, one can submit that an ECLECTIC APPROACH was used in the development and design of the new high school geography syllabus of Zambia.

This descriptive account of the new Zambian high school geography syllabus suggests that the syllabus was designed out of the Nation's desire to attain its ideological and philosophical goals which are stipulated in the National Education Policy document- "Educating our Future" (MOE 1996) which called for the need to improve the quality of education at High School level. The new syllabus considered the goal of high school education, which is "to enable every pupil to become a well educated person who is useful to society, and who is adequately prepared for furtherance of his or her Education", (MOE, 1996 p53).

The syllabus also addresses issues of national concern such as Environmental Education, Gender and Equity, Health Education, HIV/AIDS, Family Life Education, Human Rights, Democracy, Reproductive Health, population Education, Entrepreneurship, and Vocational Skills, life and Values Education. In this regard, it can be said that the design of the curriculum was guided by the values expressed by Zambians.

In its design, the new Geography high school syllabus underpinned the quest for relevance of topics to be covered if learning was to be meaningful to the learner. Therefore, the focus of the new syllabus was on students' learning of more details than

before about their own country first (Zambia) and then moving outward to the neighbouring countries and the world Geography at last.

Another very important reason for revising the Geography high school syllabus was the need to fully localize the High School Examinations, which were formerly set by the University of Cambridge local Examinations syndicate UK (CDC, 2000). Whilst realizing that Examinations are important, the design of the new syllabus took into account the practical aspects of learning Geography by fusing in the fieldwork component, which is compulsory. This component ensures that there are no armchair Geographers as students are supposed to be exposed to real life situations away from the classroom environment. The fieldwork component is expected to develop students' skills of observation, recording, critical analysis and interpretation of observed phenomena as well as skills of data presentation.

The final copy of the new Zambian High School Geography syllabus was ready (published) by the year 2000. However, the implementation of the syllabus only took effect in the year 2002 with the then Grade ten (10) pupils countrywide.

The indirect focus of this study in the year 2004/2005 was on this same cohort of pupils who had, by then, reached grade 12 in readiness to be examined for the first time under the new geography syllabus. The primary target of this study was to describe the actual experiences of the rural based high school geography teachers who taught and prepared the first shoot of grade 12 pupils that followed this new geography syllabus. It was unavoidable, in pursuing this objective, to include the evaluation of that first cohort of pupils. In this regard, pupil experiences and views were also captured in the process in order to effectively contextualize the experiences and views of teachers in Mkushi district.

The key research questions were;

- What were the various experiences of geography teachers from High Schools of Mkushi district who taught the new syllabus and prepared pupils for their final examinations in geography in the year 2004?
- What did the rural-based High School teachers consider to be the major constraints and opportunities to teaching the new syllabus?
- What type of teaching-learning resources and in-service training would be required for rural teachers in order to enable them effectively teach the new syllabus?

The next section describes the research method and data collection techniques that this researcher used in order to address the above noted questions.

CHAPTER – FIVE
METHODOLOGY

5.1 Study Design

The research employed an evaluative and descriptive design. It was evaluative in that it involved the collection and analysis of data which was used to make perceptions and judgements about the manner in which the new syllabus was implemented. The researcher made an assessment as to whether or not the stated goals, aims and objectives of the syllabus were achieved, and if they were, to what extent. In addition, the study was evaluative as it also involved the collection and analysis of data that was supposed to be useful in the making of informed decisions over a number of areas, such as syllabus review, examination of teaching-learning materials used, methods of teaching employed and other variables that might have had an effect on the overall performance of geography teachers during the course of their teaching the new geography syllabus.

This study was descriptive in the sense that it involved the bringing out and documentation of the subjective experiences and views of teachers who taught the new syllabus so as to give a fair picture of the experiences and practical constraints these teachers encountered.

The study was also both qualitative and quantitative in design. It was qualitative in that it captured subjective views of the teachers' experiences, views and challenges and opportunities. However, since the study sought to establish the number of responses to the various themes and content in numerical terms converted to percentages, it can also be said to have been a quantitatively designed study. Subsection 5.5 spells out how the qualitative and quantitative aspects of this study were addressed.

5.2 Research Instruments

Separate questionnaires for teachers, pupils, ECZ and CDC officials have been appended and these were the ones which were used to obtain primary data. The questionnaires had open-ended items designed to capture views of Geography teachers on various aspects

of the implementation of the new high school Geography syllabus in rural high schools. Non-participatory observation method was used. The researcher used this approach when collecting data which sought to determine the commonly employed method(s) of teaching geography by teachers. The researcher observed at least three geography lessons being taught on different topics in order to assess the commonly used methods. During lessons, the researcher did not take part in teaching or making any comments within the classroom but was actively involved in observing the manner in which the lessons went on. After the lessons, the researcher checked samples of pupils' notebooks to help assess the commonly used methods of teaching by teachers.

5.3 Study Population

The study population included all Geography teachers in the three rural-based high schools found in Mkushi District, all Grade 12 pupils taking Geography, Head teachers/Deputy head teachers, Heads of Departments for Social Sciences and Heads of Geography Sections.

Why rural high schools?

Rural high schools were chosen, firstly, because most studies conducted in Zambia had been on either rural or urban basic schools. There had been few or no documented studies conducted in rural high schools of Zambia aimed at capturing the views and experiences of Geography teachers there.

Secondly, there has always been a lopsided development in Zambia in the provision of services where preference has been for urban areas. The choice of rural high schools sought to draw attention to one sector of education which the author felt had not received much attention from various donors and policy makers. There was need to make a thorough review of the high school sector of education if the nation was to improve the declining quality of education in high schools and tertiary institutions of learning which draw their input from these same high schools.

Thirdly, rural high school teachers were used in order to provide a challenge to them by engaging them in a rigorous academic exercise meant not only to contribute to the improvement of the education delivery system through undertaking scientific research and critical evaluation of the learning programmes and curricula perceived to be imposed on them, but also to professionally up-grade and up-date them with the latest developments in their subject area. Rural based high school teachers are generally lagging behind in this regard.

5.4 Study Sample and Sampling Procedure

The sample consisted of ten Geography teachers who were teaching Geography to Grade 12 classes in the year 2004 from the three Mkushi-based high schools, one of the Head teacher or the Deputy head teacher, the Head of Department for Social Sciences and the Head of Geography section from each school. This brought the total sample of teachers of one form or the other to 19-that is, 10 teachers and 9 non-teaching staff.

Thirty-five Grade 12 pupils taking Geography were sampled using a stratified random sampling method. This was done to ensure fair representation of all the three categories of potential pupil performance; that is high, average and low performers. The total study sample for both teachers and pupils was fifty-four (54). Purposeful sampling technique was used for teachers owing to the small number of geography teachers at all the three high schools (10 teachers).

Procedure of Collecting Data

From six regular classes of pupils taking geography at Mkushi High School, four classes were randomly selected from which a sampling frame was derived. For Mkushi Coppermines High School, the sampling frame was worked out from the only two classes which were taking geography while from Chalata High School the sampling frame was drawn from the only class which was taking geography. Heads of Departments for Social Sciences working together with the geography teachers and the researcher used the derived sampling frames comprising three categories of pupil performance (high, average, and low performers) to come up with the final list of pupil

respondents. Pupils were then asked to volunteer to take part in the study. From the stratified sampling frames for each school, pupils were chosen as respondents using the pick-a-lot random method whereby pupils were asked to pick a paper which had numbers assigned on them, up to the desired number of pupil respondents for each school. Nine boys and nine girls were picked from Mkushi High School, while six boys and six girls were picked from Mkushi Coppermines High School, and three boys and two girls from Chalata High School. This was done to take care of the gender aspect for pupil respondents by way of trying to balance the gender.

The involvement of pupil respondents in this study was decided upon on the premise of arguments advanced by Lewy (1977) that, while we do not necessarily view students/pupils as experts in curriculum materials, the students who learn from any new materials such as the new geography syllabus and procedures could themselves be very good observers of their own experiences. Interviews with a small random sample of such pupils were likely to provide useful evidence or information to the initiators and implementers of new curriculum documents. In addition, pupil respondents were used in order to effectively contextualize teacher's experiences and views by comparing them to those held by pupils. In a nut shell, pupils were identified to be key stake holders in the evaluation of the syllabus especially, that they had followed the same syllabus from Grade 10 to Grade 12 and therefore were viewed to have gained sufficient experiences so as to give balanced views and experiences about the new high school geography syllabus. Such information could be utilized for course improvement in terms of learning and teaching procedures, methods or materials used.

5.5 Data Processing and Analysis

Data was analysed qualitatively and quantitatively. A content analysis of the responses was done under various themes, such as methodology, time required to cover the syllabus, nature and content of the Geography syllabus, as well as rural high school Geography teachers' needs, resources and equipment used for teaching and learning. Descriptive statistics presented in simple tables, graphs, charts and frequencies converted into percentages were used.

CHAPTER SIX–FINDINGS AND DISCUSSION

This chapter presents the findings and discussion of this study. These findings and discussion are presented in two parts, namely, Part 'A' Teacher Perspectives and Part 'B' Pupil Perspectives of the manner in which the new high school Geography syllabus was implemented in the three rural-based High schools of Mkushi District in Zambia. The study focused on capturing especially the views, experiences and opinions of geography teachers who were involved in the teaching and preparation of the first shoot of grade twelve pupils that sat for the 2004 School Certificate and General Certificate of Education (SC/GCE) Geography Examinations under the new geography syllabus. These views and experiences were put under various sub–headings which will be presented in due course.

The collected views and experiences could in future serve as valuable data for making informed decisions on course improvement and review of the geography syllabus, considering that no syllabus is static. The specific findings on each theme and aspect of the new syllabus are presented in the following pages;

FINDINGS AND INTERPRETATIONS

PART 'A' - PERSPECTIVES OF HIGH SCHOOL GEOGRAPHY TEACHERS OF MKUSHI DISTRICT ON THE NEW ZAMBIAN HIGH SCHOOL GEOGRAPHY SYLLABUS

6.1 Bio-Data of Teacher Respondents

Of the ten sampled Mkushi geography teachers who were involved in the teaching and preparation of grade twelve pupils in the year 2004, only one was a female teacher. Three of the ten were degree holders; six were diploma holders while one was a certificate holder. The period of teaching at senior secondary school level varied from one year to fifteen years. Three of the ten teachers indicated that they had attended other geography related courses after their initial training which provided them their highest qualification. However, there were no clarifications made as to what these other courses involved.

TABLE 2. Gender and qualifications of teacher respondents of Mkushi District, Zambia

GENDER OF RESPONDENT		QUALIFICATION OF RESPONDENT						# OF THOSE WHO ATTENDED OTHER GEOGRAPHY COURSES	
		DEGREE HOLDERS		DIPLOMA HOLDERS		CERTIFICATE IN PRIMARY TEACHING			
M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
9	1	3	0	5	1	1	0	3	0

At one of the high schools (Chalata), there was one teacher respondent at the time of conducting this study who still had a qualification of Certificate in Primary Teaching (CPT) which is not supposed to be used in high schools, according to the Ministry of Education general regulations. This was possibly because the school had just been turned into a high school from a basic school. However, it was learnt that the teacher was in the process of upgrading his qualification to that of a Diploma level. It was also learnt that two Diploma holder teachers from the other two high schools were in the

process of upgrading their qualifications to that of a Degree status. Judging from the similar sentiments expressed by teachers from all the three categories indicated, the researcher concluded that academic qualification held, seemed to have had little effect, if any, on the ability of teachers to have suitably adapted to the changes brought about by the introduction of the new Zambian high school geography syllabus. This was affirmed by the responses from teacher respondents on page 75 which expressed the various areas of in-service these teachers desired in order to acquaint them with knowledge of how to approach/handle both the new syllabus in general and the field project in particular.

Apart from simply looking at the academic qualification of the teacher respondents as a possible variable in differences to rates of adaptability to the introduced new high school geography syllabus, the researcher also investigated the duration of teaching experience. A summary of the findings on teaching experience are shown in Table. 3 below

TABLE.3 **Duration of teaching experience for teacher respondents of Mkushi district, Zambia.**

Duration	1 year or less	2 years	3 years	4 years	5years+
Responses	1	1	4	1	3

From the responses taken, those teachers that had served for five years and above indicated having had lesser problems of adjusting to the teaching of the new syllabus while those that had taught for a period of two to three years had moderate problems of adjusting to the new syllabus and those teachers who had taught for less than a year faced greater difficulties in teaching the new syllabus.

