

**IMPLICATIONS OF EDUCATIONAL LANGUAGE POLICY AND
PRACTICE ON LEARNERS' ACADEMIC ACHIEVEMENT AT LOWER
PRIMARY SCHOOL IN KENYA**

ONGETI KARREN OHANGA

**A Thesis Submitted in Partial Fulfilment of the Requirements for the Award of
the Degree of Doctor of Philosophy in Curriculum and Instruction of Masinde
Muliro University of Science and Technology**

APRIL, 2022

STATEMENT OF PLAGIARISM

DECLARATION BY THE CANDIDATE

1. I hereby declare that I am aware that incorporating material from other works or a paraphrase of such material without acknowledgement will be considered plagiarism under Masinde Muliro University of Science and Technology's Rules and Regulations.
2. I am aware that this thesis must be my own original work.
3. I understand that plagiarism is academic dishonesty and unethical and that any act of plagiarism can result in a failing grade ("F") for my thesis.
4. I am also aware that Academic Dishonesty may result in my suspension or expulsion from the University.

Name of student: Ongeti Karren Ohanga ECI/H/03/08

Signature..... Date.....

DECLARATION BY THE SUPERVISORS

The examination of this thesis is approved by me/us. The thesis was checked for plagiarism and found to have a similarity index of 20%.

Name of supervisor: **Prof. Isaac Ipara Odeo**

Signature..... Date.....

Name of supervisor: **Prof. Elizabeth S.B. Abenga**

Signature..... Date.....

DECLARATION AND CERTIFICATION

DECLARATION BY THE CANDIDATE

This thesis is my original work prepared with no other than the indicated sources and references and has not been presented elsewhere for a degree or any other award.

Signature.....

Date.....

Ongeti Karren Ohanga

REG. NO. ECI/H/03/08

CERTIFICATION BY THE SUPERVISORS

The undersigned certify that they have read and hereby recommend for acceptance of Masinde Muliro University of Science and Technology, a Thesis entitled, *“Implications of Educational Language Policy and Practice on Learners’ Academic Achievement at Lower Primary School in Kenya.”*

Signature.....

Date.....

Prof. Isaac Ipara Odeo,
Vice Chancellor,
Kibabii University,
Off Bungoma-Chwele Road,
P. O. Box 1699 -50200,
BUNGOMA – Kenya.

Signature.....

Date.....

Prof. Elizabeth S.B. Abenga,
Department of Curriculum and Instructional Technology,
School of Education,
Masinde Muliro University of Science and Technology,
P.O. Box 190-50100,
KAKAMEGA – Kenya.

COPYRIGHT

This thesis is copyright material protected by the Berne Convention, the Copyright Act 1999 and other international and national enactments in that behalf, on intellectual property. It may not be reproduced by any means in full or in part except for short extracts in fair dealing so for such research or private study, critical scholarly review or discourse, with acknowledgements and/or with the written permission of the Director, School of Graduate Studies on behalf of both the author and Masinde Muliro University of Science and Technology.

DEDICATION

To my children: Connie, Vallerie, Wakayula, Barasa (BJ) and Wangwe; whose encouragement and patience led me to achieve this important milestone in my academic endeavour.

ACKNOWLEDGEMENT

My gratitude goes to God Almighty for bringing me this far.

I owe a special note of gratitude to my supervisors: Prof. Isaac Ipara Odeo and Prof. Elizabeth S.B. Abenga, whose efforts, tireless guidance, and constructive suggestions made it possible for me to finalize this thesis in proper form and content.

Gratitude goes to Prof. Aggrey M. Simiyu, of the Department of Curriculum and Instructional Technology, MMUST. I thank him for devoting time to making the academic journey fruitful and rewarding. He always said, “Complete your PH.D.” This gratitude extends to all members of the Department whose advice was crucial during my thesis preparation.

Special mention to all the head teachers, teachers, parents and learners in schools whose cooperation during the pilot testing and the interviews was helpful in the preparation of this thesis.

Lastly, I wish to sincerely thank the staff at the County Education Offices of Kakamega County, who granted me access to data and records that proved useful in the study.

ABSTRACT

The national language policy in Kenya prescribes a multilingual approach to the language of instruction used in primary schools. The educational language policy stipulates that the language of instruction in lower primary Grade 1 to 3 in rural settings should be the learners' First Language or Mother Tongue. In urban settings, the language of the school's catchment area (usually English or Kiswahili) should be used as the language of instruction in Grade 1 to 3. Kiswahili and English are to be taught as subjects. English becomes the medium of instruction in all settings from Grade 4 onwards. This policy creates adoption issues for teachers and learners considering that Kenya is linguistically heterogeneous, and the overall problem then is that there exists differential implementation of language policy in lower primary school in Kenya. This study was designed to establish the actual language practice in lower primary school Grade 1 to 3 in relation to declared policy and to evaluate its relationship with learners' academic achievement. The study area was Kakamega County, which was selected based on being a county with a fair mix of urban, rural and semi-urban schools. The study adopted a correlational design. The study population comprised 1,120 primary schools and 10,767 Grade 4 learners. Multistage sampling was used to select a sample of 175 schools from the population. Questionnaires were administered to 75 teachers and mean scores of Grade 4 assessment results were obtained from 1,075 learners from the sampled schools. The data were analysed using descriptive statistics like ratios and percentages. Inferential statistics (Chi-Square Test of independence, Spearman's Correlation, Kruskal-Wallis Test, ANOVA) were used to test the hypotheses. Hypotheses tests were conducted at $\alpha = 0.05$. The findings of the study indicate that there is a gap between policy and practice in lower primary schools. There is no significant difference in teachers' attitudes towards educational language policy across urban, rural and semi-urban schools. The study revealed that there is a strong correlation between the language of instruction at lower primary school and learners' academic achievement at Grade 4. The ANOVA showed that there is a significant difference between the Grade 4 mean scores of learners taught in English and those taught in Kiswahili or Mother Tongue in Grade 1 to 3. The mean scores of those who were taught in English were higher than those of learners taught in Kiswahili or Mother Tongue. The study recommends that the policy should shift towards a uniform language of instruction for all learners in lower primary school. Notwithstanding the need to preserve the heritage of local languages, the ability to interact globally is the foundation of social and economic development. English language is recommended as it is a widespread language in academia and commerce globally. The results of the study will be of value to those concerned with language policy planning and implementation in lower primary schools.

TABLE OF CONTENTS

DECLARATION AND CERTIFICATION	ii
COPYRIGHT	iii
DEDICATION.....	iv
ACKNOWLEDGEMENT.....	v
ABSTRACT	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	ix
LIST OF FIGURES	x
ABBREVIATIONS AND ACRONYMS.....	xi
CHAPTER ONE	1
INTRODUCTION.....	1
1.1 Background to the Study	1
1.2 Statement of the Problem	8
1.3 Purpose of the Study	10
1.4 Objectives of the Study	10
1.5 Research Hypotheses	10
1.6 Significance of the Study	11
1.7 Justification of the Study.....	12
1.8 Basic Assumptions	12
1.9 Scope and Limitations of the Study	13
1.10 Theoretical Framework	15
1.11 Conceptual Framework	16
1.12 Operational Definition of Terms	18
1.13 Summary of Chapter One.....	20
CHAPTER TWO	21
LITERATURE REVIEW	21
2.1 Introduction	21
2.2 Language and Learning.....	21
2.3 Language Planning and Educational Language Policy	26
2.4 Historical Background of the Language Policy in Kenya.....	31
2.5 Effects of Medium of Instruction on Learning and Academic Achievement	37
2.6 Overview of Competency-Based Learning and Assessment in Kenya.....	43
2.7 Summary of Chapter Two	46
CHAPTER THREE	48
RESEARCH DESIGN AND METHODOLOGY	48
3.1 Introduction	48
3.2 Research Design.....	48
3.3 Study Area.....	50
3.4 Population and Sampling Procedure	52
3.5 Research Instruments	55
3.6 Pilot Study.....	61
3.7 Validity & Reliability of Research Instruments	62
3.8 Data Collection.....	64

3.9	Data Analysis Techniques.....	66
3.10	Ethical Considerations	70
3.11	Summary of Chapter Three	71
CHAPTER FOUR.....		72
DATA PRESENTATION, ANALYSIS AND DISCUSSION		72
4.1	Introduction	72
4.2	Return Rate of Research Instruments.....	73
4.3	Demographic Data from the Teachers' Questionnaire.....	74
4.4	Difference between Actual Language Practice and Language Policy	79
4.5	Attitudes of Teachers towards Language Policy.....	95
4.6	Language Policy and Learners' Academic Achievement	106
4.7	Summary of Chapter Four.....	116
CHAPTER FIVE		117
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS		117
5.1	Introduction	117
5.2	Summary of the Study.....	117
5.3	Conclusion.....	120
5.4	Recommendations	123
5.5	Suggestions for Further Research	124
REFERENCES.....		125
APPENDICES		137

LIST OF TABLES

Table 3.1:	Primary Schools in Kakamega County 2019 (Source: MoE, 2019) ..	51
Table 3.2:	Reliability Statistics (Source: Teachers of Pilot Schools)	63
Table 3.3:	Data Analysis Methods	70
Table 4.1:	Research Instrument Return Rate	73
Table 4.2:	Teachers' Highest Qualification	76
Table 4.3:	Language Preference in General Communication	77
Table 4.4:	Language Preference in Formal Classroom Communication	78
Table 4.5:	Categorization of the Sample Schools	79
Table 4.6:	Awareness of Government Language Policy	80
Table 4.7:	School Regulation on Language of Instruction.....	81
Table 4.8:	Specific School Policy	82
Table 4.9:	School Regulation on Learners Language choice.....	83
Table 4.10:	Fluency in Mother Tongue of Catchment Area	84
Table 4.11:	Frequency Distribution of Variants of MT in Catchment Area	85
Table 4.12:	Frequency Distribution of Most Efficient Language of Instruction ..	86
Table 4.13:	Frequency Distribution of Learners' Language	87
Table 4.14:	Use of Different Languages in the Classroom	88
Table 4.15:	Frequency Distribution of Ease of Communication by Learners	89
Table 4.16:	Contingency Table for Hypothesis 1	90
Table 4.17:	Chi Square Test for Hypothesis 1	91
Table 4.18:	Summary of Responses to Section 2 Likert-type items	96
Table 4.19:	Collapsed Summary of Likert Responses	97
Table 4.20:	Descriptive Statistics for Likert Data.....	101
Table 4.21:	Descriptive Statistics for test on Hypothesis 2	102
Table 4.22:	Kruskal-Wallis H test For Hypothesis 2	103
Table 4.23:	Mean Scores in English	107
Table 4.24:	Mathematics SBA Results	109
Table 4.25:	Results of Spearman's Coefficient Test.....	112
Table 4.26:	Report for ANOVA on LOI Groups and Learner Score.....	114
Table 4.27:	ANOVA for Learners' Score in Between Three LOI groups	115

LIST OF FIGURES

Figure 1.1:	Conceptual Framework	17
Figure 3.1:	Sampling Flowchart	54
Figure 4.1:	Duration in Practice of Teachers.....	75

ABBREVIATIONS AND ACRONYMS

Abbreviation	Definition
CBC	Competency Based Curriculum
EYE	Early Years Education
IBM	International Business Machines
KICD	Kenya Institute of Curriculum Development
KNBS	Kenya National Bureau of Statistics
KNEC	Kenya National Examinations Council
LoI	Language of Instruction
MoE	Ministry of Education
MoI	Medium of Instruction
MS	Microsoft
MT	Mother Tongue
NCEOP	National Commission on Educational Objectives & Policies
NY	New York
P1	Primary Teacher Education (P1) Certificate
P2	Primary Teacher Education (P2) Certificate
PRIMR	Kenya Primary Mathematics and Reading Initiative
SBA	School Based Assessment
SPSS	Statistical Package for the Social Sciences
	United Nations Educational, Scientific and Cultural
UNESCO	Organization
USA	United States of America

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The issue regarding which language should be used, when, and where, in the lives of people is often controversial. All agencies with administrative powers like governments, liberal societies and private institutions, through policy, are often called upon to intervene so as to create order (Bach, Niklasso, & Painter, 2012). Government policy formulation pertaining to specific courses of action applicable to public sector, organizations, groups and individuals, is usually followed by adoption and implementation. After implementation, the impact of policy is then evaluated to determine whether or not the policy has produced desired results (Viennet & Pont, 2017). Educational language policy is one such policy that follows the process of formulation, adoption and implementation.

In the Kenyan context, the educational language policy is formulated by the central government. The policy has historically been formulated through committees that are appointed by the executive arm of Government. Policy is then expected to be adopted by the national education system and implementation is done through instruction in schools. At the institutional level the implementing personnel are usually the teachers.

The language policy states that the language of instruction in lower primary Grade 1 to 3 for schools in urban areas is English or Kiswahili. For schools located in rural areas, the language of instruction in Grade 1 to 3 is the learners' first language or the language of the catchment area of the school. From Grade 4 onwards, all subjects are to be taught and examined in English, except for the Kiswahili subject (Mose, 2017).

The policy specifically uses the term ‘catchment area’ in its description. So, for purposes of its implementation, it is at first necessary to define what a catchment area is. Brent Council (2021) defines a catchment area as the geographical area served by a school. It is delineated by pinpointing all the learners’ homes and making an outline of the smallest area covering all of them.

Secondly, the policy makes reference to “mother tongue.” Mother Tongue can be defined as a speaker’s native language or first language (UNESCO, 2013). This definition gives rise to the issue of which language is to be used for instruction during the early stages of learning. Researchers have argued that the role of the first language is critical in learning. For example, Moschkovich (2002) has posited that learners’ first language is a resource that can be exploited for communication, specifically in mathematics.

Although policies regulate the internal operations of an educational system, they, owing to their prescriptive nature, arouse controversy. The language policies will prescribe who teaches what language to whom. It is debatable whether the implementing personnel – that is, the teachers – and all the stakeholders in the education system accept the policy. It may also be argued that the instructors find it difficult to adopt an imposed language of instruction due to the multiple languages spoken in various catchment areas from which the learners are drawn. It is further uncertain whether the learner accepts to learn the teacher’s language. It is against this background that the problem of whether or not the educational language policy and language practice in lower primary school affect the academic achievement of learners at Grade 4 level, where English then becomes a uniform language of instruction and assessment.

From the foregoing, there are two intertwining issues that require to be explored. First, what are the factors that influence the reception and adoption of policy? Secondly, what are the effects, of educational language policy and language practice on learners' academic achievement?

Several factors influence the reception of policy. The attitudes of stakeholders may influence the reception of policy. For example, in their study, Manel et al (2019) found that the attitude a learner has towards the particular linguistic group whose language he or she is learning has a substantial effect on learning the language. Another study by Young (2014) on attitudes, beliefs, and practised language policies in schools in the Alsace region in France concludes that many teachers are practising language policies based on deep-rooted ideologies that prevent them from practising prescribed language policies. As such, the attitudes of learners and teachers alike may influence the reception of policy. Therefore, evaluation was necessary to determine the implications of educational language policy, the teachers' reception of the policy and language practice on the learners' academic achievement.

Primary school learners, through their parents or guardians, are likely to perceive certain benefits from learning a second language. It has been known that success in learning a language has been influenced by learners' perceptions (Stewart, 2005). In developing countries, where the largest employer is often the civil service, knowledge of the second language places one at an economic advantage (Awuor, 2015). These are recent findings which contradict an earlier study by Heath (1971) which did not find any evidence for this. She posited that bilingual speakers in Mexico are not necessarily the ones running businesses. She argued that language is not sufficient to produce economic development. It may not even be necessary. While the effect of language on the purpose of education may be contested, what is not disputed is the fact

that language is important for education regardless of the purpose for that education (Wong, 2015). It was necessary to study the implications of a particular language selected over others as the primary language of instruction with regard to educational outcomes.

The proper treatment of pupils whose first language is not the language of the school's catchment area has been widely debated. On the one hand it is argued that pupils learn to read more rapidly in the second language and learn faster the content of other subject-matter areas if they are first introduced to education in their mother tongue (UNESCO, 1953; Benson, 2005; Mwaniki, 2014). On the other hand, it is argued that Mother Tongue may not necessarily be suited to educational purposes in terms of elaboration, codification and standardization; pupils would be better off learning through a second language of wider communication (Gupta, 1997). A study on language attitudes in primary schools by Wamalwa (2020) established that school pupils were generally positive towards learning Kiswahili. Nevertheless, they indicated that English holds sway in their academic and future career endeavours. While a lot of studies have been carried out into this in the recent years, to date the debate remains unsettled. Even so, national language policies are often prescribed in line with either of the two positions above or a combination of both. Hence the focus of this study was to carry out an evaluation to find out whether or not the prescriptions with regard to language policy are adhered to and with what results.

Even in large monolingual societies like Britain, Educational language policy is an issue because of varieties of language that exist within the society. Language use is complex because of the use and adoption of foreign languages due to globalization. The linguistic situation is worse in previously colonized countries that are characterized by many small linguistic communities. In these multilingual

communities, a rule of “which language is to be spoken where” has to be prescribed. Conversely, in multilingual societies with regions with one commonly spoken language, the aspect of language variation arises. For example, the variation of Kiswahili spoken around the coast of Kenya is different from that spoken inland. It is noteworthy that for these countries, the national goals of education include, on the one hand, “preservation of culture” and on the other hand, “fostering national unity” (KICD, 2018). Both public and private sectors are charged with the responsibility of achieving the goals. To a large extent, the burden is often left to education to achieve these apparently ambivalent goals. This gives rise to a dilemma for implementers on which language they should use as a medium of instruction. Some questions also arise such as; to what extent do the learners and teachers accept the prescribed policy? Whatever language policy is prescribed; how fair is it to all stakeholders in education? Those questions need answers that establish the focus of this study.

There is a close link between language and education. Since education is carried out through a language (Lopez, 2000), how efficiently one learns at the lower primary school level, is then a function of how one understands the language of education. How efficiently one learns is measured by academic achievement. This is why this study sought to establish the link, if any, between academic achievement and language policy and language practice.

The language situation in Kenya is complex as over 70% of Kenyans are multilingual (Brown, Asher, & Simpson, 2006) and based on Kenya Bureau of Statistics, this is out of an estimated population of 48 million, a majority of whom live in rural areas within fairly well-defined linguistic communities (KNBS, 2019). According to the Constitution of Kenya 2010, there exists in Kenya a three-language structure. The national language of the republic is Kiswahili, the official languages of the republic

are Kiswahili and English. Further, the state is obliged to promote the development of indigenous languages, Kenyan Sign language and Braille (KLRC, 2010). In Kenya, most children acquire an indigenous language for use at home, Kiswahili for outside contact and English for higher education and participation in national life. A Kenyan rural child joins school for the first time when he is about seven years old. Such a child has learnt his mother tongue to fluency, which is his or her first language. He probably has a smattering of Kiswahili and it is unlikely that he speaks any English. A Kenyan child in the urban areas is likely to have two languages by the time he joins Grade 1, Kiswahili and a little (or a lot) of English. He may also have a substantial grasp of his indigenous language by the time he joins Grade 1. It is apparent there is a disparity of language use from different demographics within the same country. It follows therefore that a concern is raised as to whether or not the language of instruction may have a bearing on the learners' academic achievement.

Just as there is a perceived relationship between education and employment, there exists a belief that knowledge of a worldwide language such as English will enable one to perform well at school and place one at an economic advantage (Warschauer, 2000). Education is, in many communities, still a means to an end – not an end in itself, at least among the adult population. This is one reason why in Tanzania attitudes towards English shifted from the negative in the early sixties to the positive in the eighties (Mlay, 2014). Tanzanians now believe English is vital for personal growth. In Kenya, English has always enjoyed a relatively high status in social life, commerce and more so in education. Many parents prefer when their children are introduced to English at home or at school, as opposed to Mother Tongue (Oduor, 2015).

Between 1964 and 1976 English had been used as a medium of instruction for all subjects from the first grade onwards. From the year 1976, the National Commission

on Educational Objectives and Policies (NCEOP) recommendations concerning educational language policy prescribed that Mother Tongue (MT) would be used as a medium of instruction from Standard 1 to 3 (currently referred to as Grade 1 to 3 in the CBC system) in schools within the catchment area of a language community. For example, the Pokot dialect would be used in schools within West Pokot County. Kiswahili would be used as the medium of instruction in Grade 1 to 3 in schools located in urban settings and other mixed language areas; and that in all schools English would be a subject to be studied during the first three years, becoming the medium of instruction in upper primary classes for all subjects except Kiswahili (Republic of Kenya, NCEOP report, 1976). In 1988 the Presidential Working Party on Education and Manpower Training, known as the ‘Kamunge Commission’ was charged with the task of assessing Kenya’s educational and manpower needs in the 1990s and beyond. The Commission varied the earlier policy by allowing parents in a school to select any preferred medium of instruction (Kamunge Commission, 1988).

It is possible that the Kamunge Report only expressed formally what had been going on in schools for a long time – parents and teachers choosing and using a language of their choice regardless of the language policy. It is probable that language practice in schools was not concomitant with the declared language policy. Research is necessary to assess the factors which influence the implementation of language policy in schools. In many studies familiar to the researcher, the characteristics of teachers and other factors which may affect success in teaching and learning have often been ignored. Frequently, the teachers’ knowledge of the mother tongue and second language which the teacher is supposed to use is not assessed. Edwards (2017) suggests that systematic studies of what teachers actually do in the classroom are necessary. Muthwii (2002) suggests that further research needs to be done on areas of language policy and

language practice. Evaluation of the factors that influence the implementation of educational language policy and their effects on academic achievement of learners at Grade 4 level was therefore necessary.

1.2 Statement of the Problem

It is widely accepted that language is important for learning, and researches show effects of teachers' diverse language practices on learning. However, very little attention has been paid to the effects of differential implementation of language policy in lower primary school Grade 1 to 3 and whether this affects learners' academic achievement at Grade 4 level. The recently instituted reforms on curriculum have introduced the Competency Based Curriculum (CBC) whose learners are expected to undergo a national and standardized assessment at Grade 4, which is referred to as School Based Assessment (SBA). The Grade 4 achievement scores contribute to gauging the learners' competence and their subsequent progression in their learning.

The educational language policy prescribes that the learner's mother tongue or the language of the school's catchment area should be used as the language of instruction in lower primary school up to Grade 3. English and Kiswahili are to be taught as subjects at this level. Thereafter, from Grade 4 onwards, English should be the language of instruction and assessment. This policy for use of mother tongue as the language of instruction applies to schools in rural areas. For schools in urban settings, the language of the catchment area, which is often Kiswahili or English, ought to be the language of instruction.

Whereas the policy for the medium of instruction in lower primary school is clearly defined by the Ministry of Education, teachers and school managers in Kenya have several languages at their disposal to select from. Some teachers choose to teach in

English, others in Kiswahili and others in Mother Tongue. There arises the issue of what language school managers and teachers should adopt as the medium of instruction in a learning institution, and its effect on learning outcomes. Teachers may be unable to speak the language of the catchment area, or learners may be unable to understand and communicate in English and Kiswahili. The overall problem then is that there exists differential implementation of language policy in lower primary school in Kenya. Consequently, learners exposed to different languages of instruction in the early stages of education are bound to progress to upper primary with evident difficulties in the adoption of English language as the uniform language of instruction and assessment.

Some learners commence education in lower primary in English right from Grade 1 while others are beneficiaries of instruction carried out through lower primary in Mother Tongue and Kiswahili. Yet, they are all expected to undergo the same national assessment, administered in English language, at Grade 4. Could one group be disadvantaged with respect to learner-to-learner communication, instruction and academic achievement especially at Grade 4 level when English language is the sole medium of instruction in all subjects? Do schools within a particular catchment area uniformly implement the educational language policy in lower primary school? Are teachers aware of the educational language policy? What are the teachers' attitudes towards the educational language policy? What is the actual practice with regard to the language of instruction in lower primary schools? These questions are pertinent to this study.

It is necessary to delineate the relationship between educational language policy and actual language practice in lower primary school. It is also necessary to establish the relationship between actual language practice in lower primary school and learners'

academic achievement at Grade 4 level, where the transition is made to English as the language of instruction.

1.3 Purpose of the Study

The purpose of this study was to find out the language used for instruction in lower primary schools, in relation to Kenya's declared educational language policy and to assess the relationship between language practice and learners' academic achievement at Grade 4 level. The focus was on the classroom practice with regards to the educational language policy in Kakamega County in Kenya.

1.4 Objectives of the Study

Specifically, the study addressed the following objectives:

- 1) To establish the difference between the languages used for instruction in lower primary schools and the language prescribed in the language policy.
- 2) To assess the teachers' attitude towards educational language policy across different languages of instruction.
- 3) To analyse the relationship between language of instruction at primary school level and learners' academic achievement at Grade 4.
- 4) To compare the academic achievement of learners at Grade 4 who were taught in English, Kiswahili or Mother Tongue in Grade 1 to 3.

1.5 Research Hypotheses

To realize the objectives of the study, the following research hypotheses were tested:

H₀₁: There is no significant difference between the language(s) used for instruction and the language(s) prescribed in the language policy in lower primary school Grade 1 – 3;

- H02:** There is no significant difference in teachers' attitude towards the educational language policy across the different languages of instruction;
- H03:** There is no significant relationship between the language of instruction in Grade 1 to 3 and the academic achievement of learners at Grade 4;
- H04:** There is no statistically significant difference in the Grade 4 achievement scores of learners across the three language(s) of instruction.

1.6 Significance of the Study

This study analyses factors influencing the implementation of the language policy and helps to contribute to the body of knowledge on how the language used in lower primary schools affects the learners' academic achievement at Grade 4 level. The results of this study should be of value to Kenya's education policy makers in general and language planners in particular. It is expected that policy makers will attach more importance to the gap between the prescribed policy and the actual practice of language of instruction in lower primary schools. Planners will use the results of the study for improvement, review or refinement of the educational language policy to align it to actual practice in lower primary school Grade 1 to 3 within the country. Consequently, it is expected that the findings will trigger a more collaborative and inclusive review of the educational language policy, with the participation of teachers as the eventual implementers.

School heads will draw from the recommendations of this study useful data on the attitude of teachers towards as well as some practical steps on the implementation of language policy. It is anticipated that school heads will use the findings of the study to streamline their institutional adaptation of the language policy and practice. Teachers on the other hand should find the results of this study valuable in understanding how their attitude towards the language policy affects their implementation of it. They will

also find the results useful in understanding how the language policy and practice affect learners' academic achievement at Grade 4.

The research also forms a basis for other studies on the areas of educational language policy, educational language practice and academic achievement in Early Years Education and the interrelationships between these facets.

1.7 Justification of the Study

The area of language in education has received much research attention over the years but many research problems remain unexplored. Most of the researches focus on practicality of multiple languages of instruction, multilingualism and the role of indigenous languages (Roy-Campbell, 2014; Mwaniki, 2014; Awuor, 2015) and the appropriate time for introducing a second language. Other studies focus on code-switching (Siele, 2009) and language and learning (Gacheche, 2010). The input of teachers as policy implementers and how this affects learners' achievement has not been adequately studied. They are inconclusive on the part played by teachers to change ideals into reality and how their role bears on achievement by learners. The same can be conceptualized as: LANGUAGE OF INSTRUCTION→TEACHERS' INPUT→LEARNERS' ACHIEVEMENT.

1.8 Basic Assumptions

The following assumptions were made during the study:

First, it was assumed that the effect of language variants and dialects of the mother tongue in the study area is negligible. That is, it was assumed that the language widely spoken by teachers and learners in the catchment area is the mother tongue of the catchment area despite any possible variants or dialects of the same tongue.

Secondly, that the teachers and managers of each school are aware of the language policy as stated either in the Gachathi Report (1976) or the Kamunge Report (1988).

Third, that listening and reading ability in the medium of instruction affects academic achievement of learners in areas of study.

Fourth, that learners' passage from Grade 3 to Grade 4 is an adequate basis for evaluation of academic achievement. It was assumed that other factors which are known to contribute to academic achievement such as the number of teachers they interact with, socio-economic status, and school infrastructure are constant variables. The influences of these variables were not measured.

Fifth, that learners attain linguistic competence at the same rate. This means that all learners taught in English in lower primary schools are equally and uniformly competent upon reaching Grade 4. Likewise, it was assumed that all learners taught in Mother Tongue are equally and uniformly competent in the language upon reaching Grade 4.

Lastly, that teachers in schools are the implementing personnel for educational language policy.

1.9 Scope and Limitations of the Study

Ideally, such a study should have been done for the whole of Kenya. However, the study was limited to Kakamega County of Kenya. Kenya is a multilingual country with 45 ethnic affiliations each with distinct mother-tongue languages and their various dialects as reported in the Kenya National Population and Housing Census 2019. These languages are distributed over the wide geographical areas that make up Kenya. Due

to spatial constraints, it was therefore not practical to contact all the 45 mother-tongues.

It was expected that the sampled subjects within Kakamega County provided the necessary information for the study. Kakamega County is a sizeable county with over 550,000 learners enrolled in 1,021 primary schools across the region. The study was limited to 1,075 learners and 75 teachers drawn from 175 schools through the sampling procedure detailed later on, which provided a reasonable sample for the study. These comprised teachers and learners from both public and private primary schools in the County who were in session at the time of this study.

The study focused on learners' achievement at Grade 4 level in the County. This was informed by the recently introduced Competency Based Curriculum (CBC), a curriculum designed by the Kenya Institute of Curriculum Development (KICD) and intended to be learner-centred. In the previous curriculum regime, primary school learners undertook one summative examination at the end of Class 8. They were all expected to have gained adequate competency in the subjects they were taught over an 8-year period. The CBC introduces a new school-based assessment at the end of Grade 4, which contributes to 20% of the overall score of the learner's primary education. The learners are expected to have acquired some level of required competency and skills at this stage.

The results analysed were drawn from a sample of the standardized assessment of Grade 4 learners in English and Mathematics, learning areas, studied at lower primary school level. Vocational curricula, international curricula and home-based curricula are excluded from this study as they are not within the scope of Kenya's educational language policy.

Whereas the language policy in Kenya touches on various matters of language, this study focused only on the educational language policy and practice at lower primary school level Grade 1 to 3 and its effects on academic achievement.

1.10 Theoretical Framework

This study was guided by the Classical Liberal Theory of Equal Opportunity and Social Darwinism proposed by Charles Darwin. According to this theory, each person is born with a given amount of capacity which to a large extent is inherited and cannot be substantially changed (Mayne, 1999). The Classical Liberal Theory of Equal Opportunity maintains that Social Mobility will be promoted by equal opportunity of Education (Orodho, 2004), whereas Social Darwinism theory observes that provision of formal equity of access to education by putting everybody on the “scratch” guarantees that the course is a just one so that achievement is based on equal opportunity. It follows that, social institutions such as education should attempt to treat people equally. Thus, educational language policy should be designed so as to provide learners with equal opportunity to the language of instruction in education and examinations. This way, the learners will be enabled to benefit from the learning areas in lower primary school and hence take advantage of their inherited talents.

Kenya’s educational language policy states that medium of instruction in lower primary Grade 1 to 3 will be English in schools in urban areas, Kiswahili in mixed language areas and Mother Tongue of the schools’ catchment area in rural schools. Then English language shall become the only medium of instruction in all schools from Grade 4 onwards. This differential implementation of educational language policy at lower primary school level is an issue of concern in this study, considering that the language of examinations is English. The question is; to what extent does the

implementation of the language policy affect the academic achievement of learners after three years of instruction? To what extent have the learners been subjected to equal opportunity of education by using various media of instruction? Academic achievement in upper primary school largely depends on initial foundation in lower primary school. Are learners exposed equally to same learning experiences when various media of instruction are used? Whereas the medium does not affect content, the medium affects the delivery of content and, as a consequence, how this content is received. Is every learner put on equal footing right from Grade 1? Do the learners who are instructed in English right from Grade 1 have an added advantage in achievement at Grade 4 over the learners who are instructed through other media?

For the Classical Liberal Theory of Equal Opportunity and Social Darwinism to be applicable in the case of medium of instruction, it is expected that learners in lower primary Grade 1 to 3 level should be subjected to the same medium of instruction, in this case English, which is the medium of instruction from primary Grade 4 and at the same time the language of examinations. This study sought to find out the effects of medium of instruction in lower primary school Grade 1 to 3 on learners' academic achievement at Grade 4 level. This was an attempt to find out if the present disparities in language policy and practice in lower primary school affect learners' academic achievement.

1.11 Conceptual Framework

The conceptual framework in Figure 1.1 is used to define the interaction between the variables. It shows the linkage between the independent and dependent variables, and shows the influence of the intervening variables.

The independent variables in this study were the prescribed language of instruction, the choice of language used in the classroom, and the preferred language of instruction. The dependent variable was the learners' achievement in Grade 4, as broken down to academic achievement in literacy, numeracy and other subjects. Other variables such as number of teachers per learner, socio-economic status and school infrastructure which are known to affect learner achievement and performance were considered extraneous variables, and held constant.

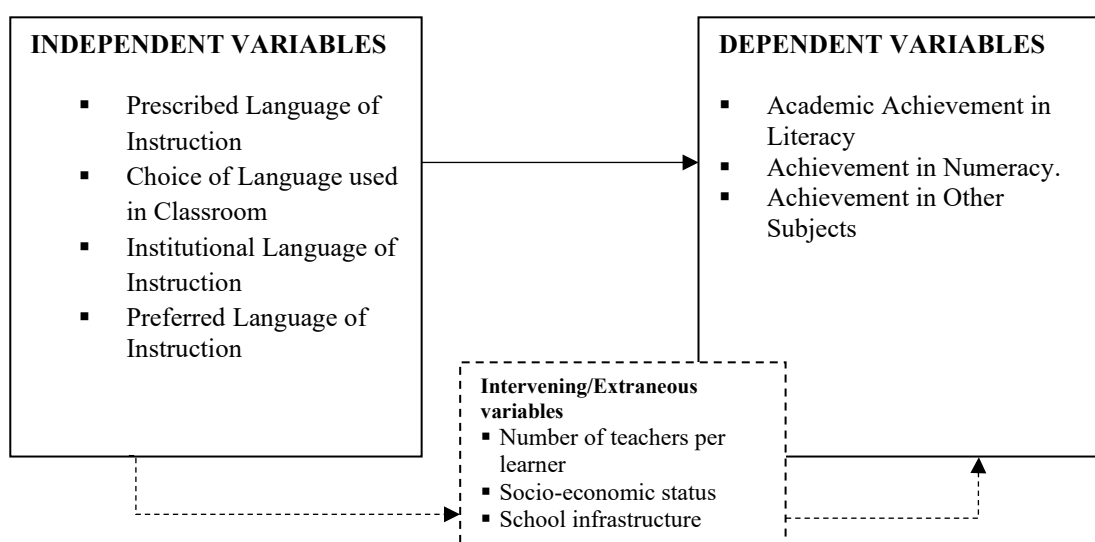


Figure 1.1: Conceptual Framework

1.12 Operational Definition of Terms

Achievement: The numerical score attained by pupils on assessments in areas of study. It is commonly measured through graded examinations or continuous assessments. For this study, achievement is taken as the scores attained by learners in the School Based Assessment of 2020 set by the Kenya National Examinations Council.

Catchment area: The area immediately surrounding a school defined by the distance over which pupils cover to school every day. In the case of boarding schools, the catchment area is narrowed to the school compound.

Competency Based Curriculum (CBC): A curriculum that focuses on the complex areas of knowledge, skills and attitudes to be applied by learners as the outcomes of the learning process.

Equal Opportunity: The idea that everyone, regardless of their social background, skin colour, gender, or religion should have fair and equal access to a good quality education. The outcome and achievement should be based on their efforts and free of any sort of discrimination.

Grade: The levels of education sectioned in the Competency Based Curriculum (CBC) in the 2-6-6-3 structure that replaces the previous 8-4-4 structure. Each grade is derived from an academic year. Lower primary education includes Grade 1,

Grade 2 and Grade 3; a total of three. Middle school commences at Grade 4.

Implementation: The enactment of policy or putting policy into practice.

Language Policy: Kaplan and Baldauf's definition of language policy has been adopted in this study. Thus, "A language policy is a body of ideas, laws, regulations, rules and practices intended to achieve the planned language change in the societies, group or system" (Kaplan & Baldauf Jr., 1997). In Kenya, the policy is prescribed by the National Government.

Language practice: The language habit developed by a speaker; the use of a specific language for day-to-day activities; the decision by a speaker to select one language or another or a mixture of languages for use at any instance.