6.2 Consultation with Teachers during Syllabus Development

When asked as to whether anyone of the teacher respondents was ever consulted *regarding the changes to the syllabus before the implementation of the new syllabus, it was found out that none was consulted. This finding contradicts the view held by the* CDC (2000), which asserts that the new Zambian geography syllabus was introduced after wide consultations were made with teachers in the field. However, Chondoka and Manchishi (1999) observed that few teachers, especially those from rural based high schools were involved in the design of the new geography syllabus. Realizing as

Kasperson (1967) did that educational experimentation takes place in the teacher's classroom, it is only logical that more and more effort be put to ensure that teachers are involved in the formulation and implementation of the syllabuses. This would ensure that teachers perceived themselves as agents of change rather than as defenders of the established order designed by top policy makers who were detached from what was happening at the grass root level.

As a nation, we could take a leaf from the educational reforms undertaken by the Toronto Board of Education in Canada as reported by UNESCO (1997), whose success was attributed to the involvement of well-trained teachers in the formulation and implementation of the curriculum reform. On The other hand, Zambia should be ware of the possible causes of poor or failure process of curriculum implementation arising from teacher's lukewarm attitude to curriculum reform as reported from the example of Finland cited on page 8.

6.3 Access to the Syllabus by High School Geography Teachers of Mkushi District

One of the aspects of evaluation this study sought to investigate related to access by teachers to the new high school geography syllabus. This aspect was brought in order to assess whether the syllabus was distributed to the teachers in time or not. Distribution of the syllabus in time would have enabled the teachers to study its contents in good time for them to teach the new syllabus effectively.

The responses were shown in Table 4 below.

TABLE 4. Access to the new Zambian high school geography syllabus by high school geography teachers of Mkushi district

# of Responses	Grade 10 Term 1	Grade 10 Term 2	Grade 10 Term3	TOTAL	%
Received the syllabus	3	2	1	6	60
Not received the syllabus	0	0	0	4	40
TOTAL	3	2	1	10	100

From the above table, of the ten geography teachers sampled, 60 percent of them indicated that they had access to the syllabus in grade ten. Three of these had access to the syllabus in term one of grade ten; two respondents had access to the syllabus in term two, while one respondent had access to the syllabus in term three. The variations in access to the syllabus could be attributed to the different initiative styles employed by individual school managers to acquire the syllabus, as the CDC or MOE officials did not distribute these documents to schools in time. It was discovered that some Head teachers had to photocopy the syllabus from other schools, which had obtained the document much earlier. By the time the district education officials brought copies of the syllabus for distribution to individual schools, it was the third term of grade ten.

6.4 Access to some Prescribed Textbooks

It is assumed to be a common practice that whenever a new syllabus is produced, the prescribed textbook and other necessary teaching learning materials should accompany it. This is particularly important to schools in rural areas where there are limited alternative sources of teaching/learning materials such as libraries, newspapers, or the Internet. In this regard, this research sought to find out if the respondents had received the prescribed textbook which was supposed to be used in the course of implementing the new geography syllabus. The study also asked the respondents to state what alternative sources of teaching /learning materials they used in the event that they had not received the prescribed textbook.

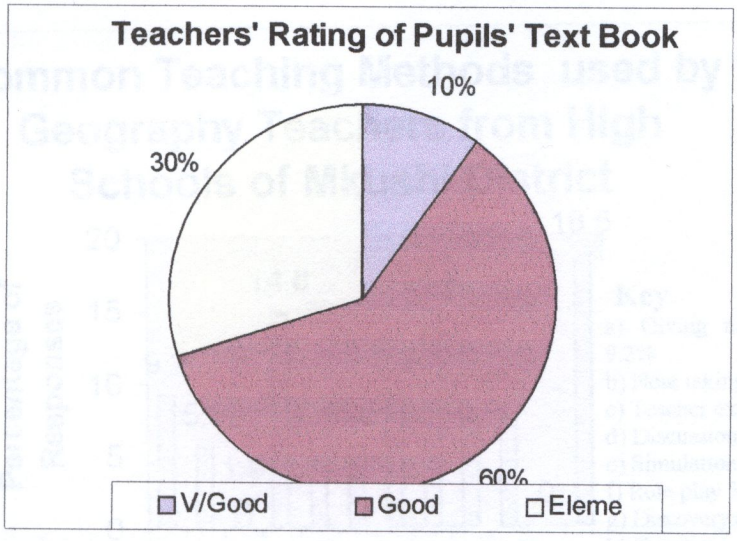
At the time of conducting the research, in mid March 2005 to the first week of April 2005, all the ten teachers stated that they had had access to the Grade 10-12 High School Geography Pupils' textbook. The book was delivered to these three high schools in the first term of 2005. Prior to this, teachers stated that they were simply using their initiative by using a textbook entitled A Secondary Geography of Zambia by Naidoo and Bwalya (1995) and a pamphlet by Salati (1998) which were however, inadequate.

This implied that the 2004 grade twelve pupils who did the new high school geography syllabus had no access to the prescribed textbook. Such a textbook could have facilitated their preparations for answering examination questions based on the sub region of

Southern Africa. It could be inferred from this that the poor grades in Geography obtained by most of the pupils who sat for their grade twelve SC/GCE 2004 examinations could partly be accounted for by the lack of pupils' high school Geography textbook, (refer to the appendices **3 'A'** and **3 'B'** showing the results analysis for the two high schools, namely, Mkushi High school and Mkushi Coppermines High School).

In a related development, teacher respondents were asked to rate the New High School Geography (Grades 10-12) Pupils' textbook under the headings of very good, good, elementary and shallow, as well as any other description. The responses are shown by the pie chart below;

FIGURE 4. Rating of the prescribed pupils' textbook by some high school geography teachers of Mkushi district

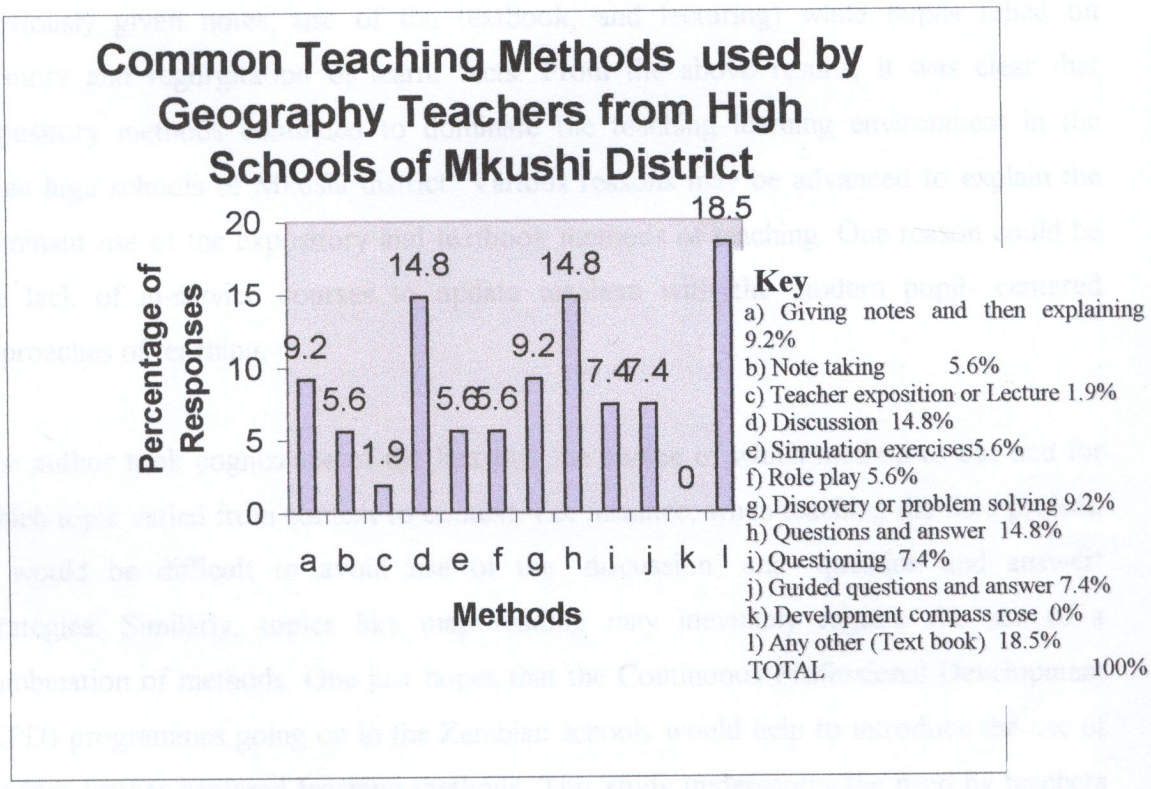


The pie chart indicates that of the 10 teacher respondents 70 percent were generally satisfied with the content and coverage of topics for the new high school geography pupils' textbook as shown by the high number of respondents, that is, 60 percent who responded that the book was 'Good' and 10 percent who felt the book was very good. However, 30 percent of the teacher respondents felt that the book was elementary and shallow. It is the view of the researcher that the pupils' textbook was just a guide or supplement to the teachers' resources. Teachers needed to find other alternative sources of information on each topic from various sources if pupils were to be prepared adequately for their examinations.

6.5 Common Methods of Teaching used by Geography Teachers from the High Schools of Mkushi District

There are various methods and teaching–learning styles that are used in the teaching of Geography. In order to establish the common teaching methods used by the geography teachers from the high schools of Mkushi district, this study asked teachers to state as many methods of teaching as they commonly used when teaching the high school geography. This approach was used because it was assumed many a good teacher would use more than just one method of teaching geography. The responses are as shown in Fig. 5

FIG. 5- Common methods of teaching geography used by the high school geography teachers of Mkushi district.



The most commonly used methods of teaching by teachers in their descending order of importance according to figure 5 were;

- use of the textbook (18.5percent)
- discussion (14.8 percent)

- question and answer (14.8 percent)
- note giving and explanation (9.2 percent)
- problem-solving or discovery (9.2 percent)
- questioning method (7.4 percent)
- guided questions and answer (7.4 percent)

Although it would appear that there was effort in the use of discussion as well as question and answer method of teaching, it became apparent that the most commonly used methods of teaching geography by teachers from the three High Schools of Mkushi district were those which Luma (1990) described as involving rote method, techniques of cramming which aimed at ensuring that pupils pass their examinations. A check through a few of the pupils' note books also confirmed the findings of Namafe et al (2001) that teachers largely relied on expository teaching methods (teacher explaining previously given notes, use of the textbook, and lecturing) while pupils relied on memory and regurgitation of learnt facts. From the above results, it was clear that expository methods continued to dominate the teaching–learning environment in the three high schools of Mkushi district. Various reasons may be advanced to explain the dominant use of the expository and textbook methods of teaching. One reason could be the lack of in-service courses to update teachers with the modern pupil- centered approaches of teaching.

The author took cognizance of the fact that the choice of which method to use and for which topic varied from context to context. For instance, when teaching the field project, it would be difficult to avoid use of the 'discussion' and 'question and answer' strategies. Similarly, topics like map reading may inevitably require the use of a combination of methods. One just hopes that the Continuous Professional Development (CPD) programmes going on in the Zambian schools would help to introduce the use of modern learner-centered teaching methods. This study underscores the need by teachers to employ a variety of teaching methods as was found out by the Review of High School Education Survey in Zambia (MOE 2004) conducted by People's Action Forum (PAF). It is commendable to note that Nkrumah and Copperbelt Secondary Teachers' College (COSETCO), as teacher training institutions of high school teachers are already focused

on learner-centred methodologies. The challenge however, still remains to teachers to apply the learnt methods in the field and for the local High School education as well as District Education Standards Officers to promote use of such methodologies by its high school teachers.

6.6 Nature and Content of the New Zambian High School Geography

This research also aimed at finding out the views of teachers on the nature and content of the new high school Geography. Of the 10 teacher respondents sampled, 80 percent felt that the current syllabus was ideal as it was more relevant to the Zambian context. However, 20 percent of the respondents expressed the view that the current syllabus was not ideal because it left out European and American geography components which exposed pupils to some understanding of geographical phenomena at the global level.
The issue of whether or not to study geography of foreign, far flung countries of America and Europe is a contentious one with views for and against. Ologue et.al (1979) for instance, contended that there was need to depart drastically from what they called 'the Eurocentric type of Geography', to that which would help find practical solutions to the socio- economic malaise faced by African countries such as Zambia.

When doing this, great caution should be taken to ensure that our pupils were not completely cut off from the geographies of other countries outside Africa for Zambia is in the Global Village and therefore it is important to equip our pupils with Geographical skills and knowledge that would see them articulate Geographical issues at a global level. As argued by Namafe et al (2001), Zambia's geography is expected to measure up to internationally–set targets, for Zambia is a signatory to certain agreements and must, therefore, keep abreast with developments in other countries beyond the regional setup.