Lower Primary: The definition given by Kenya Institute of Curriculum Development (KICD, 2017) is the first three levels of education, Grade 1 to 3. It is a part of Early Years Education (EYE) which comprises PP1, PP2 and Lower Primary.

Medium of Instruction: The language which a teacher uses to pass instructions to the learners. It is usually a national policy or at school level or even at individual choice by a teacher to use as a vehicle for teaching all other subjects except languages. Also referred to as the Language of Instruction.

Mother Tongue: The language first learnt by a child which becomes his natural instrument of communication and thought. It is the predominant language spoken in the child's home. In the context of this study 'First Language' and 'Indigenous Language' are assigned the same meaning as Mother Tongue.

Subjects: Learning areas, activities or courses offered at each learning grade level.

1.13 Summary of Chapter One

This chapter has presented the background of the study. The background lays the foundation of the problem that the study sought to tackle. The problem was stated and the objectives were formulated with corresponding hypotheses to be tested for the actual significance of the problem. This study is based on the appropriate theoretical framework which is stated and explained, followed by the justification, significance and scope. Lastly, the chapter lists and defines the key terms used in the study.

The following chapter of the thesis covers a review of the body of literature.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of the body of literature related to the present study. The first part of the chapter presents literature on the relationship between language and learning. The second part seeks to provide an understanding of the concept of language planning and educational language policy. The third part deals with the historical background of the language policy in Kenya. The fourth part of this chapter reports reviews of research related to language practice and the effects of the Medium of Instruction on learners' academic achievement. The literature assists to place the present study in context.

2.2 Language and Learning

Learning, a basic goal of education is a social activity. It involves the transfer of knowledge from one source to another. In the process, language, whether spoken or written, is used as the medium of transfer. The language to be used ought to be sufficiently developed to transmit the accumulated wisdom and social practices gathered over time.

Language development involves the selection of norms to be used, codification of form, elaboration of function and acceptance by the community (Holmes, 2001). Developed languages are likely to have more functions than less developed ones. They go beyond the basic informative and expressive function of language and transcend to the meta-lingual function, where a language can have a legitimately superior relative worth (Dixon, 2016). Languages with many particular fields that require specialized terminologies may, contestably, be defined as more developed. Such languages require

relatively more lexemes to convey the needs of every specialist group that uses the language.

The number of people who speak a language also indicates the level of development of that language. However, it is noteworthy that:

It is not only important to understand specific languages but to also appreciate associated structural linguistics as a means of appreciating the underlying, rich cultural aspects of those languages. (Ogechi, 2011, p. 2).

Traditionally, education consisted of folklore and the wisdom acquired was what one required for survival in one's immediate community. Then education was truly "A social process of transmitting from one generation to the next the accumulated wisdom and knowledge of society." (Sifuna, 1975, p. xv).

In the modern sense, education is given a new concept especially for those in previously colonized societies. Throughout the world today there is a knowledge explosion and the world is becoming a smaller and smaller 'global village'. There is a greater need for international cooperation in politics, science and technology. Language has a central role to play in the international cooperation because it is a channel of communication.

All languages have a dual character as a means of communication and carriers of culture (Kembo-Sure, Mwangi, & Ogechi, 2006). As a means of communication, language is used to maintain relations between people, to cooperate with others, to regulate behaviour and simply to pass on desired information. As culture, language expresses the thoughts and history of a particular people (Hudson, 1996). The language develops over time and embodies the values of a particular community. The names of places, objects and processes will be relative to that community. This is what some linguists have referred to as 'linguistic relativism' (Whorf, 2011).

Everret (2016) and Lopez (2000) suggest that language and thought influence each other. Bruner (1975) argues that language is used for expressing thought. We are able to understand what an individual thinks when he speaks. Elsewhere, Bruner (Toward a Theory of Instruction, 1966) has expressed the development of thought through three stages: the iconic, the enactive and the symbolic. While at the earlier stages man is able to know that objects exist and he may even use them, it is at the symbolic stage that words are used to express thought. Some writers have argued that language does not only express the contents of a persons' culture but the language the person speaks may also influence his thoughts. Zlatev & Blomberg (2015) found experimental evidence to support the view that language influences a person's habitual manner of perceiving and thinking. A person will be able to conceptualize objects or ideas represented by words if such words exist in his first language and he is able to relate to the objects and ideas meaningfully. Chabal (2015) uses the example of English and Spanish children whom she had an opportunity to teach, to argue that speakers of different languages divide up the world differently. In Chabal's experience, children differed from her in the labels they gave to the same item:

Whereas English speakers searching for the clock also look at a cloud, Spanish speakers searching for the clock also look at a gift, because the Spanish names for gift (*regalo*) and clock (*reloj*) overlap phonologically. These different looking patterns emerge despite an absence of direct linguistic input, showing that language is automatically activated by visual scene processing. (Chabal, 2015, p. 539)

She recognized that differences in the ability to label correctly may also depend on the socio-economic status of the individual but she concluded that a change in medium of instruction has an effect on the thought processes and conceptualization. Chabal's position is amplified by Gruenewald & Pollak (1990) who wrote,

It is sometimes difficult to separate learning concepts and processes of a subject from learning to use language to represent and use these concepts and processes (p. 20).

In other words, the language used to describe concepts and processes in a subject, such as science, is the essence of the subject. The teacher has to pay special attention to the medium of instruction.

The importance of the medium of instruction is described by Bull (1964). In his paper, 'The Use of Vernacular Languages in Education' he states that a medium of instruction has the role of ensuring that learners get educated and consequently the educated society develops the nation. While using a chosen medium of instruction, educators and learners should be able to attain the educational objectives of the society, to do so universally and equally for all, and to do so efficiently and economically.

Stern (1983) describes criteria for choosing a medium of instruction. He distinguishes between characteristics of a language which are relatively objective and those which are subjective (or can be varied). With regard to objective characteristics, Stern explains that the language should be standardized: it should be 'codified', 'elaborated' and 'written'. There are two subjective characteristics required of a language. First, it should be accepted by all as suitable for teaching and it should be sufficiently important to be acquired. Second, the language should be teachable to the required standard.

It is apparent from a review of the literature that Stern's criteria are not always adhered to while selecting media of instruction. Psychological considerations and sometimes emotional biases come into play in some situations. In the present study, these psychological considerations and emotional biases are aptly called "attitudes".

The question of language choice is also a question of prestige. It has been argued that an individual who finds himself in a situation of using another's language automatically submits to control of the super ordinate language. According to Mazrui & Mazrui (2000), choice of language is intrinsically connected to power and control. Owners of a selected language control those who have to learn that language.

Along similar lines, Kembo-Sure and Ogechi (2009) note that:

the colonial history of Kenya established English as the most revered, powerful and 'prestigious' language, while the mother tongues were to be used for mundane communicative needs in the private sphere (p. 151).

They propel the argument that the language policy entrenched an old colonial structure, where Mother Tongue is used as a medium of instruction for only three years of an individual's school life. Kembo-Sure advocated the use of Mother Tongue in education and in creative writing should be given more prominence.

Proponents of Mother Tongue Instruction argue that change from home to school is bad enough for a child. It becomes 'traumatic' when the child discovers that he is unable to communicate with anyone when he discovers that the language of his home is not the same as the language of the school. Brown (1979) describes the experience of a child who on discovering that his mother tongue is not the same as the language of the school is unable to report to the teachers that he is injured and suffers miserably. While accidents of this nature are not common, it is such instances that lead many writers to advocate for the use of Mother Tongue during instruction. Despite this, Trudell (2007) advocates for the use English saying that in Kenya and many other sub-Saharan countries, the education agenda are majorly driven by "economic progress and social advantage" as opposed to national unity. This is in conformity with the proposition of "English as an International Language" (Crystal, 2002) that sees English

as a neutral language and a positive tool for multi-lingual societies. Overall, language is important for communication, learning and education.

The present study will go further to determine the relationship between medium of instruction, language practice and their relationship with learners' academic achievement at Grade 4 level.

2.3 Language Planning and Educational Language Policy

Different countries adopt varying approaches to the complex issue of language planning and educational language policy.

Up to the year 2002, the language policy in Ghana required teachers to use the Mother Tongue for instruction during the first three years of school (Owu-Ewie, 2006). In May 2002 English language replaced the use of a Ghanaian language as the medium of instruction. The change was instigated due to the view that the previous policy was impractical to implement. The multilingual situation in the country, teachers' actual practice, lack of materials in Ghanaian languages and absence of a standard written form of written native languages were advanced as the hurdles which prevented the success of the language policy (*The Statesman*, Thursday July 16, 2002; cited in Owu-Ewie, 2006).

In Mali on the other hand, indigenous languages were not encouraged. Most schools use the Traditional French (TF) approach, while a convergent teaching pedagogy called *pédagogie convergente* (PC) is adopted in others. The 'PC' approach is a unique pedagogy where teachers approach learners in a language they understand. Canvin (2015) carried out a comparative study to find out the differences in the learners within one school that uses the two approaches. She found that literacy was higher in those who used the PC as compared to those who did not use the PC. She attributed this, to

among other reasons, the fact that indigenous languages were used in the PC approach. The use of the French language in Mali not only inhibited literacy but also created an over-dependence on France as the supplier of curriculum materials.

A contrasting situation occurs in Ethiopia. The language practice runs opposite the accepted axiom. While it is widely held that individuals should learn to read in their mother tongue, many individuals in Ethiopia become literate in a language they do not speak – Amharic (Alumu & Tekleselassie, 2006). Amharic is the national language in Ethiopia and the Language of Instruction in primary schools. The factors which help the development of Amharic are the strong motivation to learn the medium of instruction; the religious values associated with literacy; and the special national status given to Amharic. Ferguson notes that memorization is the most widely used teaching technique. Children recite and sing from a memory text in a language they do not understand. This, he attributes to the fact that in Ethiopia the main purpose of literacy is either participation in religious ceremonies, performance before a group of adults or learning the rhythm of the sounds made (Racette & Peretz, 2007).

The Ethiopian example illustrates the length to which people can go to learn another language for the purpose of acquiring a tool for communicating with others – “to communicate with one’s fellow humans” (Whiteley, 1969, p. 13) or, so that they are able to progress in social and economic status if the language of the majority is associated with power and material benefits.

In Zambia as well, English is used as the medium of instruction throughout primary school. Some of the reasons given for selecting English were that it would unify the many linguistic communities; it is an international language that would facilitate international communication, it was a general language that would enable children of

working parents to fit in any school anywhere in the country; it would make publication of school books cheaper and affordable and, it is a highly developed language through which scientific and technological concepts could be expressed (Goldman, 2019). However, Nkolola-Wakumelo (2008) carried out a simple survey and concluded that the medium has not been very successful. Teachers still have to resort to Mother Tongue to enhance classroom communication. Nkolola-Wakumelo bases her conclusion on the reports teachers provided. Teachers claimed that through translation they were understood better. No evidence was sought to prove that translation led to better achievement. It is necessary to ascertain that the concepts as understood by learners are the same as the ones conveyed in English. There may be truth in Hawes' (1979) statement that:

In some subjects and topics, particularly in Science and Mathematics, English language embodies western thought patterns and there is a risk that translation may lead to fundamental misunderstandings (p. 77).

Confusion is expected when the teacher cum translator is not a specialist either in his mother tongue or in English.

Unlike the countries discussed above, Tanzania formulated a radical language policy. The choice of Medium of Instruction in Tanzania is of particular interest to this study. Immediately after independence, a decision was taken to focus all education towards the dominant agricultural sector. School leavers were expected to become self-employed and work in the rural areas (Nyerere, 1967). This was the essence of the policy of Education for Self-Reliance. According to another study, 44% of secondary school graduates were destined for agricultural occupations (Malekela, 1977). To make the Education for Self-Reliance policy more realistic, a decision was taken to make Kiswahili not only the national language, but also the medium of instruction in

all primary school subjects except in English (Nyerere, 1967). English was considered a foreign language which would only be used as a Medium of Instruction just to benefit the minority going to secondary school. Nevertheless, the Medium of Instruction in secondary school would remain English.

The decision to use Kiswahili as a Medium of Instruction no doubt had several advantages. The advantages notwithstanding, researchers have found many secondary school learners who are unable to cope with their studies through English when it is used as a Medium of Instruction. Adamson (2014) reported that:

... I was particularly struck by the frustration experienced by both students and teachers, particularly in the early years of secondary school when they were trying to cope with the shift in the Language of Instruction (p. 25).

Qorro (2013) ponders why research findings are not heeded with regard to the Language of Instruction in Tanzania. She notes that the policy goes against what researchers have recommended over the years. She acknowledges that the Language Policy from 1974 to date has had negative effects on education in Tanzania. In their report on the English language situation in Tanzania, Criper and Dodd (1984) ascertain that university students' level of English is substantially below that required for university English students (p. 15).

Although at the university some subjects such as *Siasa* (Civics) and *Malezi* (Educational Psychology) are taught through the medium of Kiswahili, library work, examinations and assignments are conducted in English (Rubagumya, 2010). In his presentation, Rubagumya concludes that it is still an uphill task for learners in Tanzania to achieve learning objectives through the use of English language. English is seen as a foreign or even colonial language, being imposed.

There are possibly many causes of the pathetic literacy situation in Tanzanian universities. One of the causes could be attitude towards English. For a long time, leadership in Tanzania associated English with neo-colonialism. A second cause may be delayed, and then abrupt, switch to English medium at form one. Many children are simply not ready for it and throughout the secondary cycle, teachers have to use Kiswahili to communicate (Mtallo, 2015). Ever since the Arusha Declaration, it had been a national policy to replace English with Kiswahili at all educational levels. Interestingly, the Tanzanian government recently began veering towards English Medium. In 1985, it accepted the Criper-Dodd report which proposed a re-institution of English as a Medium of Instruction at secondary school level and above. In 2015, English was again removed as an official language in schools. Just as Tanzania has an abrupt switch to English as a medium in form one, Kenya has an abrupt switch to English in Grade 4. The distinction is that in Kenya, this switch does not apply to all learners but only those who are in rural schools.

Most literature consulted by the researcher define language policy as a statement describing which language will be used at what level and occasion for instruction, communication in commerce, administration, public meetings and conferences. According to The Cambridge Handbook of Language Policy (Spolsky, 2012) four main features of a language policy are postulated. First, a language policy consists of practices, beliefs, and ideologies. Second, the policy covers all elements of a language. Third, the policy operates within a speech community, and fourth, the policy exists as part of a complex ecological relationship.

There are several dimensions of language policy. Literature reveals the distinctions between official language policy, general language policy and educational language policy (Noss, 1985). Official language policy concerns the recognition of a

government of the language to be used and for what purposes. General language policy refers to the unofficial approval by the government regarding use in business, in mass communication and in contact with foreigners. Educational language policy deals with the use of particular languages as either school subjects or media of instruction at the various levels of public and private education.

Evidently, the language landscape in Africa is diverse. Some countries have chosen to use languages that were introduced by colonial governments. Other countries have resorted to use of African languages as the main medium of instruction, while others have experienced policy shifts between one language and another, or a mix of languages. Just like in these countries, the situation in Kenya in terms of language policy has historically been a focal point of concern for policy makers. This necessitates a review of the literature on historical background of the language policy in Kenya, which is covered in the next section.

2.4 Historical Background of the Language Policy in Kenya

Educational language policy in Kenya has been characterized by ambivalence and uncertainty. Policy has been changed from time to time in response to political and educational demands of the people which were always tied to socio-economic expectations. Because of differences in objectives and personal attitude, there have been not less than 15 committees making language policy in Kenya (Muthiani, 1986).

During the colonial period, the language policy was mainly determined by missionaries and education officials. The first committee, the United Missionary conference of 1901, suggested that the mother tongue be used in village schools in the first three years and Kiswahili in class four and five. Missionaries preferred mother tongue and were prepared to accommodate Kiswahili because they saw it as a primary

duty to provide translations of parts of the Bible and to equip children in schools to read the Bible in their own languages (Gorman, 1971). The missionaries adhered to the British policy of adaptation and believed that Africans would only be converted to Christianity by Africans themselves (Whiteley, 1969). Missionaries emphasized mother tongue because of four reasons. First, they subscribed to the principle that the language best known and understood by the child on his entry to school is the most effective medium of instruction during initial education. Second, it was argued that through the use of mother tongue then ‘whatever is good in native customs, ideas and ideals would be preserved (African Education Commission, 1952). Third, the use of a lingua–franca was suited to reach the innermost thoughts of those to be converted to Christianity. Fourth, Kiswahili was associated with the “spirit of Islamisation” because of its Arabic and coastal origins.

Soon, there developed a conflict between missionaries and administration officials. While missionaries advocated for mother tongue instruction because through it, they would easily impart religious ideas to the native people, the colonial administration officials wished to nurture through education, a cadre of local people who would help administer the colony as clerks and as skilled workers (Phelps-Stokes Education Commission, 1924). Government officials, settlers and traders therefore urged the teaching of a language of wider communication – English. In 1929 an important conference on the aims of education was held in Dar-es-Salaam. Thereafter the Legislative Assembly discussed the Dar-es-Salaam recommendations. As a result of the deliberations, the Department of Education issued instructions to the effect that:

- i) The mother tongue will be used for the first four years in school life.
- ii) Kiswahili will be introduced as a subject during the first four years.

- iii) English may be taught in those classes where there are competent teachers.
- iv) After the first four years Kiswahili would become the medium of instruction.
- v) In those schools that English has been taught, English may be used as the medium of instruction.
- vi) After completion of six years of study, English will be introduced as soon as possible (cited in Gorman, 1971).

Following these instructions, a revised primary school syllabus came into force in 1935. However, the situation did not remain stable for long. By 1937, the Commission for Higher Education was already pushing for the complete use of English as a medium of instruction – because in their view, the local people would themselves push for earlier introduction of English (Anderson, 1970).

The anticipated demands were soon manifested in the independent school's movement. Africans, starting around 1925, began to set up their own schools to teach an education similar to the one taught to European children in English.

The independent schools aside, the period from 1945 to 1963 saw Kiswahili gradually replaced by Mother Tongue and English within the colonial education system. The African Education Commission Report of 1949 made the following recommendations:

- i) That Africans be taught in their respective mother-tongues in lower primary schools.
- ii) That English was to be the medium of instruction from Standard 4 onwards.