6.7 Time required to cover the new Zambian high school geography syllabus

In relation to the time required to cover the new high school geography syllabus, 60 percent of the sampled respondents indicated that there was enough time to cover the topics of the syllabus whereas the remaining 40 percent felt that the time required to cover all the topics was inadequate. The latter group cited, in particular, the human and

economic geography components as still being too long, adding that there was need to remove some topics. The time factor, however, was dependent on the pace of individual teachers and on the approach they used to handle the topics in the syllabus. From the observations made, it was evident that the geography teachers needed some training on how to approach the new high school geography and, in particular, the Sub-region and the field project components.

6.8 Sections of the new Zambian Geography Syllabus which were deemed difficult to teach by the Geography Teachers of Mkushi district

This study sought to establish amongst other aspects, those sections of the new geography syllabus that were deemed difficult to teach by the geography teachers. Table 5 gives a summary of the results:

TABLE 5- Sections of the new geography syllabus which were deemed difficult to teach by the high school geography teachers of Mkushi district

TOPIC/SECTION	NUMBER OF RESPONSES	%
a) Physical geography (landforms)	2	13.3
b) Field project component	4	26.7
c) Map work	1	6.7
d) Mathematical geography	1	6.7
e) Elements of human geography	2	13.3
f) Meteorology and climatology	1	6.7
g) Geography of Zambia	0	0
h) Geography of the sub region	1	6.7
i) Settlement and Population studies	1	6.7
j) None	2	13.3
Total	15	100

The results, as depicted by table 5 above, indicate that most of the teacher respondents (26.7 percent) had most difficulties in the teaching of the field project component of the syllabus.

The percentage of teacher responses that indicated they had difficulties in teaching Physical geography was 13.3 percent, while that for Elements of Human Geography was also 13.3 percent. The Map reading, Mathematical geography, Geography of the sub

region, Settlement and Population studies components each had a percentage of 6.7. Individual teachers' 'voices' as extracted from some striking individual teachers' verbatim suggested that there could still be a problem of how to handle the field project component. Authorities should, therefore, not think that all is well, expecting that every teacher who passed through a Secondary Teachers' Training College or University would be able to supervise and assess the field project component. There is some immediate need to put in place a deliberate training or retraining programme for Geography teachers, especially those from rural high schools where there was little or no academic sharing of new developments tailored towards helping teachers to manage the field project.

6.9 Types of teaching and learning resources required by high school geography teachers of Mkushi district

In order to assess the type of teaching and learning resources which were required, respondents were asked to state as many types of teaching/ learning resources as they felt were required in order for them to teach the New High School Geography Syllabus effectively. The responses are in Table 6.

TABLE 6- Types of teaching and learning resources required by the high school geography teachers of Mkushi district

TEACHING RESOURCE REQUIRED	NUMBEROF RESPONSES	%
Computers and Internet service	2	7.1
Overhead projectors	1	3.6
Revised Atlases on the Sub region of Africa	5	17.9
Weather instruments	2	7.1
Wall maps	4	14.3
Enough reference books	1	3.6
Materials on field project	9	32.1
Video tapes on Tourism and physical features	2	7.1
Synoptic Charts	1	3.6
Ordinance Survey maps	1	3.6
TOTAL	28	100

From the table 6, it was evident that the key teaching/learning resources required by the teacher respondents in order of preference were:

Materials on field project (32.1 percent). Revised atlases and latest information on the sub region of Africa (17.9 percent), Wall maps (14.3 percent), followed by Computers and Internet service (7.1 percent), Videotapes on Tourism and physical features (7.1 percent), and weather instruments (7.1 percent). The need for the provision of overhead projectors, synoptic charts, enough reference books and ordinance survey maps ranked lowest at 3.6 percent each.

Whilst it was pleasing to note the availability of a few computers at two of the high schools, it was also noted that these computers were rarely, if ever, utilized for purposes of geography teaching and learning other than for the preparation of schemes and records of work. This was due to some inadequate computer skills among the teachers. There is need to train teachers in this aspect and to provide more computers and Internet services. Indeed as argued by Lee (2000), the world of learners in a geography classroom can no longer be contained within its four walls. Access to computers and the Internet now should allow our pupils to reach any part of the world and hence make the geography classroom boundless. The World Wide Web (WWW) could serve as a gateway to a virtually limitless amount of information for rural high schools such as those of Mkushi district, if made available.

6.10 Assessment Aspects of the New Zambian High School Geography

Assessment of any learning programme such as that of the new high school geography is an important aspect of evaluating the success or failure of implementing that programme. One aspect of the implementation process of the 2000 edition of the Zambian high school geography syllabus involved the distribution of specimen examination papers to schools in order to help teachers prepare the pupils for their examinations. Teacher respondents to the questionnaire were asked on various aspects of assessment for the new syllabus. Their responses were shown in the table7 and a description of the same is given under.

TABLE 7- Assessment aspects of the new Zambian high school geography

ASSESSMENT	RESPONSES %	
Aspect of assessment	YES	NO
Should continuous assessment be part of the final SC/GCE Grade?	40	60
Did your school receive the specimen examination paper in time?	60	40
Did the 2004 SC/GCE Geography examination paper cover the main Areas of the syllabus?	60	40

At the time of the research (March 2005), out of the ten respondents, 40 percent indicated that they had not received the specimen examination papers in time, while 60 percent stated that they had received the specimen examination paper in time. Out of the respondents who stated that they received the specimen examination paper in time, 80 percent of them said that the paper was very helpful for them while 20 percent felt that the paper was not useful. Of these teacher respondents 60 percent expressed that the 2004 SC/GCE Geography examination paper covered most of the areas of the syllabus while the other 40 percent said that the examination did not cover the main areas of the syllabus.

Regarding continuous assessment, it was learnt from the respondents that this was an important aspect of the subject. However, only 40 percent of the teacher respondents were of the view that continuous assessment should be part of the final result while 60 percent of the respondents reasoned that it should not be part of the final examination grade. Those who objected to the inclusion of the continuous assessment as part of the final geography grade cited reasons of how to ensure objectivity and standardization of the pieces of work assessed. However, given proper guidelines on the handling of continuous assessment by the Examinations Council of Zambia, continuous assessment could be a more reliable method of assessing pupils' ability and performance in geography in contrast to the current method which judges a pupil by the final examination grade obtained in the subject.

6.11 Major Challenges of Teaching the new Zambian High School Geography.

According to the sampled teacher respondents, lack of orientation and textbooks were the major challenges they faced when teaching the New Zambian High School Geography to pupils who wrote the 2004 School Certificate and General Certificate (SC/GCE) geography Examinations, the first under the new geography syllabus. Each of the other cited challenges are shown in table 8.

TABLE 8— Major challenges of teaching the new high school geography faced by the high school geography teachers of Mkushi district

Major Challenges	NUMBER OF RESPONSES	%
Lack of orientation for teachers	6	23
Lack of textbooks for both teachers and pupils	6	23
Inadequate time allocated for teaching Geography	3	11.5
lack of resources in form of funds to conduct field work	3	11.5
Lack of supportive teaching aids on the sub region	3	11.5
Lack of regular in-service training for geography teachers	3	11.5
Lack of equipment for example no weather instruments	2	8
TOTAL	26	100

The table above shows that the challenges faced by the teachers were those related to lack of orientation for teachers who were involved in the implementation of the syllabus in schools, and the lack of textbooks for both teachers and pupils. One of the teacher respondents stated that, "It was quite sad to note that at one point, as a teacher, I felt like stopping the teaching of geography because I did not have any reference material and no orientation was done as it is done in other subject areas". Some other verbatim expressions from teacher respondents that were of a critical flavour are given below;

- *The necessary teaching materials did not accompany the syllabus*
- *The new syllabus should have been introduced after ensuring teaching and learning materials were available*
- *Workshops for geography teachers should have been conducted so that they are made aware of what they were to teach*
- *Teachers must have been consulted first before implementing the new high school geography- teachers who were involved in the actual teaching were*

not involved in the formulation of the new syllabus; teachers should be consulted.

- *Before the people in Lusaka (ECZ) decide on such a national change, consultations are important even to the least man in the line of delivery- the teacher. The syllabus was imposed on teachers.*
- *The implementation process lacked the orientation aspect for teachers in form of workshops especially on the fieldwork project component.*
- *Let there be a workshop where teachers' views can be heard on how best to implement the new syllabus.*

Other verbatims read as follows;

- *Teachers last year 2004, taught the new syllabus out of being resourceful because books were only delivered to schools in term one of the year 2005.*
- *There was inadequate logistics put in place to facilitate full implementation of the syllabus*
- *Supervisors were made to panic in order to ensure pupils were ready for examinations*
- *Initiators of this syllabus were in a hurry for whatever reasons to bring such a change- people were quick to bring new changes without considering the means of how to achieve the changes*

- *Some parts like the Copperbelt and Lusaka had access to the new book before examinations were held- this was very unfair because the examination was not only for pupils in those areas but for the country as a whole. At the end of the day, because of the unfair dealings, it would seem as though teachers, especially in rural areas, never taught. Schools along the line of railway, in particular, schools in Lusaka and Copperbelt can get information that Mkushi will not get, or get it when it was very useless by the time it reached. "Zambia is not Lusaka and Copper belt alone but all the provinces and districts, even in the outskirt- selfishness in Education sector should cease".*
- *When people introduce new things, they must aim at targeting the grass roots, that is, make consultations and if anything take time to orient the classroom teacher who is always blamed for poor performance even when it was not his fault.*
- *Teachers of geography should be involved in the in-service trainings that take place in Lusaka or where ECZ decides to hold one.*
- *More materials should be produced and reach the teachers before the pronouncement and implementation of any new geography inclusion or corrigendum.*
- *Teachers in schools and college lecturers already in the field should be well oriented to this new syllabus to avoid finger pointing in case results dangerously fail to please the nation*
- *All high schools in Mkushi should have markers in geography to give them school certificate examination marking skills* (Sampled verbatim responses from the Geography teachers of the High Schools in Mkushi District, March-April, 2005).

The above sentiments from the rural–based high school geography teachers of Mkushi District pose challenges to management and policy formulators to research further and find out the real problems encountered by those teachers entrusted to implement curriculum changes.

6.12 Type of In-service Training required by high school Geography Teachers of Mkushi district

In-service training of teachers ensures that teachers are updated with the latest developments and methodologies in their subject disciplines. In this regard, teacher respondents were asked to state as many types of in service training as they required. The responses are shown in Table 9 below.

TABLE 9—Type of In-service Training required by high school Geography Teachers of Mkushi district

Training area required by teacher respondents	Number of responses	%
Handling the field project component	6	25
How to approach the new syllabus	6	25
How to mark especially the field project	4	17
General handling of the new aspect of the sub region	4	17
Examination setting for the new syllabus	2	8
General marking skill in SC/GCE examination	1	4
On methods of carrying out scientific research	1	4
TOTAL	24	100

Judging from table 9, it was clear that the field project component posed a lot of challenges to most of the teachers of Mkushi District. From the responses, the most important in-service training needs were;

- how to handle the field project component of the syllabus
- how to approach the new syllabus,
- how to mark especially the field project component
- general handling of the new aspect of the sub–region

The challenges experienced by geography teachers of Mkushi district at that time could be attributed to relatively low levels of skills required to conduct the fieldwork as most

of the teachers only came across this component of geography during their initial training at College or University and had never applied the skills until the new high school syllabus was introduced. High schools then, did not put emphasis on practical skills. As Gerber (2003) observed, fieldwork skills were most pronounced for College/University level.

6.13 Mkushi High Schools Geography Teachers' Views on the Field Project Component of the New Zambian High School Geography Syllabus

The new high school geography syllabus has the field project component. This study wanted to capture the experiences of high school geography teachers of Mkushi district on this aspect of the syllabus as they prepared the first shoot of grade 12 pupils. It has already been established in earlier sections of this report that the teachers had problems on this component of the syllabus. However, their difficulties were eased by the one-day field project orientation seminar conducted by the Examinations Council of Zambia in 2003, though 80 percent of the respondents expressed that the one-day teacher's orientation was inadequate for them to have acquired the much-needed skills. All the respondents (100 percent) expressed the need for a more detailed training in the field project component of the syllabus.

In response to the question as to whether any one of them had attended a similar course in fieldwork, only the three graduate teachers indicated having had such training. Most of the teacher respondents (70 percent) reported that they had not received training in the field project component of the syllabus.

The respondents were also asked to express their opinion as to whether pupils should choose their own research projects or teachers should choose for them. Most of the respondents (60 percent) were of the view that pupils should be choosing their own research projects so as to encourage them to discover more on their own and also to see how resourceful pupils would be. Furthermore, the teachers indicated that allowing pupils to choose projects on their own would make them (pupils) write the projects whole-heartedly out of interest.