The policy of replacing Kiswahili as a medium of instruction became difficult to implement in many areas basically because of lack of suitable school texts in the various mother-tongues and the lack of qualified teachers to teach English. A pre-condition for using English as the Medium of Instruction at the time, was that there had to be sufficiently trained teachers and that syllabi and schemes of work had to be submitted to the Education Department for approval. Despite the challenges posed by the shortage of personnel, English became, in 1953, the compulsory medium in the examination held at the end of standard eight. Kiswahili, no longer a medium of examination, was used less widely as a medium of instruction in lower classes in areas where it was not itself a mother tongue (Gorman, 1971).

Then in 1957 began an experiment which was to have far reaching consequences on the medium of instruction in Kenya. It was occasioned by a need to investigate problems arising from changeover from mother tongue instruction to English for Asian children. The project was also charged with the task of finding solutions to problems caused by multilingualism in Asian schools. In the project, 25 teachers began instruction of children in English from standard one. This was against the prevailing educational belief that early education should be provided through the language children knew. Interestingly, the phrasing the 'language the children know' is on the assumption that a child's first language is the necessarily the same as the first language of their parent. This may not always be the case. The result of the experiment greatly impressed the project organizers.

In their report titled Report on Asian and European education in Kenya, 1958, the project organizers put forward several arguments in support of the use of English as a medium of instruction. Three of these were that:

- i) The incentive to learn English becomes greater when English is the only medium.
- ii) The general progress in the higher classes where English is a must is most likely to be faster.
- iii) The younger the child, the less conscious is the effort required to learn a foreign language and the less the change demanded in his pattern of thought when he has to replace one language by another.

(Woodhead & Harper, 1958)

Gachukia (1970) saw yet another advantage of the English medium: the use of English brought with it more adequate texts and materials for both teacher and pupils and, increased supervision. Immediately after independence a committee was appointed to review the education system. The Kenya Education Commission Report of 1964 recommended the use of English as a Medium of Instruction from standard one citing the following reasons:

- i) The English medium makes possible a systematic development of language study and literacy which would be very difficult in mother tongues.
- ii) As a result of systematic development possible in the English medium, quicker progress is possible in all subjects.
- iii) The foundation laid in the first three years is more scientifically conceived, and therefore provides a more solid basis for all subsequent studies than was ever possible in the vernaculars.
- iv) The difficult transition from mother tongue to English medium which can take up much time in primary four is avoided.

- v) The resulting linguistic equipment is expected to be much more satisfactory, an advantage that cannot fail to expedite and improve the quality of post primary education of all kinds.
- vi) Advantage has been taken of the new medium to introduce modern infant techniques into the first three classes, including activity and group work and a balanced development of muscular coordination.

The Commission's recommendations reflected the mood of the time. Kenyans wished to receive education in the form they thought had been denied to them during the colonial period. English was progressively introduced in schools becoming the Medium of Instruction in 1,920 schools by 1965.

The enthusiasm for its expansion was so high that there were cases when parents complained if their children were not receiving the new English teaching. (Sifuna, 1975, p. 49)

English was used as a Medium of Instruction until 1976 when the National Committee on Educational Objectives and Policies (o.p. cit.) recommended a reversal to mother tongue during the first three years of school, Kiswahili and English to be taught as subjects, and English taking over as the Medium of Instruction from Grade 4 (then known as Standard 4). Although this policy recognized the role of Mother Tongue in education, its practicality was wanting considering that teachers who were expected to implement the policy came from diverse linguistic backgrounds. As such, it was necessary to investigate factors surrounding the educational language policy and language practice and to find out the extent to which these affected the academic achievement of lower primary school learners at Grade 4 level.

2.5 Effects of Medium of Instruction on Learning and Academic Achievement

In this section, literature related to researches on choice of language, language practice and effects these have on academic achievement of pupils is discussed.

In Kenya, English was used as a Medium of Instruction until 1976 when the National Committee on Educational Objectives and Policies recommended a reversal to Mother Tongue instruction during the first three years of school. This was due to studies that demonstrated that children learned faster when mother tongue was used as compared to English. Muthwii (2002) notes that Mother Tongue was used as a medium of instruction only in Mother Tongue lessons, Kiswahili in Kiswahili lessons while English was used in all other subjects because materials were written in English. This was then translated to Mother Tongue for children to understand. However, some proponents of the use of English argue that English is the language of science and technology (Foyewa, 2015) and therefore it is the most suitable for education.

Several African countries in the southern parts of Africa like Malawi and South Africa have embraced learning in African languages. There is a kaleidoscope of African languages such as Amharic, Swahili, Chichewa, Xhosa, Ndebele, Zulu and Venda which are overlain by 'international' languages which were introduced during colonial times (UNICEF, 2016). The argument is that the use of the child's home language has a positive link with learning outcomes. The study concludes that the use of mother tongue in classroom instruction improves the cognitive process.

This position is countered by Obanya (1999) who examined the widely held views of factors that impede promotion of African languages as media of instruction in classrooms. In his paper, he postulates that research and analysis of examination results

indicate poor performance of students in English. Whereas Obanya looked specifically at performance in English. This study takes it up a notch to look at performance after being exposed to one of the languages of instruction: English or mother tongue or Kiswahili. As such, there is a distinction between the focus of these two studies.

With the foregoing in mind, this present study was split into four major objectives. The literature relating to this is discussed in the subsequent paragraphs.

2.5.1 Difference between the Language used for Instruction and Language Policy

It may be argued that “policy is not legislation.” Whereas legislation can be enforced through legal means, government policy is often left to institutions to adopt and implement. In the case of educational language policy, various factors may lead to it not being implemented as has been prescribed.

Githinji (2014) sought to establish the language(s) used in lower primary school and delineate the factors which influence the choice of language. The study outlines school factors, teacher factors and parents’ factors as the central issues that influence the choice of language of instruction. Githinji points out that “pre-primary schools ignore this rule”. In tandem with his findings, another study states that “many teachers in Primary Schools hardly use Mother-Tongue for instruction” (Oluoch, 2017).

Such findings of an apparent gap between policy and practice are replicated in other studies, such as that of Awuor (2019) which points out that lack of training is a fact that contributes to the encumbrance faced by teachers when implementing the language policy. The study further examines the extent to which language policy is

implemented by teachers. The emerging idea is that teachers have reservations about using their mother tongue since “this is not the language used in examination”.

Other factors that influence the implementation of policy have been identified as policy and culture (Nyika, 2015) lack of structured implementation frameworks (Laitin & Ramachandran, 2016) and inadequate teaching materials.

It is necessary, therefore, to study the impact of these factors and how they affect implementation in the Kenyan context. This formed the basis of the first objective of this study, which sought to give a research-based description of the difference between policy and practice.

2.5.2 Attitude of Teachers towards Educational Language Policy

Critically, Githinji (2014) reveals that teachers have different perceptions of different languages. It is these perceptions that are referred to as "attitudes" in the present study.

The attitude of teachers towards the language used for education has been an area of study. Naturally, the attitude would inform the choice of language, regardless of prevailing policy.

On the matter of choice of language, the teachers may be at liberty to choose the language they use for instruction. Muthwii *et.al* (2002) report that teachers in both multilingual and monolingual schools chose to teach in English in lower primary schools. They perceived that teaching science in Mother Tongue was hard. According to Muthwii (2002) many speech communities are linguistically heterogeneous, so they mainly choose English as the language of instruction in lower primary school for purposes of uniformity. Since English is the language of education higher up the education ladder, those that choose English as the language of instruction from primary

Grade 1 presumably have a head start over those that use Mother Tongue or Kiswahili. In most Ugandan rural schools, for instance, pupils preferred their mother tongue to learn difficult words but the urban pupils found it unnecessary since their indigenous languages do not qualify as their first language. The study sought to find out the extent to which language policy and language practices encourage or hamper the acquisition of desirable learning competencies. The present study, however, goes further by seeking to point out the possible effects the language practice has on learners' academic achievement at Grade 4 level.

In a different research, Hasan & Dogan (2019) delve into multilingual education languages to determine how teachers view the use of mother tongue in education. In the study which looked at the use of Kurdish language in Turkey, the researchers conclude that teachers have a positive attitude concerning heritage education language policies.

In Kenya, the aspect of attitude has been studied by Nyaom & Sarah (2014). The study was carried out at a time when the government of Kenya had renewed the directive for instruction in Mother Tongue. The research points out numerous challenges in implementation, including teacher attitudes. The study underscores that teachers' attitudes are difficult to change as they are often deeply ingrained and held unconsciously.

The change of attitude is critical if any educational language policy is to succeed. However, for there to be any change, there must first be knowledge-based research that establishes existing attitudes. This formed the basis of the second objective of this study.

2.5.3 Relationship between Language of Instruction and Academic Achievement

Academic achievement has been described as the extent to which a learner has attained their educational goals following a set of instructional activities (Steinmayr, et al., 2015). Academic achievement has many measures, and these measures are carried out on a defined set of goals that apply to various subject areas. In many jurisdictions and curricula, academic achievement is measured by scores earned from assessments or examinations. For this study, academic achievement is defined as the scores obtained by learners in the School-Based Assessment of 2020 set by the Kenya National Examinations Council.

Factors that affect academic achievement have been widely studied. Students' attendance in class ("time-on-task"), family socioeconomic status, level of parents' education, the ratio of students to teachers and the level of training of the teachers have been put forward by researchers as key considerations that affect performance and achievement (Ongeti, 2012).

Research has continuously attempted to explore the relationship between the language of instruction and learners' academic achievement. To achieve the intended outcome of an instructional program, a learner must first understand the language in which the instruction is being delivered and thereafter understand the language in which the assessment is carried out.

The question of whether the language of instruction affects the quality of education is posed by Qorro (2010). The author covers existing literature that demonstrates that a lack of proficiency in English leads to poor academic performance overall. The author

concludes by creating an analogy that describes language of instruction as the conduit of education much like how electricity is transmitted through copper cables.

UNESCO (2005) attempts to answer the question of language of instruction and quality of education, chronicling the history of the educational language policy in Zambia which like other countries in Africa has grappled with the policy of language of instruction. The report espouses that the choice of language of instruction has a direct bearing on students' academic performance.

Evidently, there exists a linkage between language of instruction and learners' academic achievement. Perhaps this is what informs the present structure of the educational language policy in Kenya. However, there is no clear consensus on which approach is best suited for the academic success of the learners (Rodriguez, 2017). There is a need to explore whether, regardless of the language of instruction used, there is a uniform achievement of the learners across the practiced languages of instruction after they transition to the use of English at Grade 4. This was the basis of the third objective of this study.

2.5.4 Comparison of Academic Achievement of Learners taught in Different Languages

In relation to establishing *whether* there is a relationship between language of instruction and educational achievement, there is need to further explore *by how much* the achievement differs, if indeed there is a relationship. This question formed the basis of the fourth objective of this study.

Comparative studies have been carried out in different jurisdictions according to the literature reviewed for this study. The outcome of these studies is mostly that learners who were taught in other languages find it difficult to make the switch to the main

language of instruction when the curriculum requires them to. In the United States, a study was carried out in Arizona to analyze the State's policy of a single English proficiency test for English Language Learners to determine their suitability to move to mainstream learning in English. (Garcia, Lawton, & Figueredo, 2010). The study revealed that English Language Learners (ELL) underperform when instructed in English-only instruction as compared to their counterparts whose first language was English.

In his paper on learning through a foreign language versus learning through a familiar language, Brock-Utne (2008) writes that if language of instruction aims to create a labor force with critical abilities and qualifications, the language of instruction, that is Kiswahili in this case, ought to be familiar to both the learners and the teachers. However, a critical gap in Brock-Utne's work is that Tanzania is largely homogeneous linguistically. The majority of learners and teachers in Tanzania use Kiswahili as a primary language.

A problem that presents itself is that Kenya's educational language policy makes a switch from a mix of languages depending on the type of school, to a uniform language – English – in Grade 4. It remains to be explored whether learners who were taught in the same language perform the same as those who were taught in a different language. This necessitates a study comparing the academic achievement of learners taught through different languages in Kenya.

2.6 Overview of Competency-Based Learning and Assessment in Kenya

This research was carried out at a critical time of transition from the previous system known as '8-4-4'. This system entailed eight years of primary education, followed by four years of secondary education and four years of tertiary education.

Starting in 2017, Kenya adopted the Competency Based Curriculum (CBC) for all levels of basic education. The restructuring under the CBC comprises Pre-primary (2 years), Primary (6 years), Secondary (6 years) and University education (3 years). Implementation of CBC commenced with Early Years Education (EYE), which consists of Pre-Primary 1 and 2, and Grades 1, 2 and 3.

The curriculum reforms were guided by Sessional Paper No. 2 of 2015 on ‘Reforming Education and Training in Kenya’ which recommended a competency-based approach to education. The proponents of competency-based approaches argue that it develops a meaningful connection between subject areas and practical competencies.

The concept of competence has been discussed by various researchers. Ford (2014) narrows it down to “an intensive focus on what learners can do as opposed to what they are taught.” The Kenya Institute of Curriculum Development (KICD) defines competency as “the ability to apply appropriate knowledge and skills to successfully perform a function.” (KICD, 2017).

According to the KICD, (KICD, 2016) the seven core competencies to be achieved by every learner in basic education are Communication and Collaboration, Self-efficacy, Critical Thinking and Problem Solving, Creativity and Imagination, Citizenship, Digital Literacy and Learning to Learn. This is an apparent departure from the previous system, which had on several occasions been blamed for being “examination-centred”.

Under the CBC, learners join Grade 1 and spend three years in this level at “Lower Primary”, exiting at Grade 3. During those three years, they study various subjects covering Literacy, Kiswahili Language Activities/Kenya Sign Language for learners who are deaf, English Language Activities, Indigenous Language Activities,

Mathematical Activities, Environmental Activities, Hygiene and Nutrition Activities, Religious Education Activities, Movement and Creative Activities.

The learners move on to “Middle School Education” which entails three years of upper primary school and three years of lower secondary school. At this level, the subjects covered are English, Kiswahili or Kenya Sign Language, Home Science, Agriculture, Science and Technology, Mathematics, Religious Education, Creative Arts, Physical and Health Education, and Social Studies.

Assessment is an important tool for establishing the extent to which learning has occurred and how much of the learning outcomes have been achieved. (Shiundu & Omulando, 1992). The CBC has re-designed the assessment model of its predecessor.

Under the CBC, assessment adopts a more formative approach with diagnostic measures to enhance and improve learning outcomes. It is argued that the previous curriculum regime focused on comparing learners with each other (Mackatiani, 2017) since the assessment was in reference to a normal distribution or given mean score.

The tools for Competency-Based Assessment include observation schedules, checklists, rating scales, projects, orals, written tests and rubrics (KNEC, 2020). The learners’ achievement, or competence in this case, is reported in an Assessment Sheet which is a tool to record the learner’s performance on each task. There are four performance levels, namely; Level 4 (Exceeding Expectation), Level 3 (Meeting Expectation), Level 2 (Approaching Expectation), and Level 1 (Below Expectation).

At Grade 4, a standard, national assessment known as the School Based Assessment (SBA) is carried out. In the School Based Assessment, schools are expected to administer the assessment tools obtained from the National Examinations Council.

They then score and upload the Grade 4 learners' assessment scores on the KNEC Competency Based Assessment portal.

2.7 Summary of Chapter Two

This chapter reviewed existing literature on language and learning, educational language policy and effects of medium of instruction on learning and academic achievement, competency-based structure in Kenya. Lastly, this chapter outlined a gap in literature, which the present study sought to fill.

Based on the foregoing literature review, several studies in the area of language and learning, language policy and practice have been carried out. Some of these studies have been carried out in other geographic jurisdictions, which are bilingual at most and as such do not have the same linguistic set-up that Kenya has.

Within Kenya, studies have been done covering the practicality of implementing the language policy. These studies are valid to the extent that Kenya has numerous language groups, and deliberate effort must be taken in ensuring that the language policy is implemented. Further, some studies have focused on the learners' point of view and not from the teachers as implementers.

However, literature on the implication of language policy and practice on learners' academic achievement is scarce. Coincidentally, the newly implemented CBC introduces a School Based Assessment for all learners in Grade 4, at which stage a number of learners will have made a shift to a different language of instruction. All learners at Grade 4 are expected to have some certain level of competence in the nationally administered School Based Assessment. The implication of this expectation has not been studied, and this is subsumed in the objectives of this study.

The availability of credible empirical data, therefore, is crucial as the government continues to implement education reforms at primary school levels. Particularly, this study provides key insights to guide in policy direction as educationists continue with the implementation of the Competency Based Curriculum (CBC).

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter presents the research design and methodology used in the study. It describes the study area, study population, sample size, sampling procedures, data collection instruments and the techniques used to analyse the data. Lastly, it summarises the ethical considerations that were taken into account during the study.

3.2 Research Design

Research design is the framework chosen by a researcher to set up their study for success (Creswell & Creswell, 2018). The design of a study entails a selected method of research from widely accepted scientific methods such as experimental, survey, correlational and so on. The selection of any of these methods is determined by the type of problem under study.

This study adopted correlational survey design into educational language policy and practice and their relationship to learners' academic achievement in lower primary school. Correlational survey design is a type of research that involves investigating one or more characteristics of a given group in order to discover the extent to which the characteristics vary together (Walliman, 2010). This enables the researcher to establish a statistically corresponding relationship between two variables. This study sought to determine the relationship between the educational language policy and practice and learners' academic achievement in Grade 4 assessment in lower primary schools in Kakamega County. The premise of the study as stated in the objectives is that the language of instruction may have an effect on learners' academic achievement. As such, correlational research design was found to be appropriate for the study.

To achieve the objectives and to test the hypotheses, quantitative and qualitative methods were used. Quantitative research is a study done by measuring quantities and assigning numerical values to them (Vogt, Gardner, & Haeffele, 2012). Quantitative data is obtained when a dependent variable is measured against a scale that shows “the amount” of that variable. The collected data is reported in form of scores, where higher scores indicate that the variable is present whereas lower scores indicate less of that variable.

On the other hand, qualitative research entails collecting and analysing non-numerical data in order to infer concepts and opinions. It is useful for generation of in-depth insights into a research question. Qualitative research is common in education and social sciences (Vogt, Gardner, & Haeffele, 2012).

The mixed methodology approach was found suitable as it was important to combine the quantitative data obtained from assessment results, with data obtained from questionnaires which focused on the qualitative aspect.

Selected characteristics of primary school learners’ achievement were studied to find out how they vary with language practice. Then, the manner in which language practice as an independent variable affects academic achievement of learners in lower primary school was assessed by quantitatively analysing the school-based assessment results.

3.3 Study Area

The location of the study was Kakamega County in Western Kenya.

Kakamega County has a population of 1,867,579 making it the third most populous County in Kenya, after Nairobi and Kiambu Counties (KNBS, 2019). Kakamega County has 13 sub-counties, among which are Navakholo and Kakamega Central Sub-Counties. Sub-Counties (formerly called districts) are the administrative regions of the counties, under which administrative functions such as education fall.

The study area was selected as a suitable location for reasons that it comprises urban and rural settlements whose demographics are mixed linguistic groups. These provided a variety of language backgrounds and possible language practices. Learning facilities in Kakamega County of Kenya are well established and they serve a fairly large population. According to data obtained from the 2019 Kenya Population and Housing Census Results, Kakamega County had 555,021 persons aged 3 years and above that are enrolled in primary schools. This number is followed at second by Bungoma County, which had 500,157 learners in primary schools at the time of the 2019 census (MoE, 2019).

Kakamega County has a good mix of urban and rural learning institutions giving a variety of potential languages used as a medium of instruction, a factor which is subsumed in the broader focus of this study.

Based on the general population size, the number of learners in primary schools and the mix of urban and rural setups in Kakamega County, the region qualified as a suitable study area whose results could statistically be representative of the rest of Kenya.

Table 3.1 below is extracted from data obtained from the County Government of Kakamega, and it shows the number of learning institutions in Kakamega County. Of relevance is the number of primary schools in the County. The full enrolment data is contained in Appendix 7, which consists of data extracted from the Ministry of Education, Basic Educational Statistics Booklet, 2019.

Table 3.1: Primary Schools in Kakamega County 2019 (Source: MoE, 2019)

Category	Public	Private	Total
Number of Schools	908	212	1120
Total Enrolment	519,857	35,164	555,021
No. of Teachers	10,664	1,825	12,489

The study sample was drawn from the 1,120 schools within Kakamega County, from which the target sample area of Kakamega Central Sub-County and Navakholo Sub-County was drawn. Kakamega Central Sub-County was selected on the basis that it is an urban area within the study area. Navakholo Sub-County was selected on the basis that it is a rural area within the study area. In total, Kakamega Central Sub-County has 65 public and 28 private primary schools. Navakholo Sub-County has 65 public and 17 private primary schools. These made the overall population of 175 primary schools (County Government of Kakamega, 2020).

3.4 Population and Sampling Procedure

3.4.1 Sampling Technique

The key subjects in this study were head teachers, teachers and pupils from selected schools within Kakamega Central Sub-County and Navakholo Sub-County, which were purposively selected from the 13 sub-counties in the County.

The study population comprised the learners and teachers drawn from the schools within the selected schools. In total, there were 175 primary schools within the two sub-counties. The selected schools had 10,767 learners and 741 teachers in total.

Guided by Mugenda and Mugenda (2003), the researcher established that 10% of a study population is adequate for a sample. It has also been argued that the sample size should be guided by the availability of respondents and the cost implications (Hancock, Mueller, & Stapleton, 2010). Therefore, the researcher adopted a random sample size of 1,075 learners within the strata, which meets the criteria established by Mugenda and Mugenda.

For the schools' samples, stratified sampling was used. Each school was assigned to one of the categories rural, urban or suburban schools. According to the Urban Areas and Cities Act, 2011, an "urban area" means a municipality or a town. For this research, an urban area was considered as an area located within town, which is characterized by human-created structures. The density of these structures and population is higher relative to other areas around them.

The Kenya National Bureau of Statistics delineates urban centres in terms of population and the built-up structures. KNBS has listed several areas of Kakamega County as "urban areas". Rural areas on the other hand, are large and isolated areas of

an open country with low population density. Semi urban schools were considered to be schools which are located within proximity of town, but not in town.

The advantage of sampling each sub-group into homogeneous strata is that the bias or error in the sampling technique is minimized. The sample size for learners was then proportionally designated based on the percentage composition of the strata. The Grade 4 scores of 1,075 learners were obtained. These consisted of 258 learners from urban schools, 430 from rural schools, and 387 from semi-urban schools. For the teachers polled, the sample size ($n = 75$) was equal to the 10% population ($N = 741$). Of these, 11 were teachers in urban schools, 35 were teachers in rural schools and 29 were in semi-urban schools.

Figure 3.1 shows the sampling flow chart based on the aforementioned procedure.

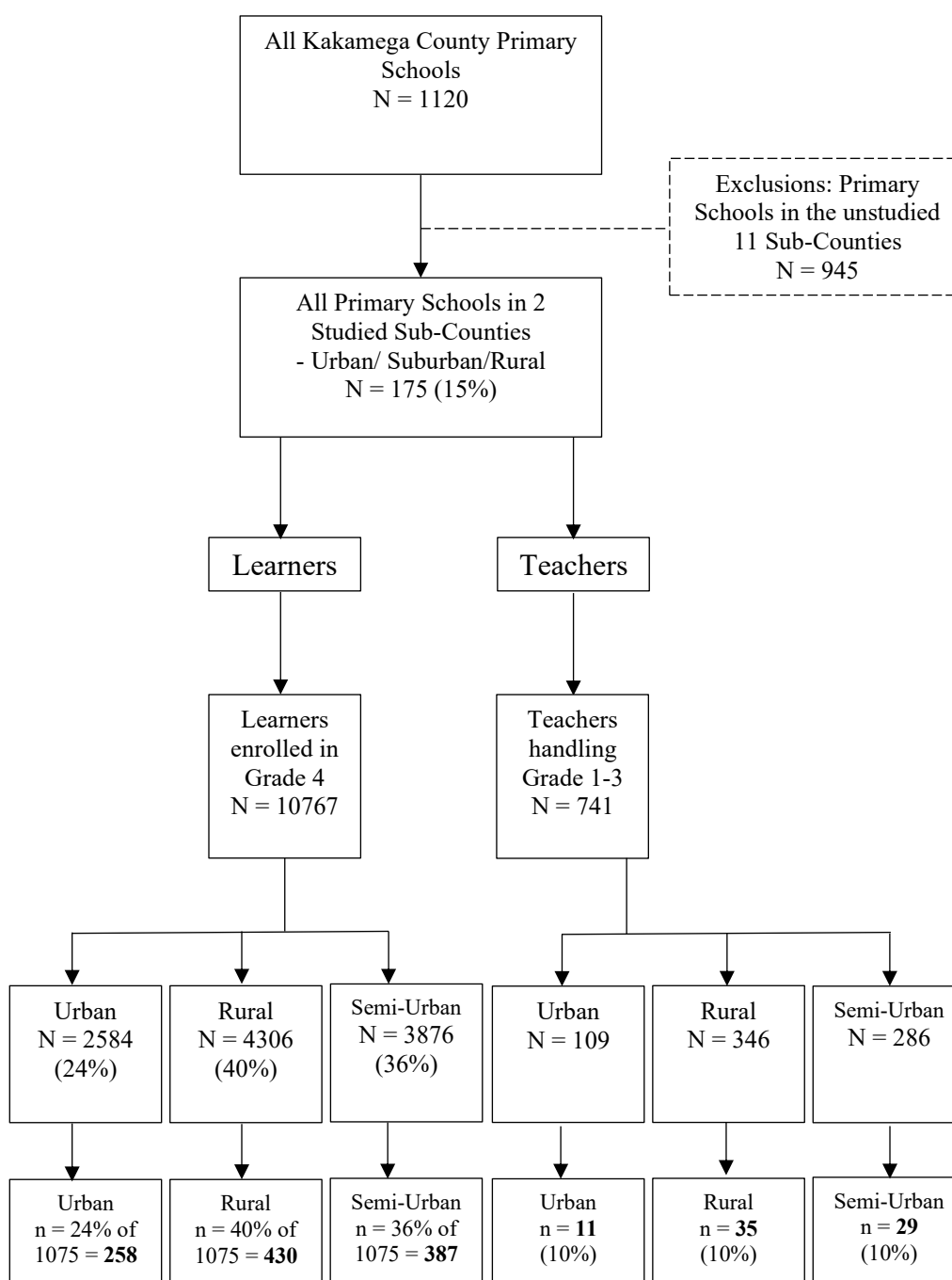


Figure 3.1: Sampling Flowchart

Those categories produced a representative sample of subjects in the study for whom language policy and practice affect.

3.5 Research Instruments

The researcher developed three (3) research instruments to collect the quantitative and qualitative data used in the research. These comprised:

- i. Questionnaire for Grade 1-3 teachers
- ii. Results analysis spreadsheet for Mathematics Assessment
- iii. Results analysis spreadsheet for English Assessment

Further to the above, head teachers were orally interviewed to obtain information on supervisions structure, administrative structures and assessment structures unique to the school. This oral interview was the source of qualitative data, which was useful in drawing conclusions in this study.

The subsequent paragraphs of this section describe research instruments.

3.5.1 Questionnaire for Teachers

A questionnaire is a convenient way of gathering information from several people at a time. During a study, the questionnaire is used by the researcher to obtain information from the respondents. It is therefore imperative that the questionnaire is well-structured in order to obtain accurate data that can be interpreted into useful results. A good questionnaire should be valid, reliable and concise. The questions in a questionnaire may be ‘open-ended’ or ‘close-ended.’ Open-ended questions allow the respondent to freely express themselves with no restrictions on possible answers.

On the other hand, the close-ended questions may be designed as multiple-choice questions, Likert scale questions and rating scale questions.

For this study, the questionnaire was selected as it is a suitable data collection tool for a qualitative survey.

The Questionnaire for Teachers was designed in three sections, namely; Part A, Part B and Part C. The sections were divided according to the content to flow smoothly and address each study objective and hypothesis, apart from the second hypothesis (H₀₂) which required data from the learners' scores.

Part A sought to obtain background information. The information sought comprised the name of the school, duration of the teacher's career, professional qualification, and the languages they speak naturally. Most of the background information was collected for the purpose of making inferences on language practice. This section of the data collection instrument was useful for administrative and handling purposes. The background information also served to prepare the respondents and to normalize the upcoming questions in the questionnaire.

Part B was constructed in the form of multiple-choice questions which addressed the language practice and preference. Some choices required basic "yes-no" responses, while others were single-answer questions from a pool of possible responses.

This section of the questionnaire focused on the language used in communication by the teachers and the learners. It sought to collect information on the institutional regulations and governmental regulations on the language used as a medium of instruction. It also sought to establish the actual practice and preference by the teachers in terms of languages of instruction in the classroom.

Finally, Part C addressed the teachers' awareness of the language policy and their attitude towards it. This section was structured as Likert-type questions, with five possible options ranging from "strongly agree"; "agree", "not sure", "disagree" and "strongly disagree". Each of the five responses were assigned a numerical value which was then used to measure the attitude.

The teachers' questionnaire is contained in Appendix 1.

3.5.2 Results Analysis Spreadsheet

For the analysis of the results, the researcher designed a result analysis spreadsheet in MS Excel Software to collect quantitative data. The spreadsheet was used to collate data from the schools and aggregate them by classifying into semi-urban, urban and rural schools, where the students' score was calculated.

The development of this spreadsheet was necessitated by the new scoring or grading system developed under the new curriculum. For clarity, this scoring system is elaborated hereunder.

Since 2017, the Kenya Institute of Curriculum Development has been implementing a new curriculum popularly known as the Competency Based Curriculum (CBC). The Competency Based Curriculum is an education programme that focuses on developing the learners' ability to apply the knowledge, skills, attitudes and values they are expected to acquire as they progress through their education. National examinations and assessments under the CBC are set by the Kenya National Examination Council (KNEC) and administered at school level.

The word assessment is defined as a collection of methods or tools that educators use to evaluate, measure, and document the academic readiness, learning progress, skill

acquisition, and educational needs of learners (KNEC, 2021). It follows therefore that performance can be defined as the readiness, learning progress and level of acquisition of skills by the learners.

Under the CBC, teachers administer and assess learners based on a formative assessment at Grade 4. The Grade 4 assessment is a standardized assessment, and it is centrally set by Kenya National Examinations Council. Further assessments are done at Grades 5 and 6, and these assessments contribute to the final score at Grade 9 National Examination. This is in contrast to the previous “8-4-4” system which had a summative assessment at the end of Standard 8. The 2021 School Based Assessment for Grade 4 learners was the first assessment under the new curriculum.

The Grade 4 School Based Assessment (SBA) contributes 20 marks to the learners’ final score at the end of primary school. This score is weighted with 10 marks coming from classroom assessments and 10 marks from a unified KNEC assessment.

This study focused on analysing the learners’ achievement in the unified KNEC School Based Assessment scores. Specifically, the study analysed learners’ scores in English (reading comprehension, grammar and writing), and Mathematics.

The rationale for settling on English and Mathematics subject scores was on the basis of them being representative of the other subjects. Apart from Kiswahili, all other subjects are taught in English as from Grade 4. Sufficient competence in English will likely translate to competence in these other subjects. On the other hand, Mathematics may be considered as a ‘language’ in itself, albeit expressed, taught and assessed in English language. Achievement in a Mathematics assessment carried out in English language requires a specific level of skill in the ‘language of mathematics’ as well as the language that describes it, in this case, English. For example, a lexicon may have

a phrase like “five times twenty” or “half a cup of sugar.” In a distinct way, these phrases have a mathematical meaning and an English meaning.

In the CBC system, students are not ranked nor are scores evaluated based on a certain mean. So, in this study, academic achievement had to be measured in a representative manner.

3.5.3 School-Based Assessment in English

According to the KICD, learners should be taught the foundational skills of reading and writing the English language at the earliest opportune time. This is in the premise that English is one of the official languages of communication in Kenya and is the second highest spoken language globally.

The English assessment comprises questions that test grammar, vocabulary and reading comprehension under guidelines issued by the KNEC. Section A consists of Task I: Listening and Speaking; and Task II: Reading Aloud. Section B of this assessment comprises Task I: Reading and Comprehension; Task II: Grammar and Task III: Writing.

In Section A, the tasks are a face-to-face assessment between the learners and teachers. Thus, the learners are called one by one by the teacher into an assessment room. The teacher reads a text for the learner and then assesses the learner’s comprehension. The teacher then gives the learner a copy of a passage and requests the learner to read it.

In Section B, the learner’s understanding of various aspects of grammar are assessed. A mixed set of questions with multiple-choice possible answers is given. Finally, the learner is given a topic about which to write a composition. The composition tests handwriting, spelling, vocabulary and fluency.

The researcher obtained the results of the Grade 4 English School Based Assessment from the head teachers of the sampled schools. The scores were then analysed and correlated to the learners' achievement in general. The scores of learners whose lower primary school language of instruction was English were compared to the scores of those for whom the lower primary school language of instruction was Kiswahili or the indigenous language (Mother Tongue).

Appendix 2 contains excerpts of the KNEC 2020 Grade 4 English School Based Assessment (SBA).

3.5.4 School-Based Assessment in Mathematics

Numeracy is a foundational skill that prepares the learner for number work and mathematics in higher levels of schooling. The learner at Grade 4 is expected to be competent in basic numeracy skills. These skills are assessed in the Mathematics School Based Assessment at Grade 4.

The Mathematics Assessment consists of 25 questions and the learner is expected to answer all questions and to show their working. The paper is divided into three “strands” (formerly known as topics), where each strand evaluates the learners' understanding of Numbers, Measurement, and Geometry, Data Handling and Algebra.

The learner is expected to be competent in reading and writing Roman numerals, recognizing place value of a digit in a number, performing basic operations mechanically on whole numbers among other numeracy skills including basic addition, subtraction and multiplication.

The first step was to obtain the results of the Grade 4 Mathematics School Based Assessment from the head teachers of the sampled schools. The scores were then

analysed and correlated to the learners' achievement in general. The scores of learners whose lower primary language of instruction was English achievement was compared to those of whom the lower primary language of instruction was Kiswahili or the indigenous language (Mother Tongue).

Appendix 3 contains the sample of the KNEC 2020 Grade 4 Mathematics School Based Assessment (SBA).

3.6 Pilot Study

According to Mugenda & Mugenda (2003), a pilot study is a technique of testing the research design before carrying out the actual research. The pilot study entails carrying out an initial study scaled down version of between 1% and 10% of the main study, to test the sample. Pilot testing is a significant element of the data collection process.

Prior to conducting the data collection for this study, a pilot study was carried out in two primary schools within the study area. These two schools were not part of the main study. A pilot sample of respondents comprising 5 head-teachers and 10 primary school Grade 1 to 3 teachers were included in the pilot study, drawn from the two selected schools in Kakamega Central Sub-County. The reason for selecting this scaled-down study of the population was in order to ascertain the validity and reliability of the questionnaire before it was administered to the target sample. The outcome was used to gauge whether the data collection instruments produced valid results and whether the research objectives were adequately covered in the questionnaires.

3.7 Validity & Reliability of Research Instruments

Validity has been defined as the extent to which a research instrument measures what it proclaims to measure (Baldwin, 2018). Validity of a research instrument evaluates the soundness of an instrument to measure that which it is designed to measure. It therefore shows the degree to which the results can be trusted.

In order to ensure the validity of the questionnaires, a logical link was established between the questions and the objectives. The phrasing of the questions was structured such as to increase the face validity, construct validity and content validity.

To ascertain the face validity, the question “will someone recognize the type of information they are being asked?” was posed. In this regard, the questionnaire met the validity requirement. To ascertain the content validity, the question “does the test contain all the items being tested?” was posed. In this regard, content validity was implicit in the structure in that the language of instruction and the teachers’ attitudes were contained in the questionnaire. Finally, to ascertain the construct validity, the question posed was “does the questionnaire show a reasonable pattern with the relationships between the language of instruction and the attitude of teachers?”. In this regard, the questionnaires met the validity test.

Further as described in the preceding section, a pilot test of the instruments was carried out in two selected primary schools, which were not part of the main study. The questionnaires were then calibrated accordingly or improved. The validity of the English and Mathematics achievement tests was ascertained as the tests are standard and issued by a central body, the Kenya National Examination Council (KNEC). The KNEC is the statutory body in Kenya mandated by law to set and maintain examinations standards. The KNEC Quality Policy (KNEC, 2021) states that it aims

to “conduct research and promote best practices in assessment for national development.”

Reliability refers to the stability and consistency of an instrument to replicate the same results each time it is used. Reliability can be viewed as the manner in which the same result is consistently achieved by way of applying the same methods under the same circumstances.