However, 40 percent of the respondents held the view that teachers should choose the projects to be done by pupils. Such teachers explained that when teachers choose the projects to be done by pupils, it becomes easier to mark the written projects. Secondly they argued that if teachers did not choose the range of projects to be done, it would be difficult to verify whether the project was actually done by a pupil himself or herself and if details on the ground were actually matching with what was written by the pupil. They further argued that when teachers chose the projects to be done, the chosen projects would be geographical in nature and also in line with the chosen theme.

All in all, the respondents bemoaned the lack of equipment in their respective high schools to enable them undertake serious fieldwork before pupils could write their individual projects. They cited the lack of equipment like soil augurs, measuring tapes, compass and chemicals for testing soil samples.

6.13.1 Practical Challenges encountered by geography teacher Respondents of Mkushi district when conducting field project

Teacher respondents were asked to state the practical challenges they might have faced, if any, when actually supervising and conducting field projects in the year 2004.
Table 10. below portrays some of the challenges the teacher respondents reported.

TABLE 10- Challenges of conducting the field project faced by geography teachers of Mkushi district

CHALLENGE	NUMBER OF RESPONSES	%
a) Managing the usually large numbers of pupils taking Geography.	3	16.7
b) Inadequate administrative support, for example, none payment of lunch allowance for teachers	6	33.3
c) Inadequate skills required to plan, conduct and assess projects	4	22.2
d) Inadequate time to teach fieldwork project	5	27.8
TOTAL	18	100

Going by the responses in table 10 above, the biggest challenge faced by the teachers was that of inadequate administrative support where, for instance, 33.3 percent of the

teacher respondents cited none payment of lunch allowance for teachers. This was followed by the inadequate time to teach the field project due to the few periods allocated to teaching geography on the time table, that is, (4) periods per week. Twenty–two percent of the total teacher respondents reported having had inadequate skills required of them to plan, conduct and assess the project work. Respondents also expressed their dissatisfaction with the non-payment of the marking allowance for the field project. All the teacher respondents said that teachers involved in the supervision, conducting and marking of the field projects should be paid an allowance in the same manner as those teachers of Industrial Arts and Home Economics

6.13.2 Aspects of the Field Project in which Pupils found difficulties

As it was not easy to tell which aspect of the field project was posing most difficulties to pupils, teacher respondents were asked to mention as many aspects of the field project as possible, in which pupils found difficulties. The responses are illustrated by Table 11 over.

TABLE 11- Aspects of the field project component in which pupils found difficulties according to teacher respondents

ASPECT	NUMBER OF RESPONSES	%
1.How to choose a fieldwork project and stating the title of the report	4	11.4
2. How to frame the aims	5	14.3
3. How to state the hypothesis/assumption/objectives	6	17.1
4.The methodology part- sampling techniques and data collection- methods	3	8.6
5. Data presentation	2	5.7
6. Interpretation and analysis	4	11.4
7. How to state problem and limitations of study	1	2.9
8. Writing a conclusion and evaluation	2	5.7
9. How to write up a report in a scholarly manner	6	17.1
10. How to make recommendations	2	5.7
TOTAL	35	99.9

According to teacher respondents, aspects of the field project in which pupils found difficulties, in their descending order of importance, were:

how to state the hypothesis/objectives and how to write up a report in a scholarly manner (each recording 17.1 percent of the total responses). This was followed by

how to frame the aim which registered 14.3 percent of the responses.

how to choose a field project and state the title for the report (11.4 percent), and how to analyze and interpret data (11.4 percent of the total responses)

the percentage for the methodology part, that is, sampling techniques and data collection methods stood at 8.6 percent of the total responses captured.

These problems as cited by teachers might have been a reflection of some of the teacher's own inadequacies in the cited areas.

At one of the three high schools, (Chalata High School) it was discovered that the teacher had not covered any of the above components with the 2005 Grade twelve pupils.

. It was also of interest to learn that from the marked field projects, there were indications that some of the candidates either simply paid some one to write the project for them or they were assisted by teachers. This revelation, however, needed further verification, which could not be done at the time of the study as this required more time.

PART 'B'– Perspectives of pupils of Mkushi district on the new Zambian High School Geography Syllabus

This study considered it important to capture the views of pupils who had been taught using the new syllabus from grade 10. The rationale was two-fold. Firstly, it was assumed that grade 12 pupils were in a better position to give a more realistic picture of their experiences of the new high school geography syllabus having learnt it from grade 10. Secondly as Lewy (1977) argued, while we may not necessarily view pupils as experts in curriculum materials, pupils who learn from the new curricula materials and procedures are very good observers of their own problems and reactions. With this in mind, the study sampled thirty-five grade twelve pupils taking geography and asked them about the various aspects of the implementation and nature of the new high school geography syllabus. Eighteen of these were male while seventeen were female.

As alluded to earlier, the involvement of pupils was made on the premise that pupils are key stakeholders in the teaching-learning process and therefore their observations, experiences and views on the subject from the time they started learning it in Grade 10, would assist in the evaluation of the various facets of the new syllabus. Secondly, involvement of pupils would help contextualize the experiences and views of teachers and therefore would be useful for comparison of information provided thereby providing checks and balances, for example, on preferred teaching/learning methods used as well as on aspects of the syllabus considered to be difficult by pupils.

Popularity of Geography as an Optional Subject

Pupil respondents were asked to express their ideas about geography as an optional subject and whether or not they liked the subject. Judging by the high number of 'YES' responses (97 percent) to the question which sought to establish the popularity of geography as an optional subject, it seemed that Geography still enjoyed popularity as an optional subject at all the three high schools of Mkushi district.

Choice of Geography as an Optional Subject

When asked as to whether these pupil respondents were given a chance to choose Geography as an optional subject, 97.2 percent of the respondents stated that the subject was imposed on them as the curriculum was already tailored by the school authorities in such a manner that if a pupil found himself or herself in a class which was allocated to take geography, then one had to take the subject. Similarly if one found oneself in a class that was not allocated geography then one could not take geography as an option subject. This finding points at the challenges faced by school authorities to ensure that optional subjects be treated as such and not as mandatory subjects. There is need to allow pupils choose subjects which they consider to be worthwhile studying for their future rather than impose subjects on pupils.

Factors that encouraged pupils to take Geography

Pupils were asked to indicate as many factors as they felt which encouraged them to take Geography in preference to other optional subjects. The following were the common factors cited,

TABLE 12-Factors that encouraged pupils to take geography as an optional subject

FACTOR	NUMBER OF RESPONSES	%
Teacher motivation	1	2.8
Parental/Guardian encouragement	0	0
Subject imposed on pupil/school curriculum pre-designed	35	97.2
Other factors	0	0
TOTAL	36	100

Out of the thirty-six pupil respondents, 97.2 percent indicated that they had not chosen geography subject out of their own volition alleging that the subject was imposed on them through the pre-designed school curricula. These pupils however, said that they liked the subject as reported on page 80. A few of them, (2.8 percent) indicated that they took geography as a result of having been motivated by their geography teachers. This low percentage should raise concern as to whether geography could be boring because 'teachers are boring' or the 'subject is boring' or even both. There is need to explore modern teaching methods, which could motivate pupils to learn geography.

Pupils' Preferred Methods of Learning Geography

Pupils have different preferred methods of learning geography. Some of the preferred methods of learning geography by pupil respondents of Mkushi District are shown in Table 13 below:

TABLE 13- Preferred methods of learning geography by pupils from high schools of Mkushi district

PREFERRED METHOD	M	F	NUMBER OF RESPONSES	%
a) Teacher giving notes and the explaining	10	15	25	35.7
b) Note taking	3	8	11	15.7
c) Teacher exposition or lecture method	2	1	3	4.3
d) Discussion	3	6	9	12.9
e) Skills learning	3	0	3	4.3
f) Problem solving	4	0	4	5.7
g) Guided question and answer	2	3	5	7.1
h) "Questioning method"	2	8	10	14.3
TOTAL			70	100

From the above findings, it was evident that most of the pupils (35.7 percent) preferred the method of teachers providing them with notes and then explaining the given notes. In other words, the most preferred method was the teacher–centred approach which came in various forms such as the giving of notes, explanations and question-and-answer sessions led by teachers. Other preferred methods of learning geography by pupils in their order of preference were; note taking (15.7 percent), questioning method (14.3 percent), and discussion methods (12.9 percent). Although many pupils indicated "questioning method" as having been one of their preferred method, it was established by the researcher through a non-participatory method that, in fact, very few teachers and pupils alike actually understood what the questioning method was all about in its wider and deeper sense. There is need to exploit this method of teaching more than is the case at the moment if the ideals stated in the National Education Policy document "Educating Our Future" (MOE 1996) are to be realized. The lecture method and skill acquisition methods were the least preferred learning methods, each scoring 4.3 percent.

The responses in table 13 suggest that female pupils favour teacher-centred methods of learning, namely, teacher giving notes and then explaining as well as note taking. This is evidenced by the higher figures of female responses on these methods, that is, 15 and 8 respectively. Male respondents on the other hand ranked highest in the problem solving and skill acquisition methods as indicated by the higher responses compared to those of females, that is, 4 for males on problem solving against 0 for females, and 3 responses on skill acquisition for males against 0 for female responses.

Sections of the new High School Geography that pupils found difficulties in

Pupil respondents were asked to tick against as many sections of the new high school geography which they felt they found difficulties in. Their responses are as shown in table 14

TABLE 14 Section of the new high school geography that pupils found difficulties in

SECTION CONSIDERED AS DIFFICULT	M	F	NUMBER OF RESPONSES	%
a) Physical geography	5	8	13	37.1
b) Field project component	10	3	13	37.1
c) Map work or Map reading	5	12	17	48.6
d) Mathematical Geography	7	13	20	57.1
e) Elements of human Geography	2	4	6	17.1
f) Meteorology and climatology	5	6	11	31.4
g) Geography of Zambia	0	0	0	0
h) Geography of the Sub-region	4	3	7	20
i) Settlements and population studies	0	2	2	5.7
j) None	2	0	2	5.7
TOTAL	40	51	91	100

The above results confirm the much held view by many pupils that physical, mathematical and map reading are problematic topics in senior geography. In addition to these topics there was the field project which was a new component of the syllabus. These areas were particularly more problematic to female pupils who scored higher number of responses in these areas than their male counterparts, that is, (8) for female against (5) for male on Physical geography, (12) for female against (5) for male on Map work and map reading, and (13) for female against (7) for male on the mathematical geography component.

One aspect of a pupils' ability to perform well in the final examination is the exposure which he/she has had in practicing on previous examination papers or specimen examination question paper. In the case of the 2004 grade twelve candidates of Mkushi High Schools, it was found that 74 percent of the respondents (26/35) indicated that they had had access to specimen examination question papers and they affirmed that the papers were very helpful in their preparations toward the 2004 final examination. The other twenty four percent indicated that they had had no access to the specimen examination papers.

Thirty out of thirty- five pupil respondents indicated that continuous assessment should be part of the final school certificate/GCE grade. However, there were no suggestions from them on how best this could be achieved so as to standardize the assessment.

Major Challenges of Learning the new High School Geography faced by pupils

Pupil respondents were asked to indicate by ticking challenges which they faced when learning the new high school geography. Their responses in their descending order, are illustrated in table 15 below.

TABLE 15 Major challenges of learning the new high school geography faced by pupils of Mkushi district

MAJOR CHALLENGE	M	F	NUMBER OF RESPONSES	%
Field Project	5	4	9	22
Teacher related as explained in the text below (p 84)	1	8	9	22
Mathematical Geography	3	3	6	14.6
Physical Geography	2	3	5	12.1
Map reading	3	1	4	9.8
Lack of materials e.g. textbooks	1	1	2	4.9
Meteorology and Climatology	1	1	2	4.9
Elements of Human Geography	2	0	2	4.9
Geography of the sub region	1	0	1	2.4
Syllabus too long and wide notes	1	0	1	2.4
TOTAL	20	21	41	100

From the above table the major challenges of learning the new high school geography for pupils in Mkushi district were in the field project component and from the teacher related challenges.

It is of concern to note that there were higher numbers of female responses (8), compared to that of male (1) who indicated that they had teacher related challenges. There is need to be gender sensitive among teachers of geography when teaching.