Several methods have been advanced in research to test for reliability. For this study, the test-retest method was applied. In this case, the questionnaire responses drawn from teachers of one stream in the first Pilot School were evaluated. Then, the results for the same test from the teachers of the second stream were evaluated. When administered for the second time in the second Pilot School, there was a positive correlation between the results.

Table 3.2: Reliability Statistics (Source: Teachers of Pilot Schools)

Items	Q. I	Q. II	Q. III	Q. IV	Q. V	Q. VI	Q. VII	Q. VIII	Q. IX	Q. X
Mean Pilot 1	3.955	3.851	3.631	3.712	2.338	3.646	2.955	3.545	3.899	3.10
Mean Pilot 2	3.391	2.914	3.312	3.662	2.378	3.518	3.125	3.315	3.619	3.14

The reliability test was applied to the mean of the Likert-type responses for Question 1 to Question 10 on teachers’ attitude.

From Table 3.2, a simplified correlation coefficient between the mean of the teachers' responses (Pilot School 1) and the mean of the responses Pilot School 2 was calculated using the ‘CORREL’ function in MS Excel. The result was 0.7427. This shows that the data is consistent over time and across items.

3.8 Data Collection

The researcher obtained authorization to conduct research from the National Council for Science and Technology. A copy is contained in Appendix 4. The researcher further obtained clearance from the Member of County Executive Committee for Education in Kakamega County, under whose administrative jurisdiction matters of education fall. A copy of the clearance is contained in Appendix 5.

To assist in carrying out the research, three assistants who hold a degree of Master of Education were engaged as research assistants. The research assistants were familiar with curriculum studies and education philosophy in general, and therefore they were deemed qualified to assist in conducting this research. They were given a two-day training on the objectives of the study and the data collection procedure. They were further familiarized with the researcher's conceptual framework.

During the field research period, the researcher alongside the research assistants made visits to the sampled schools. The reconnaissance visit entailed delivering an introductory letter to the head teachers of the schools and introductions to the Grade 4 class teachers. Thereafter appointments for data collection and interviews were made, based on the modified school term and availability of teaching staff. A copy of the introductory letter is contained in Appendix 6.

The sampled schools were visited between March and June 2021, which was the third term for the academic year. It is noteworthy that due to the prevailing coronavirus (Covid-19) pandemic, the national assessments due to be held in the year 2020 were carried out in March 2021. Other features of the normal school term were also adjusted, and this had a bearing on the procedure for data collection.

The researcher and the assistants administered the questionnaires to the teachers and obtained the relevant data from the school in accordance with the research objectives. Where possible, several schools were visited in a day, but to a maximum of three schools based on proximity. After observation, one questionnaire was given to the English language teacher for Grade 3 and for Grade 4 and another to his/her colleague teaching Mathematics in Grade 3 and Grade 4 to respond to. The researcher waited until the teachers had responded to the questionnaire and then collected them back.

As a convenience measure, some questionnaires were administered electronically through Google Forms. Google Forms is a survey administration software included as part of the free, web-based Google Docs Editors suite offered by Google. It is convenient as it can be administered online, in confidence and with instantaneous receipt upon completion. The Google form was prepared online and disseminated through email or messaging software directly to the teachers. The teachers then responded and submitted the completed form electronically through the 'submit' feature embedded in Google Forms. The researcher was able to access and track in real-time the completed forms. All forms submitted in this manner were confidential and Google does not retain any identifying information.

The assessment results were obtained from the head teacher. Each school carries out the assessment and submits it to the KNEC internet portal for formalization, after which the graded results are returned to the school. Therefore, it is fairly easy to obtain the results of the learners' Grade 4 School Based Assessment.

3.9 Data Analysis Techniques

After data collection, the researcher crosschecked the completeness and accuracy of the information collected. The data was then codified and structured according to the study objectives.

Data computation was done using the software known as MS Excel for Windows on a personal computer, and analysed it on the software called SPSS (IBM Corp. Released 2017. IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: USA).

Descriptive and inferential statistics were used in the study. Data from the questionnaires and the learners' School Based Assessment results are presented in tables and graphs. Percentages, means, and standard deviations are calculated mainly as an analysis of learners' achievement in tests.

However, simply obtaining the means is not a sufficient basis of correlation between two sets of variables. Statistical methods are further required to establish the significance of the correlation.

To address the first null hypothesis which states that there is no significant difference between the language(s) used for instruction in lower primary school Grade 1 – 3 and the language(s) prescribed in the language policy, the chi-square test for independence was performed.

The chi-square test for independence, also called Pearson's chi-square test, is used to discover if there is a relationship between two categorical variables. The two variables "Type of School" and "Language of Instruction" were measured on nominal level, that is, they were categorical data. Secondly, the data consisted of two or more categorical, independent groups. The type of school was the dependent variable, being either

Urban, Rural or Semi-Urban. On the other hand, the Language of Instruction was considered as the independent variable which consists of four categorical independent groups; English, Kiswahili and Mother Tongue, or a mix of these as languages of instruction.

To address the second null hypothesis which states that there is no significant difference in teachers' attitude towards language policy across different groups of language used in the classroom, the Kruskal-Wallis H test was performed.

The Kruskal-Wallis H test is a rank-based nonparametric test that can be used to determine if there are statistically significant differences between two or more groups of an independent variable on a continuous or ordinal dependent scale (Kruskal & Wallis, 1952). This test is sometimes also referred to as the "one-way ANOVA on ranks". It is best suited for analysis of non-parametric data, where the data is ordinal.

The relationship between the Grade 1-3 teachers' attitude and their choice of language in the classroom was measured using a non-parametric correlation. The attitude was measured on a Likert-type scale of 1-5, which is an example of an ordinal scale of measurement, and so the data are not suitable for a parametric test.

The Kruskal-Wallis H test was selected because it satisfies the assumptions that are required to obtain a valid result:

- The dependent variable was "Teachers' Attitude" measured on an ordinal scale, where attitudes are measured on a 5-point scale from "strongly disagree" to "strongly agree."

- The independent variable is “Language of Instruction” which consists of three categorical independent groups; English (E), Kiswahili (K) and Mother Tongue (MT) as languages of instruction.
- The observations were independent. Each of the participants was segregated into their group based on their language of instruction. No participant was in more than one group.

To test the third hypothesis (H_{03}), which stated that there is no significant relationship between the language of instruction in Grade 1 to 3 and the academic achievement of learners at Grade 4, the Spearman rank-order correlation coefficient was used.

The Spearman rank-order correlation coefficient is a nonparametric measure of the strength and direction of association that exists between two variables measured on at least an ordinal scale. It is denoted by the symbol r_s , in short, and is sometimes referred to as Spearman’s correlation. The test is used for either ordinal variables or for continuous data that does not meet the criteria necessary for conducting the Pearson’s product-moment correlation. In this study, the Pearson’s correlation was not selected because the school category data did not meet the criteria of being interval data. In this study, Spearman’s correlation was used to determine whether there is an association between exam performance and the language used for instruction.

To address the fourth hypothesis (H_{04}), which stated that there is no significant difference in the Grade 4 achievement scores of learners across the three language(s) of instruction, an Analysis of Variance was conducted.

The ANOVA procedure is used to find out if there are significant differences between the means of more than two groups (Hatch & Lazaraton, 1991). Essentially, it is actually a t-test that is appropriate to use with three or more groups. ANOVA examines

the variation both within and between each of the groups. The general assumptions underlying the use of ANOVA are that the data are score data or ordinal scale data that are continuous, the data are independent and the comparison is between groups. It is also assumed that there is a normal distribution of scores in each group and there are equal variances of scores in each group. All these assumptions were correct for this hypothesis.

The aim was to test whether the learners' academic achievement was higher in one or the other language of instructions, as measured by the Grade 4 SBA results. Table 3.3 summarizes the hypotheses, their variables and respective statistical tests adopted for this study.

Table 3.3: Data Analysis Methods

Hypothesis	Independent Variable	Dependent variable	Statistical Test
There is no significant difference between the language(s) used for instruction and the language(s) prescribed in the language policy in lower primary school Grade 1 – 3;	Prescribed Language of Instruction	Type of School	Chi Square test of Independence
There is no significant difference in teachers' attitude towards the educational language policy across the different languages of instruction;	Choice of Language used in Classroom	Teachers' Attitude towards Language Policy	Kruskal-Wallis H
There is no significant relationship between the language of instruction in Grade 1 to 3 and the academic achievement of learners at Grade 4;	Language of Instruction	Academic Achievement of Grade 4	Spearman's Correlation
There is no statistically significant difference in the Grade 4 achievement scores of learners who were taught in English, Kiswahili or Mother Tongue in Grade 1 to 3;	Language of Instruction	SBA Mean Scores at Grade 4	ANOVA

3.10 Ethical Considerations

Prior to the research, a research permit was obtained from the ministry of education. A letter of introduction and a consent letter to conduct research were used alongside these to seek permission from the head teachers of each school.

Before each interview, the nature and purpose of the study was described to each teacher and Head teacher. The names and identities of all interviewees and test subjects were not recorded on the questionnaires or anywhere on the research to safeguard their

privacies. The names of the schools have adopted a code to replace their identity. The procedure for data collection ensured that all participants understood that the data was collected for research purposes only.

3.11 Summary of Chapter Three

In summary, this chapter has detailed the research design, the study area and the sampling procedure. It has also given a description of the data collection procedure, the data analysis techniques and ethical considerations. The next chapter covers data presentation, analysis and discussion.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter presents the findings of the study on Implications of Educational Language Policy and Practice on Learners' Academic Achievement at Lower Primary School in Kenya. In line with the style guidelines from APA 7th edition, the results are first presented objectively with interpretation, analysed and then discussed within the context of the objectives of this study (American Psychological Association, 2019).

First, the chapter presents the general findings in terms of the instrument return rate, demographic information of subjects segregated on the basis of professional qualifications, number of years in practice, and the teachers' language preference in communication. The data is then analysed and discussed in the context of the research and objectives of the study.

The general findings are followed by analysis of the data collected on language used in communication, teachers' attitude towards educational language policy, the actual status of the language practice, and an evaluation of the academic achievement of the sampled Grade 4 learners. Then, hypotheses that relate to the objectives of the study are tested, followed by an interpretation of the test results. The four hypotheses of the study were subjected to statistical tests for purposes of establishing the significance of the findings. A statistical hypothesis test is a method of establishing the significance of a set of observations by making statistical inference. The comparison of the two sets of data is deemed statistically significant if, according to a given standard of probability, the data would be unlikely to occur if the null hypothesis is valid.

In each case, the analysis is followed by a discussion of the implications of the finding.

4.2 Return Rate of Research Instruments

The research instrument response rate is key to enable the researcher evaluate the study findings with assurance that the sample of respondents reflects population elements. Instrument return rate supports the validity and reliability of the research instrument.

Data on the first and second objectives were collected using the teachers' questionnaire. The questionnaires were administered to Grade 1, 2 and 3 teachers.

Data on the third and fourth objectives were collected from the learners' academic achievement scores in their Grade 4 School Based Assessment.

Table 4.1 shows the rate of the return of the teachers' questionnaires and learners' SBA Scores.

Table 4.1: Research Instrument Return Rate

Name of Instrument	Sample Size (N)	Returned (N)	Return Rate (%)
Teachers' Questionnaire	75	74	98.67%
Learners' Math SBA (Secondary data)	1075	1075	100%
Learners' English SBA (Secondary data)	1075	1075	100%

Out of the 75 questionnaires administered to teachers, 74 were returned which represents a 98.67% return rate. A response from at least 90% of the subjects was considered satisfactory by the researcher, especially given the conditions under which the study was carried out during the global Covid-19 pandemic. It is also satisfactory on the basis that the sample includes representation of teachers with demographics that

are similar to the overall profile of primary schools in Kenya, namely; public and private schools, rural and urban, mixed and day boarding schools.

With regards to the learners' SBA Score, the data was already available before the researcher visited the schools. This data was drawn from the learners' School Based Assessment (SBA) administered by the schools and regulated by the Kenya National Examination Council (KNEC). From the sampled schools, 1,075 SBA Scores were obtained. This represents a 100% response rate from the targeted 1,075 scores. The sampled primary schools were categorized on the basis of their location, that is, urban, semi-urban and rural areas.

4.3 Demographic Data from the Teachers' Questionnaire

Section 1 of the teachers' questionnaire sought to obtain information on the background of the teacher, to enhance a perspective on the nature of responses given in the latter parts of the questionnaire. This notwithstanding, the risk of interviewer bias from such demographic data was controlled owing to the fact that the questions in the questionnaire were close ended questions.

Collecting this information would enable the researcher to order the responses and data into categories based on a general perspective, and to further investigate possible attitudinal or practical differences between teachers of different levels of education, qualification and experience in teaching.

Item I of Section 1 of the questionnaire sought to find out the duration the teachers had been in practice. The findings are reported in Figure 4.1.

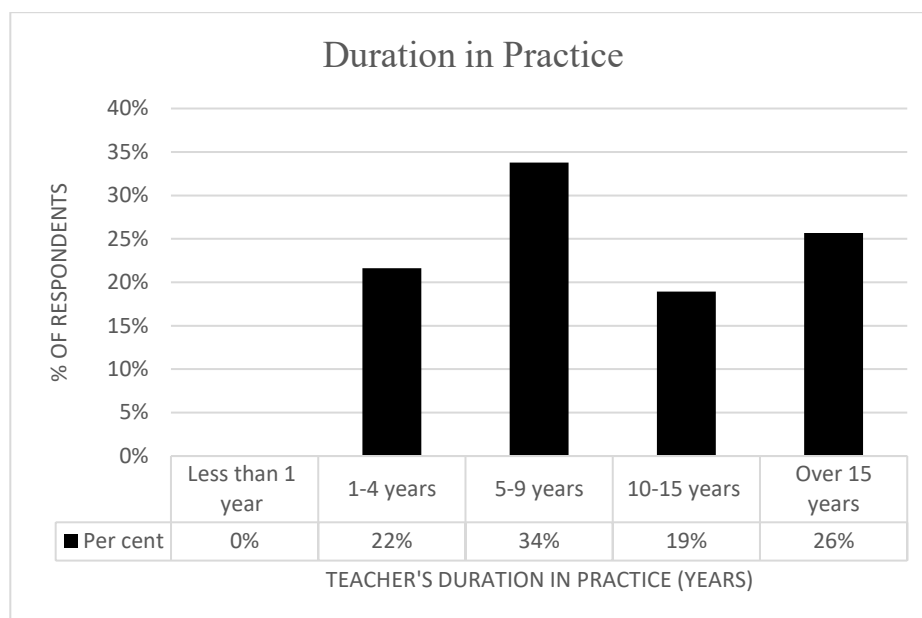


Figure 4.1: Duration in Practice of Teachers

The results show that majority of the teachers were experienced enough to understand and implement the lower primary school language policy. Over 75% of the respondents had been in practice for 5 years or more.

This finding is in tandem with previous studies which showed a positive correlation between the teachers' experience in terms of number of years in practice and the understanding of the subject they teach (Mutea, 2015). It could also be a pointer to the teachers understanding and exposure to various educational policies, including the educational language policy.

Information regarding the highest qualification of each teacher is contained in Table 4.2.

Table 4.2: Teachers' Highest Qualification

Level of Qualification	Frequency	Percentage
P1	45	60.81%
P2	1	1.37%
Diploma	16	21.62%
Bachelors	9	12.16%
Masters	3	4.05%

The results in Table 4.2 indicate that 45 of the teachers (60.81%) were of P1 (Primary Teacher Certificate) level. Some 16 (21.62%) had Diploma qualification, while 9 (12.16%) had a Bachelor's Degree, and 3 (4.05%) had a Master's Degree. One of the teachers (1.37%) had P2 qualifications.

It is evident that majority of the teachers in Grade 1 to 3 in Kakamega County have relevant qualifications to engage in teaching. It is not in all cases, especially in rural areas, that qualification is assured at the point of hiring. The qualification of the teachers is an important demographic data in this study, as it also shows the level of training they have undergone in curriculum development and implementation, which comprises the language of instruction among other facets.

Table 4.3 indicates the teachers' preferred language of communication.

Table 4.3: Language Preference in General Communication

Language	Frequency	Percentage
Kiswahili	49	66.22%
English	7	9.46%
Mother Tongue	0	0.00%
Mix of Languages	18	24.32%

In general conversations outside of the classroom, 49 (66.22%) teachers listed Kiswahili as their preferred language of communication. This cut across teachers in rural, urban and semi-urban schools.

A smaller percentage (24.32%) of the responding teachers listed a mix of languages as their preferred language for general communication outside of the classroom. It is apparent that the use of Mother Tongue and English (9.46%) communication outside the classroom was minimal.

These findings are indicative of two main patterns. First, there was considerable variation in language use outside of classrooms that seemed dependent on the teacher's preference rather than school regulations or environment. Second, there was hardly any linkage between the teacher's most natural language and the language of the catchment area or the specified language of instruction.

Table 4.4 indicates the findings of the teacher's language preference in general communication.

Table 4.4: Language Preference in Formal Classroom Communication

Language	Frequency	Percentage
English	36	48.65%
Kiswahili	10	13.51%
Mother Tongue	4	5.41%
Mix of Languages	24	32.43%

With regards to the formal conversations in the classroom, 36 (48.65%) of the respondent teachers listed English as their preferred language for formal communication in the classroom.

A mix of languages was preferred by 24 (32.43%) of the respondent teachers as the language of formal communication inside the classroom. The remaining proportion was shared amongst the respondents who listed either Kiswahili (13.51%) or Mother Tongue (5.41%) as their preferred language of formal communication within the classroom.

According to (UNESCO, 2016) there is often a negative impact on test scores when home and school languages that are spoken by the learners differ. Likewise, it can be inferred that there is likely to be a negative impact on the teachers' delivery of content if the language they use for formal communications differs from that which they use in general conversations outside of the classroom. Whereas the majority of the teachers listed Kiswahili as more natural outside of the classroom, they found it more natural to use English within the classroom. The particular nuances of varying language use are discussed in the findings from the questionnaire as presented in the following sections.

4.4 Difference between Actual Language Practice and Language Policy

Section 2 of the questionnaire sought to gather data on the actual languages used in communication by the teachers, that is, the actual language practice pursuant to the first objective.

4.4.1 School Typology

The purpose of findings from Item I of Section 2 was to identify the category of the school. The response received in this question enabled the researcher to categorize the responses into three broad categories of urban schools, rural schools and semi-urban schools. This was in relation to the language policy, which prescribes the Language of Instruction as English in urban settings, Kiswahili or English in Semi-Urban settings, and the Mother Tongue of the catchment area in rural settings.

The results are presented in Table 4.5.

Table 4.5: Categorization of the Sample Schools

Category of School	Frequency	Percentage
Urban	12	16.22%
Semi-Urban	28	37.84%
Rural	34	45.95%

From the demographic data, 12 (16.22%) of the teachers categorized their schools as urban. 34 (45.95%) categorized their school as rural and the remaining 28 (37.84%) categorized their school as semi-urban.

These percentages are consistent with the categorization during sampling, where the objective was to obtain a representative sample of the respondents for the three

categories that have a bearing on the language of instruction, which in turn has been identified as the independent variable.

The Educational Language Policy is linked to the category of the school whether urban, rural or suburban. It is therefore important in the context of this study to delineate the category of the school at first instance.

4.4.2 Teachers' Awareness of Governmental Law, Policy or Regulation

Item I of Section 2 was a 'yes–no–not sure' question, whose expected response was one of three choices. The question sought to know if the teachers are aware of any existing governmental law, policy or regulation on the language for instruction in primary schools.

The responses are presented in Table 4.6.

Table 4.6: Awareness of Government Language Policy

Awareness of Language Policy	Frequency	Percentage
Yes	73	98.65%
No	1	1.35%
Not sure	0	0.00%

The data shows that 73 (98.65%) of the teachers were aware of the government policy on Language of Instruction in lower primary schools.

It was evident that awareness of the policy and the years of experience of teachers were mutually exclusive. A large number of teachers reported awareness of the policy, whereas the number of years in service was evenly spread out. This also applied to the highest qualification of the teachers. A large number of teachers stated they were aware of the policy, notwithstanding the highest qualification they hold.

Awareness of policy is central to its implementation (Mose, 2017). When a large percentage of teachers are aware of the policy, and know its contents, it follows that implementation should be easy and consistent with the policy. On the other hand, since it is a government policy and not law, any deviation from it is not liable to any punishment or retribution. While law can be enforced to compel certain behaviour, policy can only offer guidance towards a desired outcome. Language of instruction is used to explain a teaching point. However, teachers bridge communication gaps, reduce ambiguity or offer translation in a target language.

4.4.3 Specification of School Regulations on Languages Teachers ought to Use

Item III was a three-response question whose expected response was one of three choices. The question sought to know if there are any school regulations on the language(s) teachers ought to use in the classroom as a Medium of Instruction for all subjects. Respondents could answer ‘yes’, ‘no’ or ‘not sure’.

The responses are shown in Table 4.7.

Table 4.7: School Regulation on Language of Instruction

School regulation on LoI	Frequency	Percentage
Yes	65	87.84%
No	9	12.16%
Not sure	0	0.00%

In Item III, 65 (87.84%) of the respondents reported that there exists a school regulation on the languages that teachers ought to use in the classroom as a Medium of Instruction for Learning Areas. Only 9 respondents (12.16%) were not aware of a school regulation on language of instruction.

Policies are often adopted by the management within an institution. For primary schools, policy implementation is done by the head teacher and the teachers.

The findings show that many schools have an existing policy for which language is to be used as the medium of instruction. It is not immediately apparent if this implementation was because of the government policy or despite the government policy.

4.4.4 School Policy on Language of Instruction

Item 4 was in furtherance to the question in Item 3. The respondents were expected to identify the exact school's policy on the Language of Instruction in various Learning Areas.

The results are presented in Table 4.8.

Table 4.8: Specific School Policy

Policy	Frequency	Percentage
All subjects should be taught in English	39	52.70%
All subjects should be taught in Mother Tongue	2	2.70%
All subjects should be taught in Kiswahili	2	2.70%
Teachers are free to choose their preferred language	31	41.89%

For Item IV of Section 2 of the questionnaire, 52.70% of the respondents stated that their schools prescribe English as the Language of Instruction. A fairly significant percentage (41.89%) stated that teachers are free to choose their preferred language. Only 2 (2.70%) teachers reported Mother Tongue as the preferred language and likewise, another 2 (2.70%) reported Kiswahili as the preferred Language of Instruction.

These findings should be interpreted within the context of Item IV and V in Section 1, which shows that majority of the teachers found it natural to use Kiswahili for general conversations outside of the classroom, and English for formal communications. There seems to be an incongruence in the languages the teachers are expected to use (regulation) and the languages they use for casual conversations (preference). This has been observed in studies in Norway, where considerable variation in language use in classrooms was dependent on the teacher rather than the learners or the school. (Brevik & Rindal, 2020).

4.4.5 Institutional Regulation for Learners' Choice of Language

Item V was a 'yes–no-not sure' question, whose expected response was one of three choices. The question sought to establish if there are any school regulations on the language(s) learners in Grade 1 to 3 ought to use for communication within their respective schools.

The responses are presented in Table 4.9.

Table 4.9: School Regulation on Learners Language choice

School regulation on language	Frequency	Percentage
Yes	66	89.18%
No	8	10.81%
Not sure	0	0.00%

Majority of the respondents (89.18%) agreed there exist school regulations on the languages the learners in Grade 1 to 3 ought to use for communication. On the other hand, 8 (10.81%) of the respondents reported that there is no school regulation on the languages the learners in Grade 1 to 3 ought to use for communication.

Notably, none of the respondents (0%) stated that they are “Not sure”. This implies that teachers are certain about the existence or lack thereof of language regulations in their schools. The matter of what they actually practise will therefore be a function of their awareness of such institutional regulations.

4.4.6 Fluency in Mother Tongue of Catchment Area

This was a three-response question whose expected response was one of three choices. Respondents could answer ‘yes’, ‘no’ or ‘not sure’ in response to whether they are fluent in the mother-tongue of the area where their school is located. The responses are presented in Table 4.10.

Table 4.10: Fluency in Mother Tongue of Catchment Area

Fluency in MT	Frequency	Percentage
Yes	35	47.30%
No	36	48.65%
Not sure	3	4.05%

Close to half the respondents (47.30%) indicated that they are fluent in the mother tongue of the area where the school is located. Such teachers would find it easy to teach in the mother tongue of the catchment area, should they be in schools in which the language policy requires them to do so.

An equally significant number of respondents (48.65%) were not fluent in the language of the catchment area. It becomes immediately apparent that such teachers would find it impractical and impossible to deliver learning content in the language of the catchment area, regardless of the policy.

Some 3 (4.05%) respondents stated “not sure”. This could be because of the confounding nature of how a catchment area is defined. A previous study (Mose, 2017) has shown evidence that the concept of “language of the catchment area” is often not understood among various stakeholders. It would be sensible for some respondents to state they are not sure whether they are fluent in the catchment area language, as it is difficult to identify the specific language or its dialects.

4.4.7 Variants of Mother Tongue of Catchment Area

This was a three-response question whose expected response was one of three choices. Respondents could answer ‘yes’, ‘no’ or ‘not sure’. The aim was to establish teachers’ awareness of the existence of several variants of the mother tongue spoken in the area where their school is located. The responses are presented in Table 4.11.

Table 4.11: Frequency Distribution of Variants of MT in Catchment Area

Variants of Mother Tongue	Frequency	Percentage
Yes	54	72.97%
No	20	27.03%
Not sure	0	0.00%

If language of the catchment area is understood to mean the language spoken in the local community around the school, then the issue is further compounded.

There is often little homogeneity of the languages spoken in the surrounding areas of the schools in Kakamega County. Significantly, 72.97% of the respondents agreed that there are several different variants of the Mother Tongue in the area where their school

is located. It would become difficult to define the language of the catchment area in such instances. In this item, none (0%) of the teachers responded that they are not sure of the existence of variants in their catchment. It can be deduced from this data that variants of the mother tongue in the catchment area have a bearing on the language teachers choose to use for instruction.

4.4.8 Most Efficient Language of Instruction

Item VIII of Section 2 of the questionnaire was a multiple-choice question where the respondents were to choose from one of four possible options. The question sought to know what language the teachers find most efficient to use when giving instruction in class. The results are presented in Table 4.12.

Table 4.12: Frequency Distribution of Most Efficient Language of Instruction

Most Efficient Language	Frequency	Percentage
Efficient to give instructions in English	31	41.89%
Efficient to give instructions in Mother Tongue	1	1.35%
Efficient to give instructions in Kiswahili	28	37.84%
Efficient to mix several languages	14	18.92%

From the results of this item, English and Kiswahili take eminence as the most efficient languages in giving instructions, with 31 (41.89%) and 28 (37.84%) of the respondents respectively reporting that it is the most efficient language. A further 14 (18.92%) responded that they find it efficient to give instructions in a mix of several languages. Only 1 (1.35%) of the respondents reported deeming Mother Tongue as the most efficient language for giving instructions.

This finding is consistent with previous studies on the issue of mixed language use in instruction. Code-switching and code mixing often provide a resource for teachers to regain learners' attention, and to emphasize, or clarify lesson material. (Bunyi, Merritt, Cleghorn, & Abagi, 1992).

4.4.9 Language of Use in Learner-to-Learner Communications

Item IX sought to know which languages learners are expected to speak within the classroom. It was a multiple-choice question where the respondents were to choose from one of four possible options. The results are presented in Table 4.13.

Table 4.13: Frequency Distribution of Learners' Language

Language Expected to be used by Learners	Frequency	Percentage
Strictly English	18	24.32%
Strictly Kiswahili	0	0%
English or Kiswahili	46	62.16%
English, Kiswahili or Mother Tongue	10	13.51%

In this item, 62.16% of the learners are expected to practice the use of English or Kiswahili in their classroom learner-to-learner communications. A further 24.32% of the respondents reported that learners are expected to speak strictly English.

Flexibility in either of the three languages English, Kiswahili or Mother Tongue was reported by 13.51% of the respondents.

There was no requirement (0%) for learners to speak strictly Kiswahili.

From these results, it is seen that learners in Grade 1-3 in the sampled schools mix languages whenever they are in the classroom. The use of English and Kiswahili is predominant. This could be demonstrative of the restriction that prescribed language policy imposes on learners within the classroom environment. This is congruent with the study by Cushing which explored how schools justify establishing prohibitive regulations which restrict the use of certain languages from being used. (Cushing, 2019).

4.4.10 Code-switching in the Classroom

Item X was a ‘yes–no–not sure’ question, whose expected response was one of three choices. It sought to know if learners generally speak other languages, other than English, in the classroom.

The responses presented in Table 4.14.

Table 4.14: Use of Different Languages in the Classroom

Learners Code-switching	Frequency	Percentage
Yes	73	98.65%
No	1	1.35%
Not sure	0	0.00%

The results indicate that code-switching is prevalent. Code-switching and code-mixing are resources for the learners to ensure linguistic security and effective communication. This appears to be in conformity with the work of Mutea (2015), who reports that code-switching was prevalent by learners and teachers alike depending on the situation.

On the other hand, inconsistent use of language carries the disadvantage of leading to conceptual problems. This argument has been advanced by Krauss & Chiu (1997) who posit that the way languages are used can be constrained by the way they are constructed. The set of linguistic principles must have a valid sequence of sounds that refer to a specific meaning. If languages are used inconsistently, then there is likely to be a breakdown of the “encoding/decoding” process of communication, and the speaker’s mental representation fails to arrive at the addressee in the intended manner.

In this regard, it may be argued that there is a balance which ought to be kept between policy requirements and classroom language management needs.

4.4.11 Ease of Communication in Selected Language

Item XI was a multiple-choice question where the respondents were to choose from one of seven possible options. The results are presented in Table 4.15.

Table 4.15: Frequency Distribution of Ease of Communication by Learners

Ease of Communication by Learners	Frequency	Percentage
They find it easier to communicate mostly in English	4	6.76%
They find it easier to communicate mostly in Kiswahili	37	52.70%
They find it easier to communicate mostly in their Mother Tongue	0	0%
They find it easier to communicate in both English and Kiswahili	13	18.92%
They find it easier to communicate in both English and Mother Tongue	0	0%
They find it easier to communicate in both Kiswahili and Mother Tongue	8	14.86%
They find it easy to communicate in English, Kiswahili and their mother tongue	4	6.76%

From this finding, it is observed that learners are prone to speak a mix of languages when in the classroom. Whilst the questionnaire did not specify whether the language expectation is for formal communication or social communication, the results indicate that learners practise code-switching and code-mixing.

4.4.12 Testing of Hypothesis One

Having made these observations, it is necessary to statistically test the hypothesis. The first hypothesis was:

H₀₁: There is no significant difference between the language(s) used for instruction and the language(s) prescribed in the language policy in lower primary school Grade 1 – 3.

To test this hypothesis, data from Item I and Item VIII in Section 2 of the questionnaire were used. The hypothesis was tested at a level of significance of 0.001.

The 74 respondent teachers were surveyed and each was asked to report the language they used for instruction. The language of instruction was cross-tabulated against the category of school. This data was recorded in a contingency table of $4r \times 3c$. The data that resulted from the survey is summarized in the following table 4.16. This table is the first step of carrying out a chi-square test.

Table 4.16: Contingency Table for Hypothesis 1

	Urban	Rural	Semi-urban	TOTAL
Kiswahili	4	18	14	36
English	7	1	2	10
Mother Tongue	0	3	1	4
Mix	1	12	11	24
TOTAL	12	34	28	74

Using this table, a chi-square test of independence was performed to examine the relation between language practice and the prescribed language as per the policy. The relation between these variables was significant, $\chi^2 (6, N = 74) = 26.407, p = .001$.

Table 4.17: Chi Square Test for Hypothesis 1

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	26.407	6	0.001
Likelihood Ratio	21.302	6	0.002
N of Valid Cases	74		

At a significance level of 0.05, we can infer that the relationship between the variables is statistically significant. The null hypothesis is therefore rejected. There is a significant difference between the language used and the prescribed policy as per the category of school.

This result means that there is a gap between language policy and language practice in schools. The findings are in agreement with Awuor (2019) who carried out an extensive analysis on the practicality of the implementation of the language policy.

Where schools are required to teach in Mother Tongue from Grade 1 to 3, the findings indicate that teachers use languages of their choice, for their convenience and that of learners. It is well understood that language is a critical tool in communication and social cohesion. The Constitution of Kenya 2010 under Section 7 (3) of Chapter 2 underlines the commitment of the state to promote and protect the diversity of languages of the people of Kenya. The Constitution underpins the need to develop and use indigenous languages as a tool for social development. It is on this backdrop that the educational language policy is formulated. However, the actual practice differs

significantly from the language policy in several schools as shown by the inferential statistical test. Many teachers do not adhere to the language policy as revealed in the descriptive statistics in the foregoing section. This is especially so in rural schools where a significant percentage of teachers reported that they use English or a mix of languages for classroom instruction. This could be for various reasons. For instance, there may exist language differences between learner and teacher. It could also be due to language preference of the teacher or the need to employ different languages to effectively deliver content. These findings are consistent with the ideas penned down by (Nabea, 2009), in a paper examining the language policy in Kenya from the colonial era to date.

With regards to awareness of policy, a huge proportion of teachers are aware of the existence of a government policy on the language of instruction. However, despite this awareness there is an evident gap in the implementation of this policy. The study reveals that majority of the teachers, though aware of the policy, do not practise it as it ought to be implemented. It can be argued that it is not in the place of teachers to implement policy, and this should be the role of those charged with enforcement of government policy. For instance, Quality Assurance and Standards Officers (QASOs) are mandated to inspect schools and enforce quality standards. Indeed, Mose (2017) maintains that despite enforcement of standards by the relevant authorities, there is great need for teacher readiness and acceptance of policy. In concurrence, the findings of the present study have brought up the question of whose responsibility it is to formulate, to implement and finally to enforce language policy.

There is some difficulty in interpreting the meaning of the ‘catchment area’ of a school. Some teachers reported that their schools are located in a rural area, simply by virtue of the study area being an agricultural area in general. It is understandable why this

may be confounding. Some areas may be urban areas but are in a generally rural location. Kakamega County is an example of a rural county compared to other areas like Nairobi or Kiambu. The majority of its geographical area is rural by definition. It is also possible that a 'semi-urban' area may be referred to as an urban area, depending on context.

Many teachers reported that their schools had their own language policies. For example, some schools have a rule for English to be spoken from Mondays to Fridays. One of the days of the week is set aside for purely speaking Kiswahili. This was particularly common in the urban schools. In other schools, any incident of learners using mother tongue and unofficial languages such as sheng' attracts punishment. Regardless of this, the study revealed that code-switching, code mixing and selection of language based on context was common. This finding can be linked to the assertion that the starting point for understanding the premise of learning a foreign language in a school setting, is to observe how learners use the language in institutional interactions within and outside the classroom (Auer, 1998).

Several studies done in Kenya and elsewhere have tackled the issue of code-switching as a communication strategy and its influence on learner outcomes (Ogechi, 2002). One such study investigated how Dholuo speaking learners acquired English language (Awuor & Nyamasyo, 2016). The findings in terms of code-switching as a coping strategy for learnability of a second language are relatable to the present study.

There is a dilemma that arises when teachers find that learners are not able to understand and communicate instruction issued in English or Kiswahili, yet the teacher is unable to speak the language of the catchment area. As a result, most teachers choose to mix English, Kiswahili and Mother Tongue as the language of instruction in lower

primary. This is in disregard to whatever policies the institution may have, and indeed in disregard to the language policy.

Even in areas where the teachers are fluent in the language of the catchment area, the ethnic diversity of Kenya cannot be overlooked. Thus, it is likely that there are learners who are not fluent in the language of the catchment area. The problem is compounded further with dialects and variants of the same language. In most regions, the vernacular (the language of the region) is not necessarily the speakers' mother tongue (the first language). In such cases, it becomes impossible to implement the language policy as is prescribed.

From the learners' perspective, the study revealed that learners generally speak other languages, other than English in the classroom. However, the present study did not investigate if this affected their overall achievement. The use of other languages other than English is a pointer to the need to achieve a practical communication need. Perhaps speaking in different languages saves the effort required to communicate in a language that is not the first language of the learner. Despite this, the fact remains that educational instruction and assessment from Grade 4 onwards is in English, which is a second or third language for many. Inconsistent use of language bears the disadvantage of leading to conceptual problems.

4.5 Attitudes of Teachers towards Language Policy

The second objective concerning attitude of teachers toward the language policy was assessed through Section 3 of the questionnaire. Section 3 comprised ten statements that were in a five-level, Likert-type scale.