Some verbatim comments from pupil respondents on these challenges read as follows,

Field- project, mathematical geography, meteorology and climatology as well as map work where they (teachers) don't even teach much I don't consider any difficult, the only thing that can cause problem may be the teacher
I don't consider this new high school geography to be difficult. It's only that sometimes if the teacher is not having confidence in teaching it becomes boring and for this, pupils start to run out of the subject. So what I can say is geography is not difficult.
Method of teaching is not up to date.
We lack teachers of geography/ shortage of teachers.
Misunderstanding some of the words they (teachers) use, or notes for example books, which are not summarized. (Sampled verbatim responses from the 2005 G12 pupil respondents from three high schools of Mkushi district)

All the above statements suggest that many of the challenges of learning geography faced by pupils were teacher–related. This is a confirmation of the argument raised by Manchishi (2004) that the quality of Zambia's schools reflects the quality of the teachers found in them. Clearly the above pupils' experiences should send signals to teachers to evaluate themselves and see if they are approaching the new syllabus with the appropriate competences that can win pupils' confidence in them.

Other than the field project component, another area that posed a problem to pupils was the Mathematical and physical geography components. Of the thirty-five pupil respondents, 23 percent of them stated that they had no difficulties in learning the new high school geography.

Pupils' Views about the Field Project Component

Of the thirty-five pupil respondents, 77.1 percent stated that they had lessons in the field project while the remaining 22.9 percent indicated that they had no lessons on this component of the syllabus. In response to the question as to whether the respondents had already chosen a field project to be done, 68.6 percent of the respondents indicated that

they had already chosen individual projects to be done, while 31.4 percent of the respondents indicated that they had not yet chosen.

Most of the pupil respondents (57.2 percent) showed that they had an idea of the date for the submission of the final project report, while the other 42.8 percent did not know the date of submitting the finished projects. Concerning choice of the projects, 85.7 percent of the pupil respondents felt that pupils should choose projects on their own and not teachers to choose for them.

If pupils are to acquire the much desired skills of observation, recording, analyzing and interpreting data, it is recommended that they (pupils) should be allowed to choose projects of their own preferably within their localities and under guidance of their teachers.

The Field project component of the new syllabus has several dimensions. In order to assess which aspect of the field project posed difficulties to pupils, the researcher asked respondents to indicate which aspects they found difficulties in. The findings are presented in table 16 below;

TABLE16-Aspects of the field project perceived to be difficult by pupils of Mkushi district

ASPECT OF FIELDWORK CONSIDERED TO BE DIFFICULT	NUMBER OF RESPONSES	%
a) Topic identification and stating project title	5	6
b) How to frame aims	6	7.1
c)How to state hypothesis, assumptions and objectives	16	19
d)The methodology part- sampling techniques and data collection methods	15	17.9
e) Data presentation	11	13.1
f) How to interpret and analyze data	11	13.1
g) How to state problems and limitations	4	4.8
h) How to make a conclusion and evaluation	6	7.1
i) How to write up a report in a scholarly manner	4	4.8
j) How to make recommendations	6	7.1
TOTAL	84	100

The study revealed variations in aspects of the field project where pupil respondents found difficulties in. As shown by table 16 above, out of the thirty-five pupil respondents, 19 percent of them had problems with knowing how to state hypothesis, assumptions or objectives. Of the aspects listed, 17.9 percent of these respondents stated that they faced difficulties in the methodology part, that is, sampling techniques and data-collection methods, while another 17.9 percent had difficulties in data presentation and interpretation. A visual comparison of the responses given by teachers in table 11 to those given by pupils in table 16 indicates that there are close similarities in the aspects of the fieldwork considered to be difficult. In few aspects, such as scholarly writing, choice of topic, and methodology, there are significant variations in responses between those given by teachers and those of pupils with the former showing lesser difficulties than the latter.

From the follow-up discussions held with pupil respondents and teachers, it was clear that this section of the syllabus (the project component) proved to have posed a major challenge to the learning of the new high school Geography for many pupils of Mkushi District.

Further Discussion

6.14 Implications brought by the New Zambian High School Geography Syllabus to High Schools of Mkushi district

Much as the New Zambian High School Geography Syllabus can be said to have brought improvement to school Geography in that it has become more meaningful, relevant and relatively easier as pupils are dealing with geographical phenomena which are familiar to them, it has also unearthed a number of implications for teachers, pupils, as well as school management and policy makers, as observed from the findings of this study. This section of the chapter outlines some of the major implications that were identified with respect to teachers, management and pupils of high schools of Mkushi district.

6.14.1 Implications for the High School Geography Teachers

Though the points outlined below are not exhaustive, the following are the challenges and implications of the new high school geography syllabus for the geography teachers of Mkushi district.

- The need to continuously upgrade their initial qualifications obtained from Colleges or Universities through training and retraining in a wide range of geographical body of knowledge and skills so as to enable them to handle the new syllabus with greater confidence and competence. In this regard, high school geography teachers have a personal responsibility to them to upgrade their qualifications and thereby deepen their geographical knowledge, skills and professional capacities. This could be through In-Service Training (INSET), Continuous Professional Development (CPD) or regular training.
- Involving themselves (teachers) in subject professional associations such as the Geography Clubs at school level and the Geographical Association at national level. This would enhance sharing of similar or diverse experiences.
- Involving themselves (teachers) in the efforts of undertaking scientific research and evaluation of teaching/learning programmes and materials at both local Education Boards and National levels.
- Production of suitable locally made teaching /learning materials such as writing of pupils' textbooks as teachers are assumed to know better what should be taught to pupils.
- Familiarising themselves with the use of the latest teaching /learning approaches and methods so as to cater for the various types of learners in geography described by Balderstone, and Lambert (2000) as Accommodators, Assimilators, Divergers and Convergers.
- Ensuring that the Desired Learning Achievements (DLAs) and competences such as those stated in "Educating Our Future" (MOE 1996) are rightly conveyed to and attained by learners of geography. This entails teachers to teach beyond merely preparing pupils to pass their examinations. It entails equipping pupils with geographical knowledge and skills that pupils should apply in

solving the socio-economic, political and ecological problems encountered in the real world outside the classroom environment.

- Ensuring fair and standardized assessment of the field project component of the syllabus.
- Teaching and living as role models with regard to topics such as HIV/AIDS, which has affected both teachers and pupils.
- Studying and understanding the psychological processes of pupils when learning geography, such as their motivation.

These are some of the challenges to teachers which have been brought by the introduction of the new geography syllabus. These challenges are not exhaustive and cannot be fully discussed in this chapter.

6.14.2 Implications for Management and Policy Makers

A number of implications and challenges are posed to management as a result of the introduction of the new high school Geography. There is now, more than ever before, the dire need of rising to the challenge of professionalizing geography teachers through, for instance, involving them in the processes of Geography Curriculum design, formulation, implementation and review. In view of this, the following implications and challenges have been brought out by this study;

- The need to source for finances to facilitate some deliberate training and retraining of teachers of geography to levels of accreditation or certification and not merely the ongoing locally organized workshops.
- The need to source for and timely provide suitable and updated teaching/learning materials, such as the use of computers, access to Internet services and latest Atlases and textbooks.
- The need to create a conducive, enabling teaching –learning school environment to both teachers and pupils. School management should be interested in finding out what is going on in their classrooms and ensuring that learning is taking place in their schools. Teachers with weaknesses should be talked to in a professional manner and those who are hard working rewarded accordingly.

- Ensuring that the ideals of Educating Our Future- the National Policy document on Education (MOE, 1996) are promoted and attained to societal and national expectations. One particular challenge of school Geography is the promotion of equality, equity, efficiency, partnership, and accountability. School Geography in Zambia in general, and Mkushi district in particular, is expected to play a vital role in human capital formation, particularly in developing the types of knowledge, skills, values and competences that are necessary for sustainable economic development and social welfare. School geography in Zambia is still expected to contribute to serving individual, social and economic well-being and to enhance the quality of life for all. This aim for school geography is guided by the principle for the development of education in Zambia, namely; liberalization, equality, equity, partnership and accountability.
- The new high school geography needs to re-align itself more than before to contribute to the attainment of the following goals of Zambia's Ministry of Education:-

Producing a learner capable of

- being animated by a personally held set of civic, moral and spiritual values
- developing an analytical, innovative, creative and constructive mind
- appreciating the relationship between scientific thought, action and technology on the one hand and sustenance of the quality of life on the other.
- demonstrating free expression of one's own ideas and exercising tolerance for other people's views.
- cherishing and safeguarding individual liberties and human rights
- appreciating Zambia's ethnic cultures, customs and traditions and upholding national pride, sovereignty peace, freedom and independence

- participating in the preservation of the ecosystems in one's immediate and distant environments.
- maintaining and observing discipline and hard work as cornerstones of personal and national development,(MOE 1996).

How much of the above ideals are being realized through the role played by the new high school geography is one area that requires further exploration.

- Seriously considering introduction of Continuous Assessment (CA) at high school level; school-based assessment and evaluation as an additional way of assessing and evaluating candidates rather than predominantly basing it on the final examination grade obtained by a candidate.

With the decentralization of education delivery in Zambia, High School Boards are faced with such managerial and policy interpretation challenges. High Schools in Mkushi District are not exceptional.

6.14.3 Implications for Pupils

The introduction of the new high school Geography syllabus has also brought implications to pupils in schools. The greatest of the challenges is that of making a choice out of the optional subjects such as geography. Pupils are put to test of having to choose either a subject which would equip them with analytical and life skills such as Geography or taking any other subject which they may consider to be more relevant to their future career. In other words, there is a challenge of either to learn for life-citizenship, responsibility toward self and environment in its broader context or to learn for passing the examination in order to enter a preferred career.

The second implication to pupils is that of how to achieve the desired learning levels of achievement in geography. The introduction of the new high school geography calls for pupils to work hard academically. This entails curtailing the culture of promoting failures for those pupils who feel they have a right to progress with their academic work even with minimum passes. This is because the new high school geography demands

acquisition of intellectual skills such as analytical thinking, problem solving and enquiry learning. The new high school geography opens up the affective and dispositional outcomes such as values and attitudes education, all of which cannot be learnt by rote memory.

Thirdly the nature and content of the new geography syllabus entails that pupils should read beyond classroom notes given to them by their teachers. They are expected to selectively get relevant geographical information from educational Videotapes, Television, Internet, and reading Newspapers, as information from such sources cannot be found in convectional prescribed textbooks.

CHAPTER SEVEN – CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

This study has brought up various salient experiences of geography teachers in rural based high schools of Mkushi District who taught and prepared the first shoot of grade twelve pupils that followed the new Zambian High School Geography Syllabus up to the 2004 examinations. Some of the pertinent findings of this study are summed up below.

The study has shown that teachers of Mkushi district were not consulted before the syllabus was implemented. There was no orientation given to teachers to acquaint them with the structure, aims and objectives of the new syllabus. In this regard, it can be argued that it is doubtful as to whether the goals, aims and objectives of the new syllabus were being adequately addressed by the implementers of the new syllabus- the teachers. The one-day nation wide Geography field project workshop organized by the Examinations Council of Zambia was inadequate.

Rural high school geography teachers had a problem of finding the appropriate teaching/learning materials, particularly for the new regional geography of SADC and COMESA member states. Some of the teachers who were expected to be key sources of information were equally not well versed in the latest geographical information pertaining to this region. The prescribed standard pupils' textbook was only distributed to schools the following year (2005, term one) after the first shoot of grade twelve candidates had written their examination. This might have been one major reason for the relatively poor grades obtained by pupils in their 2004 final geography examination.

This study has also shown that there was little, if any, departure in methods of teaching geography employed when preparing pupils. The methods were still examination–oriented and teacher–centred. Methods that required critical thinking, such as those based on 'the questioning' method were hardly known and utilized. Judging from Figure 3, there was still total dependency on the use of the textbook as a major source of information and as a teaching method. The evident stress on teaching pupils in order to pass examinations raises concern as to whether the ideals, aims and objectives of

introducing the new syllabus have been clearly perceived by the teachers. Maybe the curriculum change was not significant in effect, in other words there was negligible transformation at all. This point relates quite well to a classification scheme proposed by Namafe (2006) when he was citing Farrant (2004). According to Namafe (2006), curricula changes may be categorized into three main groups.

First, there are those curriculum reviews which are least significant. These are the easiest curriculum review types to achieve because they merely adapt an existing syllabus. Parts of the old syllabus are cut out and new parts introduced. Where examples are no longer appropriate for some reason, they are changed and where facts are out of date they are updated. As far as teachers and pupils are concerned, the main change here is simply a new or revised textbook. Clearly, the new high school geography syllabus under discussion belongs to such type of curriculum review. This is because perhaps the clearly noticed change was simply the publication of the new high school geography of Zambia syllabus which was later followed by the publication and distribution of the new high school geography of Zambia textbook

The second type of curriculum review is termed by Namafe (2006) as "Significant Curriculum review". This type of curriculum change and, hence, curriculum type is more substantial than that noted above. The syllabus that emerges bears little resemblance to that which went before. In this case, new teaching materials for the course are produced as a result of careful research and testing. Such curricular require a great deal of time, effort and expertise and may, therefore, be devised by curriculum development teams.

The Third curriculum review type is called the "Most Significant". This version of curriculum does not only alter the content of the curriculum but also the method by which it is taught. The role of the teacher may change completely in this regard and in view of this, some kind of in–service as well as pre–service teacher training may require to be provided to accompany the changed curriculum. Farrant (2004) argues that curriculum development and in-service teacher training are opposite sides of the same coin and it is impossible to have the former without the latter.

The geography curriculum review which was supported by the British Council and coordinated by Namafe (Zambia) with his colleague from the United Kingdom (Frances Slater) belongs to this category of curriculum reviews.

It was also apparent from this study that there was, and there could still be, a problem of how to handle the field project component of the syllabus. Judging from the verbatim responses by some teachers, there was a general dissatisfaction from the teacher respondents with the manner in which the new high school syllabus was implemented. The syllabus was hurriedly implemented before putting in place the necessary logistics and without widely consulting the implementers, that is, the teachers themselves.
The introduction of the new high school geography certainly brought challenges and implications to the Zambian High School Geography. These challenges and implications are for teachers, pupils, school-managers and policy makers.

It is hoped that this study has contributed to the field of evaluation at a local level which is vital in a decentralized system of educational delivery. The study has yielded insights of what was happening in rural high schools of Mkushi district in as far as the teaching and learning of the new high school geography was concerned. Such information may be relevant for the improvement of teaching and learning as it stirs the minds of teachers to venture into rigorous academic exercises such as the evaluation of the introduced teaching learning programmes, learning processes and materials associated with the new geography syllabus at the local education board level or at national level.

It is also hoped that this study has provided data, which could be utilized by management and lecturers in Colleges of Education as well as CDC officials to design strategic in-service courses for Geography teachers, aimed at re-orienting them to the new syllabus, as well as to deepen and update teachers with developments in their profession and subject area. This is particularly the case with Nkrumah College of Education which, at the time of this report, was transforming its curriculum from training Grade 8-9 teachers towards the training of high school geography teachers of grades 10-12.

7.2 Recommendations

In view of the above findings, the author proposes the following recommendations aimed at addressing the identified weaknesses and challenges:

- In order to link the goals and objectives of the new geography syllabus to the goals, aims and objectives of high school education in Zambia as stipulated in the national education policy of "Educating Our Future" (MOE 1996), the Ministry of Education should plan and budget for short *accredited* in- service courses to orient and re-orient teachers to the new high school geography syllabus.

- Having established that there is a problem of how to approach the new syllabus in general, and in particular, the field project component, the MOE should design accredited short intensive courses (SICO) to train and retrain geography teachers on how best to handle the new syllabus in general, and in particular, those specific identified areas of the new syllabus which posed difficulties for teachers, such as the field project component, the sub–regional geography of Africa and the Human and Economic geography section, the latter which needs to be revised so as to cut down on time spent on this section. Such trainings could be held during school holidays from provincial centres for all geography teachers. Resource personnel could be drawn from identified qualified and competent subject specialists, Team leaders for SC/GCE examiners, Education standards officers and other teachers across the nation. Such training could be held even at district level.

- Following the publication and analysis of the results of the 2004 grade twelve candidates who were taught under the new high school geography syllabus, it would be ideal to hold national, provincial or district symposia for all geography teachers and other interested stakeholders aimed at getting views and experiences of practicing teachers on aspects of the new syllabus. Resolutions from such symposia could be used to review the new geography syllabus.

- In future, curriculum developers should make wider consultations among the rural–based high school geography teachers in the formulation and design of syllabuses before the implementation of any intended changes to curriculum are effected.

- There is need to acquire suitable, detailed and latest teaching/learning materials, especially on the Sub–region of Africa and the field project component by the Ministry of Education, respective schools or district education boards.

- In future, prescribed textbooks and any other relevant teaching-learning materials and equipment relevant to the new syllabus should be put in place before implementing any changes. The challenge of the then Minister of Education in Zambia, Brigadier General Miyanda (1999/2000) for teachers to write and produce suitable text books still remains unanswered to a large degree. Teachers are supposed to know better what materials are best suited for their pupils. CDC could organize workshops for teachers to produce teaching materials.

- If rural–based high schools are to match with the modern technology in educational instruction then Government, NGOs, Embassies, business organizations and other individuals should provide more computers and Internet facilities to rural–based high schools such as those of Mkushi district.

- Education Standards Officers should facilitate the holding of locally held INSETs concerning the use of various pedagogical methods of teaching and learning of geography in general, and in particular, the use of such methods as the 'Questioning method' which, if properly employed, could be a driving force for implementing Zambia's educational policy in high school geography and a means towards addressing the type of learner stipulated in 'Educating Our Future" (MOE 1996).

- The Zambia Geographical Association (ZGA) should be revived so as to serve as a forum for geography teachers and professionals to share experiences and developments in Geography as a subject.

- ECZ should explore the possibility of introducing Continuous Assessment (CA) as a core component of the final assessment for pupils.

- There is need for geography teachers in Mkushi district to continuously upgrade their initial qualifications obtained from colleges or Universities. The Government through the MOE should increase the number of teachers to be sponsored to University from the current four per province to at least fifteen. Out of this figure three quarters should be selected from rural based high schools. Some of the Highly Indebted and Poor Countries (HIPC) completion benefits should be channeled towards human resource development of teachers.

- A comparative study in adjustment mechanisms employed between rural and urban high schools, to assess the impact of the implementation of the new high school geography syllabus should be undertaken.

It is hoped the findings of this study and the recommendations made will be of value to various stakeholders who may be interested in conducting further research in the area of evaluating the implementation of new School Geography curricula in rural-based high schools of Zambia, or in urban schools for comparison purposes. In a nutshell, the implementation of the new Zambian High School Geography Syllabus in the High Schools of Mkushi district was an undertaking with challenges, implications and opportunities for many high school geography teachers, school managers and pupils.

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APPENDIX 1 'A'

QUESTIONNAIRE FOR TEACHERS ON THE IMPLEMENTATION OF THE NEW ZAMBIAN HIGH SCHOOL GEOGRAPHY SYLLABUS

Dear Respondent

You have been purposely selected as one of the respondents to this questionnaire whose primary purpose is to help gather data, which would be of assistance to the evaluation of the implementation of the new Zambian High School Geography syllabus in rural, based high schools of Mkushi district. Your views, experience and constraints encountered (if any), when teaching and preparing grade 12 pupils for their final 2004 geography examinations under the newly implemented high school geography syllabus, will provide relevant information for the improvement of teaching and learning of geography in rural high schools of Zambia in general and of Mkushi district in particular.

To ensure confidentiality, anonymity of the respondent is assured and all responses obtained shall be treated with the strictest confidence they deserve.

INSTRUCTIONS

For questionnaire items with objective responses, please **tick** (√) the most appropriate one from your point of view.

For open-ended questions, please, write your response in the space provided. If you need more space for your response, the blank pages may be used. You are requested to be as objective as possible when answering the questions. Kindly, answer without influence from any other person.

NAME OF HIGH SCHOOL_____

School Code_____**Region/ Province**_____

District _____

TYPE OF SCHOOL:

(A) Co- education/ Dual (i) Boarding (ii) Day School (iii) Weekly Boarding

(B GENDER OF PUPILS AT SCHOOL:

(i) Boys only Boarding School
(ii) Boys only day School
(iii) Girls only Boarding School
(iv) Girls only day School

GRADE OF SCHOOL: GRADE [1] [2] [3]

1. GENDER OF RESPONDENT: [MALE] [FEMALE]

2. What is your highest professional qualification?
   (a) Masters degree (b) First degree (c) Advanced diploma (d) Diploma
   (e) Certificate

3. Name of Institution and year when your highest qualification was obtained:
   Name of Institution _____
   Year qualification obtained_____

4. Do you have any other related qualifications? [Yes] [No]

   If 'Yes,' state the qualification, name of institution where the qualification was obtained and the year the qualification was obtained.

   Qualification_____
   Name of institution _____
   Year qualification was obtained _____

5. From the year you last obtained your highest qualification have you ever attended any training course related to Geography? [Yes] [No]

   If 'Yes' briefly state the nature of the course attended, where the course was held and when ?
   Nature of the course attended _____
   Place where the course was held _____
   Year the course was held _____

6. How long have you been teaching Geography?

(a) At Junior Secondary School level? _____
(b) At Senior Secondary School/ High School level _____
(State number of years or months).

7. Were you involved in the teaching and preparation of grade 12 pupils towards their 2004 school certificate and GCE Geography examinations? [Yes] [No]

8. During your teaching experience were you ever consulted and oriented to the changes in the Geography high school syllabus? [Yes] [No]

If Yes, who did the appraisal and orientation? _____
_____

9. Did your school have an early access to a copy of the new high school Geography syllabus? [Yes] [No]

If yes, at what level did you have access to the syllabus? In grade _____

[Term 1] [Term 2] [Term 3]

10. Did your school receive the approved and prescribed high school Geography textbook to accompany the new high school Geography syllabus in time?

[Yes] [No]
If Yes, please state the date/ month/ year _____

If No, please state the type and source of teaching learning materials you were using when teaching the new high school Geography._____
_____

11. If you have looked at and used the new high school geography textbook, what is your rating of the book as a standard textbook to be used when teaching the new high school geography syllabus?

(a) Very good (b) Good (c) Elementary and shallow (d) If any other view please clarify _____

12. Which type of teaching method do you commonly use? Below are some of the methods used by teachers. Indicate by using a tick against the method (s) you use most when teaching Geography.
    (a) Giving notes and then explanation
    (b) Note taking
    (c) Lecture
    (d) Discussion
    (e) Simulation exercises
    (f) Role play
    (g) Discovery/ problem solving

(h) Question and answers
(i) Questioning method
(j) Guided questions and answer
(k) Development Compass rose
(l) Any other, please, specify_____
(m)

Give a reason (s) for using the preferred method (s) you have indicated in item (12) above _____

13. In your opinion, is the content of the new high school Geography syllabus ideal for the development of a pupil well equipped with Geographical knowledge and skills to enable him/ her cope with the challenging higher level tertiary (college and University) Geography courses and for life after school? Briefly illustrate your view.

_____

_____

14. From your experience of having taught and prepared G 12 pupils for the 2004 Geography examinations, is the time allocated for Geography teaching adequate to cover the syllabus in time for examination?
[Yes] [No]

If No, please, clarify

_____

_____

15. Which topic/ section of the new high school Geography syllabus do you find difficult to teach? (Tick as many as you find difficulties in)

(a)	Physical geography (land forms)	[ ]
(b)	Field project component	[ ]
(c)	Map work component	[ ]
(d)	Mathematical geography	[ ]
(e)	Elements of Human Geography	[ ]
(f)	Meteorology and Climatology	[ ]
(g)	Geography of Zambia	[ ]
(h)	Geography of the Sub – Region	[ ]
(i)	Settlements and population studies	[ ]
(j)	None	[ ]

16. In your view, what type of teaching and learning resources are required for the new high school geography syllabus?_____

_____

17. Did your school receive the specimen examination question paper in time?
[Yes] [No]

If Yes, How useful was the specimen examination paper in helping you prepare your

pupils For their examinations?

1. Very useful 2. Useful 3. Not very useful

18. In your opinion, did the paper 2 geography examination address the main areas of the syllabus? (a) Yes it did (b) It did not (c) Clarify

_____

_____

19. Should continuous assessment be part of the final grade in the school certificate/ GCE Geography? [Yes] [No]

If, Yes, suggest how best continuous assessment could be incorporated in the assessment of the new high school Geography? _____

_____

20. From your teaching experience, what would you consider to be the main constraint in teaching the new high school Geography syllabus?

_____

_____

_____

21. What type of in-service training is required for Geography teachers?

_____

_____

22. On the blank paper provided, please, make a critique of the implementation of the new high school geography syllabus using your own experiences in Mkushi district. Your suggestion of how best the new syllabus should have been implemented will be most appreciated.

THE GEOGRAPHY FIELD PROJECT COMPONENT

1. Did you attend the one-day field project orientation seminar organized by the examinations Council of Zambia in 2003? Yes / No
2. If you attended the one-day field project orientation seminar by ECZ, how would you describe the skills you received from the seminar?
   (i) Adequate (ii) Very adequate (iii) Inadequate (iv) Need for a more detailed training in field project
3. Have you attended any other field project course such as one conducted by the Department of languages and Social Sciences of the University of Zambia?
   [Yes]
   [No]
4. In your opinion should pupils be left to chose projects on their own or should teachers choose the projects to be done by their pupils? Give a reason or two for your response_____

   _____
5. Did the school have adequate fieldwork equipment? Illustrate type of equipment used _____

6. What practical difficulties did you face (if any) when conducting fieldwork?
   (a) Managing the large number of pupils taking Geography
   (b) Inadequate administrative support e.g. no missing lunch paid to teachers
   (c) Inadequate skills required to plan, conduct and assess the field project
   (d) Inadequate time to teach and later on conducting field project
   (e) High teaching load
   If any other difficult please specify: _____

7. Which aspect (s) of the field project did pupils find difficulties in?
   1. Choice of field work project and stating title of report
   2. Framing the aims
   3. How to state the hypotheses/ assumptions/ research questions/ objectives
   4. The methodology part – sampling techniques and data collection methods.
   5. Data presentation
   6. Interpretation and analysis part
   7. Stating problems/ limitations/ delimitation
   8. Conclusion and evaluation
   9. How to scholarly write up their reports
   10. How to make recommendations
   (Tick against each item observed to have presented a problem to pupils)

Thank you for sparing your precious time and for your willing co-operation to participate in this research.

APPENDIX 1 'B'

QUESTIONNAIRE FOR PUPILS

Dear Respondent

You have been randomly selected as one of the respondents to this questionnaire whose primary purpose is to help gather data that would be of assistance to the evaluation of the implementation of the new Zambian High School Geography syllabus in rural based high schools of Mkushi district. Your views, experience and difficulties faced (if any) during your learning of Geography from the time you came to this school, would provide relevant information for the effective teaching and learning of geography in rural high schools of Zambia in general and of Mkushi district in particular.

To ensure confidentiality, anonymity of the respondent is assured and all responses obtained shall be solely for academic and research purposes only and shall be treated with the strictest confidence they deserve.

INSTRUCTIONS

For questionnaire items with objective responses, please, **tick** (√) the most appropriate one from your point of view.
For open – ended items, please, write your responses in the spaces provided. If you need more space for your response, the blank pages may be used. You are requested to be as objective as possible when answering the questions.

Kindly complete the questionnaire without influence from any other person.

QUESTIONNAIRE FOR PUPILS

Name of High School-_____

School code_____REGION/PROVINCE_____

District _____

Type of School

a) Co – Education/ Dual
   (i) Boarding
   (ii) Day School
   (iii) Weekly

b) Gender of pupils at school:
   (i) Boys only Boarding school
   (ii) Boys only day school
   (iii) Girls only Boarding school
   (iv) Girls only day school

c) GRADE OF SCHOOL: Grade [1] [2] [3]

1. GENDER OF RESPONDENT:
   [MALE]
   [FEMALE]
2. GRADE _____ CLASS _____ AGE _____
3. How long have you been at this school? _____Years/ Months
4. Have you been learning at this school since grade 10?
   [Yes] [No]

5. If your response to question 4 above is No, please state when you came to this school, where you came from, and at which grade level?
   I came to this school in _____(year) from_____
   (Name of school) as a grade _____
6. Did you choose geography as your optional subject?
   [Yes] [No]

7. Do you like learning geography as a subject ?
   [Yes] [No]
   If No, please, clarify _____

8. Who influenced you to take geography as your optional subject?
   (i) The teacher
   (ii) My parents/ Guardian
   (iii) I had no choice it was imposed on me
   (iv) The school curriculum was designed that way.
   (v) Myself

If other, please specify_____

9. Which of the following learning methods of geography do you prefer?
   a) Teacher giving notes and then explaining
   b) Note taking
   c) Lecture method
   d) Discussion
   e) Skills learning
   f) Problem solving/ discovery method
   g) Guided questions and answer
   h) Questioning method

   (tick the method (s) you prefer most) and give reasons for the choice of the chosen method.

10. Which sections of the new high school geography syllabus do you find difficulties in to learn?
   a) Physical geography [ ]
   b) Field project component [ ]
   c) Map work/ map reading [ ]
   d) Mathematical geography [ ]
   e) Elements of human geography [ ]
   f) Meteorology and climatology [ ]
   g) Geography of Zambia [ ]
   h) Geography of the sub –region [ ]
   i) Settlements and population studies [ ]
   j) None [ ]

11. Have you had a look at of the specimen geography examination paper?
   [Yes] [NO]

12. Have you had a look at of the 2004 paper 1 and 2 examination papers?
   [Yes] [No]

13. Should continuous assessment be part of the final School Certificate/ GCE grade? [Yes] [No]

14. What do you consider to be your main difficulties of learning the new high **school geography?**

_____

_____

_____

THE FIELD PROJECT COMPONENT

1. Have you had any lessons on fieldwork project [Yes] [No]

2.Have you already chosen a field project topic to be done? [Yes] [No]

3.When should a grade 12 candidate submit his/ her final field project?
By _____ (State month)

4. In your view, should pupils choose fieldwork projects on their own or should teachers choose selected projects to be done by their pupils?
a) Pupils should choose on their own
b)Teachers should choose selected projects to be done by their pupils.

Tick either (a) or (b) and give a reason or two for your answer.

_____

_____

_____

5. Which aspects of the field project do you find difficulties in, if any?

a. How to choose the project (topic identification) and stating title of report/ topic
b. How to frame the aims
c. How to state the hypotheses/ assumption/ research questions/ objectives
d. The methodology part – sampling techniques and data collection methods
e. Data presentation
f. How to interpret and analyse the results/ findings
g. How to state problems and limitations and delimitation
h. How to make a conclusion and evaluation
i. How to write up the report in a scholarly way
j. How to make the recommendations

6. What do you suggest could be done to promote more liking of and interest in geography among pupils?

Thank you for sparing your precious time and for your willing participation in this research.

APPENDIX 1 'C'

QUESTIONNAIRE FOR THE CURRICULUM DEVELOPMENT CENTRE (CDC) AND EXAMINATIONS COUNCIL OF ZAMBIA (ECZ) GEOGRAPHY SUBJECT SPECIALIST OFFICIALS

1. What policy guidelines influenced, or had to be considered in devising the new high school syllabus?

2. What were the various factors, issues or pressures which precipitated the introduction of the new syllabus?

3. Were there / are there any regional or international factors relevant in influencing the new syllabus?
   If yes, what were / are they or which ones are these?
   If no, why?

4. Why should a syllabus be situated within such a regional or international context?

5. To what extent do you think this Geography syllabus addresses the challenge of "Educating for the future" as contained in the national education policy document, "Educating Our Future" 1996, pages 5 – 6 Goals and pages 51 –52 The Aims and Objectives of High School Education.

6. What went into the minds of people who chose the topics to be taught, to the exclusion of other possible topics to be taught, such as Regional Geography of North America or European Geography?

7. Which theoretical framework, approach was used to design and draw up this new Geography high school syllabus? And why was this approach used and not others?

8. Is the word "Syllabus" proper to use now instead of "Curriculum"?, why was the later not used by the designers of the syllabus?

9. The syllabus does not seem to address the relief and drainage, as well as the weather and climatic features of individual countries in the sub region, yet these aspects influence the human and economic activities taking place in these countries, which the syllabus focuses on, why this omission?

10. Are the topics such as: - landforms resulting from earth movements such as folding, faulting, volcanic activity and earthquakes, weathering in temperate regions relevant to Zambia? Why were they included?

11. The syllabus still covers all topics on Elements of Human Geography, such as location and importance of major Iron and Steel industries of the world (Australia, Japan, N.E, United States of America, France Germany and refers to Africa), how relevant is such a topic to Zambia, to society and to the learner?

12. Is the syllabus closely taking care of "rural" issues, topics or visions? How adequately are rural high schools taken care of with respect to the challenges of the new syllabus?

13. Was there any consultation and sensitization made to the teachers in rural based high schools before the syllabus was designed and implemented? If yes which provinces and schools are covered and how many teachers in all were involved?

14. Other than the 1986 survey of 60 rural and urban schools, on teaching and examining of geography in secondary schools, what other surveys focusing on geography have been done in Zambia, if any?

THANK YOU FOR YOUR RESPONSES

MGEYS/101/7/44

Ministry of General Education, Youth & Sport,
P.O. BOX 50093,
LUSAKA.

23rd January, 1989

To: All Heads of Senior Secondary Schools,

ATTENTION: H.O.D. Geography

PROPOSED NEW GEOGRAPHY - SC/GCE 'O' LEVEL SYLLABUS
NO. 2218

Attached please find a copy of the proposed new Geography - SC/GCE 'O' Level syllabus No. 2218.

This draft incorporates all your earlier suggestions as reflected in the survey report and other correspondence.

Please study the draft syllabus and send your comments and suggestions to me before 20th February, 1989. A geography subject panel meeting is set for 24th February. The University of Zambia Geography Department, School of Education Methods Section, Nkrumah Geography Department, Zambia Geographical Association, Curriculum Development, a representative from schools and the Inspectorate will meet to make a final draft before presenting it to the Zambia Examinations Council.

For section 3 - indicate fieldwork activities you are likely to carry out around your school, district or province.

Thank you.

T.M. Bwalya
DIRECTOR OF SCHOOL EDUCATION (HQ)
FOR/PERMANENT SECRETARY
MINISTRY OF GENERAL EDUCATION, YOUTH AND SPORT

PROPOSED NEW GEOGRAPHY - 50/600 'O' LEVEL SYLLABUS

NO. 2216

AIMS OF THE SYLLABUS:

The syllabus will provide the opportunity of a course of study which will allow the candidate to obtain a knowledge and understanding of:

(i) the basic geographical character of the locality in which he/she lives;

(ii) the systematic geography of the "home" area as a part of a more general study of the wider region of which the "home area forms a part;

(iii) major problems of a geographical nature arising from man's relationship with his environment.

INTRODUCTION:

In this syllabus emphasis is placed on making candidates aware of principles and concepts. These ideas should be applied to a systematic study of the topics listed in the syllabus content but should not be studied along traditional regional lines. These topics must be related to the "home" area (Zambia) and the "wider" region the continent of Africa.

FORM OF EXAMINATION:

The syllabus is based on the assumption that not less than three teaching periods or two hours per week over a course of three years will be allocated to the subject.

Candidates must offer Paper 1 and Paper 2. S.I. units only will be used for temperature, heights, distances etc.

Paper 1 (1½ hours) to which 40% of the total marks will be allocated, will consist of an objective test containing 50 multiple choice items and candidates should attempt all questions. The paper will be constructed as follows:

Syllabus Section	Number of questions
Syllabus Section A MAP WORK Basic Techniques and Skills	12 of which 10 will be based on a topographical map.

Syllabus Section B

Elements of physical geography 20

Syllabus Section C

Elements of world Human Geography 18

Total 50

Paper 2 (2 hours) will carry 60% of the total marks. Candidates must answer 4 questions. Two questions from section D, and two other questions from section E, Section F or Section G.

GEOGRAPHY:

SECTION A - Mapwork, Basic Techniques and skills.

(i) The interpretation of topographical maps on a scale of either 1:[illegible],000 or 1:25,000 to be based on tropical areas. Grid references, conventional signs, gradients, measurement of distance, direction,. Description of relief, drainage, land use, settlement patterns and communications, and the inter-relationships between these features.

(ii) The simple interpretation of sources of information such as photographs, diagrams, maps and statistics. (in appropriate cases these may be related to work on topographical maps).

(iii) The use of sketch-maps and diagrams to illustrate the geography of an area or to illustrate a principle.

SECTION B - Elements of Physical Geography.

(i) Landforms resulting from folding, faulting and volcanic activity;

(ii) Weathering in tropical and temperate conditions.

(iii) River processes (erosion, transportation and deposition) and resulting landforms. The development of river valleys, flood plains and deltas.

(iv) Marine erosion and deposition and associated landforms;

(v) Weather study based on local observation and the use of simple instruments. Relief, convectional and frontal rainfall Tropical storms.

(vi) Chief characteristics of the climates and natural vegetation of equatorial, tropical and temperate zones, where appropriate to the regions studied.

SECTION C - Elements of World Human Geography.

(i) Distribution and characteristics of major farming types.

(ii) Distribution, transportation and use of some "sources" of fuel and power.

(iii) Location of major world iron and steel industries;

(iv) Distribution of world population.

SECTION D - Agriculture, Forestry, Mining, Power, Manufacturing and Tourism with reference only to Zambia.

Studies of Agriculture.

(a) The development of land for agriculture: clearance and preparation of land; use of irrigation based on modern methods; problems associated with developing land for agriculture. Soil erosion and conservation.

(b) Agricultural systems

(i) Commercial farming;

(ii) Farming in the communal lands.

These studies should consider the inputs in relation to the scale of the agricultural system, and the physical and economic conditions in which the systems operate.

Inputs: Land, labour, capital (machinery, fertilizers, seed varieties, pesticides, insecticides, irrigation schemes)

Outputs: Agricultural products (Cultivated crops, tree crops, amimal products).

FORESTRY:

Factors influencing the exploitation of forests; methods of extracting forest products. Uses of forests and forest products. Markets for timber and other forest products conservation of woodland.

MINING:

The mining of (i) Copper (ii) Lead and Zinc (iii) Coal.

POWER:

Factors affecting the location and development of power stations for (i) thermal and (ii) Hydroelectric power.

Processing and Manufacturing Industries

(a) (i) Factors affecting the location and development of industries including reference to raw materials, power, labour, capital and transport.

(ii) The influence of the size and nature (local, national, international) of demand for the product on the scale of the industry (eg. Small-scale production for a local market in a village or urban location; large scale production in industrial zones for national and international markets).

(b) A study of the above should be made with reference to:

(i) the processing of agricultural or forest products (two to be chosen)

(ii) Processing of Copper and Copper fabrication.

TOURISM:

The factors affecting its development and importance.

SECTION E

Agriculture, Forestry, Mining, Manufacturing, Tourism and Fishing with reference only the "wider" region of Africa.

Studies of Agriculture

(a) The development of land for agriculture: Clearance and preparation of land; drainage; use of irrigation; including traditional methods; problems associated with developing land for agriculture.

(b) Agricultural systems:

(i) Small-scale subsistence farming;

(ii) Large-scale commercial farming (estate) confined to sugar, tea and rubber;

(iii) Large scale cereal production (extensive).

These studies should consider the inputs and outputs in relation to the scale of the agricultural system, and the physical and economic conditions in which the systems operate.

Inputs: Land, labour, capital (machinery, fertilizers, seed varieties, pesticides, insecticides, irrigation schemes).

Outputs: agricultural products (cultivated crops, treee crops, animal products).

FORESTRY:

Factors influencing the exploitation of forests; methods of extracting forest products; uses of forest products. Markets for timber and other forest products. Conservation of woodland.

MINING:

The mining or extraction of:

(i) petroleum and natural gas;
(ii) Copper ore;
(iii) Gold or tin.
(iv) iron ore.

Manufacturing Industry

(a) (i) Factors affecting the location and development of industries including reference to raw materials, power, labour, capital and transport;

(ii) The influence of the size and nature (local, national, international) of the demand for the product on the scale of the industry (eg. small-scale production production for a local markets in a village or urban location; large-scale production in industrial zones for national and international markets).

b) A study of the above should be made with reference to:-

(i) iron and steel manufacturing;

(ii) petroleum refining;

(iii) car assembly industry eg. cars.

Tourism

Factors affecting its development and importance.

Fishing methods, types of fish caught, fishing areas and the factors influencing their importance and exploitation; fishing ports, products, markets.

SECTION F

(i) Population studies - the growth, structure (age and sex). broad distribution, and density of population, causes and consequences of the movements of population.

(ii) Settlement studies:

(a) Rural settlement; the layout of villages and surrounding land use patterns of rural settlements and factors which affect these;

(b) Urban settlement:

(i) The location of urban centres

(ii) The internal structure of towns-urban morphology, urban spheres of influence.

(iii) The spread of urban settlements.

(iv) Problems of urban life (Traffic congestion, water supplies, air and noise pollution, social problems).

SECTION G

Field work - field work is regarded as an integral part of geographical study and as such field work experience should be cited wherever relevant to any part of the syllabus. The field work question will require a basic experience of field investigations. Fieldwork will allow schools flexibility to study and appraise the geographical phenomena and social and economic development. The emphasis however, should be on practical direct observation, recording, assessment and analysis rather than on pre-prepared material and other handouts.

In order to attempt the field work question candidates are expected to have studied some of the following aspects of geography.

(i) Rural land use zones, farm studies and land use transects.

(ii) Settlement characteristics: Site, development, farm, land use zones, transects, spheres of influence.

(iii) Industrial location;

(vi) Traffic studies: simple network analysis, pedestrian flow patterns, flow lines, commuters, tourists.

(ix) The examination of soils with particular reference to the collection and analysis of profile samples, soil forming processes, inter-relationships with vegetation and land use.

APPENDIX 3 'A'

2004 SC/GCE Internal Geography results analysis for MKUSHI HIGH SCHOOL

DESCRIPTION	GRADE	NUMBER OF CANDIDATES	PERCENTAGE PASS (2004)	PERCENTAGE PASS (2003)
Distinction	1	0	0	0
Distinction	2	0	0	0
Merit	3	4	2.2	2.3
Merit	4	2	1.1	1.7
Credit	5	4	2.2	1.7
Credit	6	22	11.9	14
Satisfactory	7	58	31.5	18.6
Satisfactory	8	71	38.6	25
Unsatisfactory	9	21	11.4	26.2
Result withheld		2	1.1	3
No. entered		207		
No. sat		184	88.9	
No. in General passing grades 7-8 (GCE)		129	70.1	43.6
No. in 'O' level passing (grades 1-6)		32	17.4	19.8
NO. ABSENT		23	12.5	7.6

Source: Examinations Council of Zambia 2004 SC/GCE Internal Geography statements of results slips for Mkushi High School.

The results analysis shows that the largest cohort of the candidates who passed their 2004 SC/GCE Geography examination (70.1 percent) at Mkushi High School barely made it with low grades (grades 7-8, satisfactory passes), and only 17.4 percent obtained 'O' level grades, (quality grades 1-6) compared to 19.8 percent for those who obtained quality grades in the previous year 2003. The higher percentage (70.1) of those who obtained general passing grades for the year 2004, compared to that of 2003(43.6 percent), indicated that though there could have been other causative factors for such low grades, lack of the prescribed textbook and lack of orientation for geography teachers from Mkushi High School could have been the major contributing factors for the low grades obtained by pupils. This was confirmed by the verbatim responses obtained from the teacher respondents.

APPENDIX 3 ' B'

2004 SC/GCE Internal Geography Results Analysis for Mkushi Coppermines High School

NUMBER ENTERED	NUMBER SAT	NUMBER ABSENT	WITHHELD RESULTS	GENERAL PERCENTAGE PASS (1-8)	'O' LEVEL PERCENTAGE PASS (1-6)
49	47	2	1	73	27

Source: Examinations Council of Zambia 2004 SC/GCE statements of results slips for Mkushi Coppermines High School, and SC/GCE Results Analysis File for Mkushi Coppermines High School.

As was the case with Mkushi High school, the largest cohort (73 percent) of the pupils who passed their 2004 SC/GCE Examinations at Mkushi Coppermines fell within the cohort of the low grades, grades 7-8, compared to the 27 percent for those pupils who obtained 'O' level grades, (grades 1-6). According to the teachers talked to after the administration of the questionnaires, the relatively poor quality of grades was due to lack of the pupils' prescribed textbook and also due to lack of proper orientation on the general approach to the handling of the new geography syllabus.

APPENDIX 4

MINUTES OF THE FIRST GEOGRAPHY CURRICULUM REVIEW MEETING HELD ON 21ST FEBRUARY 2001 AT 09.00 HOURS IN THE CDC CONFERENCE ROOM

PRESENT

	NAME	ORGANISATION
1.	Sachibuye Mwanangombe	Kaoma High School
2.	Salome Chanda Mulenga	Kaionga High School
3.	Bwalya Freddy	Mufulira High School
4.	Peyton C. Chibale	Mable Shaw Sec School
5.	Kenny Mubanga	Mungwi High School
6.	Malambo Enestol	Chadiza High School
7.	Solami K. George	E.C.Z.
8.	Kaluba Gordon P.	Nkrumah TRS' College
9.	Lubinga Mwape J.N.	Munali J.S.S.
10.	Godfrey Hampwaye	Geography Dept. Unza
11.	Malumo Edith Mundia	National Inservice Teachers
12.	Christine Kanenga	Munali Jr. Sec School
13.	Moono Kaile	Munali Jr. Sec School
14.	Hilda Shaloba	Mwinilunga High School
15.	Charles M. Namafe	School of Education, Unza
16.	Richard K. Simukoko	School of Education, Unza
17.	Mweemba Liberty	Munali Jr. Sec
18.	Ackim Banda	British Council
19.	Penelope M. Silumesi	CDC
20.	Bupe A. Mwansa	CDC
21.	Elaine Miskell	Birmingham, UK
22.	Scott Sinclair	Birmingham, UK
23.	Mukubesa Ndoti	Munali Snr.
24.	Erick Mwale	Matero Girls High School

APOLOGY

1. Ms. B. chimpandu – CDC

1. OPENING REMARKS

The Deputy Director (CDC) invited the Director (CDC) to deliver the official opening speech.

The Director (CDC) welcomed the members present. He stressed that the meeting was very important because it was the first geography curriculum review meeting. He stated that CDC aspired in the future to engage teachers more fully

APPENDIX 4

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15.	Charles M. Namafe	School of Education, Unza
16.	Richard K. Simukoko	School of Education, Unza
17.	Mweemba Liberty	Munali Jr. Sec
18.	Ackim Banda	British Council
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21.	Elaine Miskell	Birmingham, UK
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APOLOGY

1. Ms. B. chimpandu – CDC

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The Director (CDC) welcomed the members present. He stressed that the meeting was very important because it was the first geography curriculum review meeting. He stated that CDC aspired in the future to engage teachers more fully

than before in curriculum development work. In this regard, he invited participants to consider attaching two teachers at CDC for the review work. He also offered an office space within CDC for the review exercise.

2.0 **Purpose and objectives**

These were:

a. to officially launch the Geography Curriculum Review Project.

b. to identify and sensitize all the key stake holders concerning the start of the reform of geography in secondary schools.

c. to devise a strategy framework that would incorporate all the necessary administrative and logistical measures relevant to the review exercise.

3.0 **Nature of curriculum collaboration between MOE (CDC) and Universities Of London and Zambia.**

The British Council representative (Mr. Ackim Banda) informed the meeting concerning the links that exist between the University of Zambia and other universities in the United Kingdom. He said that the British Council provides money from time to time to sponsor students for short courses in the U.K.

4.0 **Contributions of the Development Education Centre (DEC) Birmingham, to Zambia's curriculum review process.**

The presenter used a compass rose to demonstrate how various geographical issues are interrelated. On the compass N, represented natural environment, or resources, E, economic issues, S, social issues and W, represented 'who decides' or political factors.

He emphasized that an integrated approach must be adopted when looking at the issues presented on the compass rose. He suggested that local, regional and global dimensions needed to be incorporated in the new curriculum.

5.0 **Position Paper on the Status of Zambia's Geography Curriculum – Ms. L. Ntalasha.**

The speaker gave a brief history about the teaching and learning of Geography in Zambian schools. She said the previous syllabuses were designed to produce a child who would be equipped with skills for survival. The proposed curriculum needed to include such issues like environmental education, gender equality, drug and substance abuse, public health and HIV AIDS awareness.

6.0 **Position Paper on the Status of Geography Teaching at secondary school levels in Zambia – Mr. Liberty Mweemba.**

Mr. Mweemba strongly felt that the curriculum must be reviewed and subsequently changed. He noted that there was a lack of smooth transition from the junior to senior syllabus. He also cited a few topics such as glaciation and North America, which he felt were not very relevant for the Zambian schools. He proposed that the curriculum should dwell more on the Southern African Sub-region and on Zambia.

7.0 **Summarized results of the Geography Needs Assessment study – Dr. C.M. Namafe**

Dr. Namafe informed the meeting about the Needs Assessment study, which was carried out by UNZA in conjunction with the CDC. Three questionnaires were used, that is, for pupils, teachers and key stakeholders of school geography. There was a need for inservice training for teachers as well as teachers were to be actively involved in programmes that deal with curriculum formation. Some pupils suggested that a college be built specifically to train geography teachers.

8.0 **Discussion on all the above plenary presentations**

The house was in agreement that the Needs Assessment study approach adopted by Dr. Namafe was very ideal as it incorporated all stakeholders. The members, therefore, resolved to adopt a participatory approach in designing the new curriculum. There was a general concern for a lack of learning/teaching materials in geography.

9.0 **A.O.B.**

The house felt that there would be a need for another meeting. Two teachers were to be selected and be attached to CDC for the sake of centrally managing the affairs of the project under the direction of the Director (CDC and in close collaboration with Ms. Ntalasha and Chimpandu as curriculum specialists in geography.

Caution was to be exercised in formulating the new curriculum so as to avoid discarding relevant materials in the old curriculum.

The meeting ended at 18.00 hours after the closing remarks by the Chief Inspector of Schools, whose speech was read on his behalf by the Deputy Director (CDC).

Ms. L.N. Ntalasha
CHAIRPERSON

Mrs. M.J.N. Lubinga and
Mr. Ndoti Mukubesa
RECORDERS