Each of these statements was given a score on a scale ranging from (1) Strongly Disagree, (2) Disagree (3) Not sure, (4) Agree, (5) Strongly Agree. The respondents were requested to select the **one** choice which best represents their true feelings or opinion.

Descriptive statistics were used to summarize the data collected and presented in numerical form as in Table 4.18.

Table 4.18: Summary of Responses to Section 2 Likert-type items

Items	Question	Total	SA		A		N		D		SD	
			Freq (n)	per cent (%)	Freq (n)	per cent (%)	Freq (n)	per cent (%)	Freq (n)	per cent (%)	Freq (n)	per cent (%)
Q. I	Teachers in this school are well aware of the government law, policy or regulation on the language of instruction for learners in Grade 1 to 3	74	12	16.2%	50	67.6%	4	5.4%	4	5.4%	4	5.4%
Q. II	Teachers should be free to choose the language they wish to best communicate classroom concepts for learners between Grade 1 and 3	74	10	13.5%	51	68.9%	5	6.8%	8	10.8%	0	0.0%
Q. III	Learners in Grade 1 to Grade 3 grasp concepts better if they are taught in English	74	12	16.2%	37	50.0%	16	21.6%	4	5.4%	5	6.8%
Q. IV	Learners in Grade 1 to Grade 3 grasp concepts better if they are taught in Kiswahili	74	12	16.2%	40	54.1%	15	20.3%	3	4.1%	4	5.4%
Q. V	Learners in Grade 1 to Grade 3 grasp concepts better if they are taught in their mother tongue	74	3	4.1%	6	8.1%	16	21.6%	37	50.0%	12	16.2%
Q. VI	The use of other languages, other than English, by learners in classroom interaction negatively affects their scores in English in Grade 4	74	17	23.0%	30	40.5%	15	20.3%	8	10.8%	4	5.4%
Q. VII	The use of other languages, other than English, by learners in classroom interaction negatively affects their scores in Mathematics in Grade 4	74	10	13.5%	17	23.0%	15	20.3%	24	32.4%	8	10.8%
Q. VIII	The use of other languages, other than English, by learners in classroom interaction negatively affects their scores in other subjects in Grade 4.	74	16	21.6%	27	36.5%	12	16.2%	19	25.7%	0	0.0%
Q. IX	Teaching aids, books and instructional materials in Mother Tongue language are not readily available so it is difficult to teach in Mother Tongue.	74	22	29.7%	37	50.0%	4	5.4%	7	9.5%	4	5.4%
Q. X	There is no significant problem in using any language to teach the learners, as long as they grasp the concept.	74	7	9.5%	27	36.5%	8	10.8%	23	31.1%	9	12.2%

Key: SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Disagree

All the 74 responses were analysed. For ease of interpretation, the data in Table 4.18 is condensed from 5 categories into three categories as in Table 4.19. By doing this, the data can be observed in terms of general agreement or general disagreement with the statements in the questionnaire.

Table 4.19: Collapsed Summary of Likert Responses

Item	Description	Agree	Neutral	Disagree
Q. I	Teachers in this school are well aware of the government law, policy or regulation on the language of instruction for learners in Grade 1 to 3	83.8%	5.4%	10.8%
Q. II	Teachers should be free to choose the language they wish to best communicate classroom concepts for learners between Grade 1 and 3	82.4%	6.8%	10.8%
Q. III	Learners in Grade 1 to Grade 3 grasp concepts better if they are taught in English	66.2%	21.6%	12.2%
Q. IV	Learners in Grade 1 to Grade 3 grasp concepts better if they are taught in Kiswahili	70.3%	20.3%	9.5%
Q. V	Learners in Grade 1 to Grade 3 grasp concepts better if they are taught in their mother tongue	12.2%	21.6%	66.2%
Q. VI	The use of other languages, other than English, by learners in classroom interaction negatively affects their scores in English in Grade 4	63.5%	20.3%	16.2%
Q. VII	The use of other languages, other than English, by learners in classroom interaction negatively affects their scores in Mathematics in Grade 4	36.5%	20.3%	43.2%
Q. VIII	The use of other languages, other than English, by learners in classroom interaction negatively affects their scores in other subjects in Grade 4.	58.1%	16.2%	25.7%
Q. IX	Teaching aids, books and instructional materials in Mother Tongue language are not readily available so it is difficult to teach in Mother Tongue.	79.7%	5.4%	14.9%
Q. X	There is no significant problem in using any language to teach the learners, as long as they grasp the concept.	45.9%	10.8%	43.2%

From Table 4.19, a few general observations of the data can be made.

With regards to awareness of government policy and regulation, 83.8% of the respondents generally agreed that teachers in their schools are aware of existing policy and regulation on the language of instruction. This is the majority of respondents and only 10.8% generally disagreed with this statement.

Likewise, the majority of teachers were in agreement that they ought to be free to select the language of instruction they should use. Perhaps, this is an indicator of the gap between policy and attitude. Whereas government policy gives a prescription of language to be used, the teachers feel they need to adopt and adapt based on their classroom experiences.

The next three bands of questions sought to know which languages the teachers choose to use more frequently in instruction. The questions were set up in such a way as to avoid acquiescence bias. An interesting observation is that 66.2% generally agree that English is a more effective language of instruction and 70.3% generally agree that Kiswahili is a more effective language of instruction. Notably, only 12.2% of the respondents acknowledged that Mother Tongue is an effective language of instruction for learners in Grade 1 to 3.

The next three bands of questions asked the respondents about their view on the effect of learners' use of other languages on academic achievement. While it was not specified the context of "use", it is implicit that the question is asking about the languages used in daily general conversations and formal learning interactions in the classroom.

For the case of English, 63.5% of the respondents leaned towards agreement. Another 20.3% were neutral while 16.2% of the respondents generally disagreed. It is evident that a reasonable number of teachers agree that use of other languages by the learners has a negative impact on learners' academic achievement in English.

For the case of Mathematics, 36.5% agreed that the use of other languages has a negative impact on learners' performance. Some respondents (20.3%) were neutral and 43.2% of the respondents generally disagreed. It is difficult to assess the significance of these percentages without statistical analysis. However, this data is a pointer to the fact that majority of the teachers do not generally think language of instruction has an impact on learner achievement in Mathematics. This may be due to the perception that little to no language skills are required in attaining numeracy competence.

For the case of other subjects, the data shows that teachers generally agree (58.1%) that learners' academic achievement is affected by the use of other languages, other than English. Only 16.2% are neutral while the remaining 25.7% generally disagree.

A teacher's delivery of content is enhanced by the tools available for pedagogy. In this case, the teachers were asked to give their opinion on the statement that teaching aids, books and instructional materials in Mother Tongue language are not readily available so it is difficult to teach in Mother Tongue. Majority (79.7%) agreed with this statement.

The last question sought the teachers' general attitude towards use of other languages of instruction. The responses are fairly balanced with 45.9% generally agreeing that there is no significant problem in using any language to teach the learners, as long as

they grasp the concept and 43.2% expressing disagreement. Some 10.8% were neutral to this statement.

4.5.1 Testing of Hypothesis Two

The second hypothesis was:

H₀₂: There is no significant difference in teachers' attitude towards language policy across different groups of language used in the classroom.

The hypothesis was tested at a level of significance of 0.05.

The relationship between the Grade 1-3 teachers' attitude and their choice of language in the classroom was measured using a non-parametric correlation. The attitude was measured on a Likert-type scale of 1-5, which is an example of an ordinal scale of measurement, and so the data are not suitable for a parametric test. As such, a non-parametric test specifically the Kruskal-Wallis H test, was selected. The Kruskal-Wallis H test is ideal for ordinal data, such as Likert data. Essentially, it is a rank-sum test that tests if three or more independent variables have the same medians. For this hypothesis, the independent variable is "language of instruction" with three levels: English, Kiswahili and Mother Tongue. The dependent variable is the median of the responses measured on a 5-point Likert scale from strongly disagree to strongly agree.

Table 4.20 shows the descriptive statistics (number of observations, standard deviations, minimum and maximum) obtained from the statistical test.

Table 4.20: Descriptive Statistics for Likert Data

		Descriptive Statistics				
		N	Mean	Std. Deviation	Min	Max
Q1	I. Teachers in this school are well aware of the government law, policy or regulation on the language of instruction for learners in Grade 1 to 3	74	3.9595	0.76640	1.00	5.00
Q2	II. Teachers should be free to choose the language they wish to best communicate classroom concepts for learners between Grade 1 and 3	74	3.8514	0.78831	2.00	5.00
Q3	III. Learners in Grade 1 to Grade 3 grasp concepts better if they are taught in English	74	3.6351	1.04126	1.00	5.00
Q4	IV. Learners in Grade 1 to Grade 3 grasp concepts better if they are taught in Kiswahili	74	3.7162	0.97250	1.00	5.00
Q5	V. Learners in Grade 1 to Grade 3 grasp concepts better if they are taught in their mother tongue	74	2.3378	0.98310	1.00	5.00
Q6	VI. The use of other languages, other than English, by learners in classroom interaction negatively affects their scores in English in Grade 4	74	3.6486	1.11567	1.00	5.00
Q7	VII. The use of other languages, other than English, by learners in classroom interaction negatively affects their scores in Mathematics in Grade 4.	74	2.9595	1.24349	1.00	5.00
Q8	VIII. The use of other languages, other than English, by learners in classroom interaction negatively affects their scores in other subjects in Grade 4.	74	3.5405	1.10030	2.00	5.00
Q9	IX. Teaching aids, books and instructional materials in Mother Tongue language are not readily available so it is difficult to teach in Mother Tongue.	74	3.8919	1.10500	1.00	5.00
Q10	X. There is no significant problem in using any language to teach the learners, as long as they grasp the concept.	74	3.0000	1.24966	1.00	5.00

The basic assumption behind constructing an attitude scale is that it is possible to uncover the internal state of beliefs, motivation, or perceptions of a respondent by asking them to respond to a series of statements (Fraenkel & Wallen, 1996).

For the analysis of Likert-type data, this study relied on arguments by others (Lovelace & Brickman, 2013) that one cannot use the mean as a measure of central tendency as it has no meaning. For example, the average of “Strongly Agree” and “Disagree” has

no mathematical meaning. The most appropriate measure is the mode (the most frequent responses), or the median.

Therefore Table 4.20 on the preceding page is not useful for inferential statistics. Instead, Table 4.21 is used for the statistics.

Table 4.21: Descriptive Statistics for test on Hypothesis 2

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
N	74	74	74	74	74	74	74	74	74	74
Median	4.00	4.00	4.00	4.00	2.00	4.00	3.00	4.00	4.00	3.00
Mode	4.00	4.00	4.00	4.00	2.00	4.00	2.00	4.00	4.00	4.00

From the foregoing, the mode of the questions generally tends towards ‘4’ which was coded for “Agree”. Therefore, the attitude of the teachers was generally in agreement with the items in the questionnaire. This is with the exception of Item V which stated “Learners in Grade 1 to Grade 3 grasp concepts better if they are taught in their mother tongue”. The mode for this item was ‘2’ which was coded for “disagree”.

Likewise, item Q7 received disagreement. Item 7 stated “The use of other languages, other than English, by learners in classroom interaction negatively affects their scores in Mathematics in the Grade 4.” It is at first surprising why the respondents would make this claim. The researcher is of the opinion that perhaps the teachers’ view mathematics as a learning area that does not need much linguistic competence.

To gauge the significance of the responses, a statistical test was necessary. The Kruskal-Wallis H test was applied and the results are presented in Table 4.22.

Table 4.22: Kruskal-Wallis H test For Hypothesis 2

	Test Statistics ^{a,b}									
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Kruskal-Wallis H	5.928	0.838	0.269	0.173	4.041	0.799	1.241	2.171	0.155	1.062
Df	2	2	2	2	2	2	2	2	2	2
Asymp. Sig.	0.052	0.658	0.874	0.917	0.133	0.671	0.538	0.338	0.926	0.588

a. Kruskal-Wallis Test

b. Grouping Variable: School Category

The basis of the Kruskal-Wallis test is to identify if the medians of the groups are equal. It was used to formally test for any differences in the scoring tendencies of teachers within the three different school categories (and hence language of instruction).

The test revealed there are no significant differences between the medians of the three groups for language of instruction, as categorized by the school category. The p-value is above 0.052 for all items from Item I (Q1) to Item X (Q10).

We therefore fail to reject the null hypothesis and conclude that there is no significant difference in teachers' attitude (On a scale of 1 to 5) towards language policy across different groups of languages used in the classroom in urban, rural and semi-urban schools.

The respondents to the questionnaire were of the opinion that teachers should be free to choose the language of instruction. This perhaps stems from the primary role of a teacher, which is to impart knowledge and setting up a foundation for learning to take place. A teacher would naturally find most effective ways in which the learner can grasp concepts. This will include resorting to use a mix of English, Kiswahili or Mother Tongue as and when necessary to drive the point home.

This finding reveals differing attitudes of teachers on the language of instruction that best allows learners in Grade 1 to 3 to grasp concepts. While some felt that English and Kiswahili were superior, others felt that Mother Tongue would be most ideal. The study did not delineate any particular distinction for this finding in terms of urban, rural or semi-urban schools. However, very few teachers in urban schools reported that they think learners in Grade 1 to 3 best grasp concepts when the language of instruction is Mother Tongue.

With regards to use of other languages in the classroom, an interesting finding was that 63.5% teachers were in agreement that the use of other languages affects learners' scores in English. The percentage was markedly lower in the case of Mathematics, where only 36.5% were in agreement that the use of other languages by learners in the classroom affects their scores. Perhaps the teachers felt that mathematics, being the core subject for numeracy skills, does not need much linguistic competence. This may be attributed to the notion that there is no link between math and language skills, which has been a subject of research.

It is clear that while the intention of the language policy is to facilitate concept formation in the early years, the policy is not effectively implemented. From the implementation standpoint, the findings of the study indicate that there are various structural challenges that need to be addressed if the educational language policy is to be effectively implemented. The inadequacy of teaching aids, books and instructional materials that are in Mother Tongue came to the fore. In terms of achievement, the study shows that there is a relationship between the language of instruction and academic achievement. This was the case for both English School-Based Assessment and the Mathematics School-Based Assessment. While this study was limited to these

two learning areas, it is likely that the trend applies to other subjects taught in Grade 4 onwards.

English is a means of communication and a social resource when it is spoken as the language of choice in social settings. It is also an economic resource as there is a widespread use of English in different economic settings. There is demand for professionals who are fluent in English. Academic achievement in English is therefore imperative to the success of a learner.

On the other hand, language is critical in imparting mathematical knowledge. Language is useful in the formation of concepts and understanding ideas. Learners need a certain level of competence to remember, understand, apply, analyse and evaluate the subject matter they are learning.

Competence in English at Grade 4 evidently affects achievement in Mathematics, since the instruction is done in English from Grade 4 onwards. In addition, national assessments in all subjects apart from Kiswahili, are done in English language. For example, one question selected from the Mathematics 2020 Grade 4 School Based Assessment reads:

“A trader had 234 pieces of clothes. On a certain day he sold 198 pieces of the clothes. Round off each number to the nearest 10 and then subtract to estimate the number of clothes that remained?” (Appendix 2, Question No. 7)

This question requires the learner to carry out the operations of rounding off and subtraction, which are basic numeracy skills. However, the learner will definitely have to decode the context of the question, which has been framed in English. This calls for a learner to have a certain level of command of English for them to have the required level of cognitive development to tackle this question. The learner should have built

the vocabulary to the level of knowing and applying the meaning of ‘certain day’ and ‘estimate’. The learner should also have the linguistic capacity to know the technical meanings of ‘round off’ and ‘subtract’ to correctly answer this question. This would be difficult for a Grade 4 learner whose earlier years were spent learning these concepts in a different language.

4.6 Language Policy and Learners’ Academic Achievement

The third and fourth objectives were related to the learners’ academic performance. While objective three tested if there was a relationship between language policy and the learners’ academic achievement, the fourth objective sought to quantify the disparities, if any, across academic achievement in the three languages of instruction. The sampled Grade 4 scores were isolated and classified into three categories: (1) The learners who were taught in English, (2) the learners who were taught in Kiswahili, and (3) the learners who were taught in Mother Tongue in Grade 1 to 3.

Overall, 1,075 learners from the sampled urban, semi urban and rural schools in Kakamega County took the School Based Assessment for English. These consisted of learners in Semi-urban (n = 387); Urban (n = 258); and Rural (n = 430) schools. The same sample was used for the Mathematics SBA score. The language of instruction formed the independent variable and the Grade 4 SBA score was the dependent variable.

4.6.1 Achievement Scores in English SBA

Table 4.23 presents the results of the 2020 English SBA test that was administered to Grade 4 learners in the sampled schools.

Table 4.23: Mean Scores in English

	School Code	Boys	Girls	Total	Task 4 Reading Comprehension	Task 5 Grammar	Task 6 Writing	Total Score / 40	Percent Mean Score	Average Mean Score
Semi Urban	MAT	74	79	153	7	8	3	18	45.00%	46.88%
	NAU	67	55	122	7	8	4	19	47.50%	
	KIL	26	26	52	8	8	6	22	55.00%	
	VIC	34	26	60	9	5	2	16	40.00%	
Urban	BRI	37	28	65	10	10	4	24	60.00%	57.50%
	CHK	37	27	64	12	9	4	25	62.50%	
	ELS	32	35	67	11	9	6	26	65.00%	
	BUD	26	36	62	7	5	5	17	42.50%	
Rural	CHE	51	55	106	6	3	2	11	27.50%	34.38%
	EMU	62	64	126	2	4	3	9	22.50%	
	KIS	51	42	93	7	6	5	18	45.00%	
	MAK	55	50	105	6	7	4	17	42.50%	
	MEAN	46	44	90	8	7	4	19	46.25%	
	TOTAL	552	523	1,075	92	82	48	222		

The mean score was obtained from Task 4 (reading Comprehension) Task 5 (Grammar) and Task 6 (Writing) which summed up to a total score of 40 marks. The marks were then converted to a percentage mean score for each of the schools in the three categories.

The school results were carefully extracted from the schools whose teachers responded that they actually implement the language policy as stipulated.

Upon observation, it is apparent that the urban schools had a higher mean score (60.00%; 62.50%; 65.00% and; 42.50%). The Rural schools had lower mean scores at (27.50%; 22.50%; 45.00% and 42.50%). On the other hand, the semi-urban school scored (45.00%; 47.50%; 55.00% and 40.00%). These three categories of the schools are linked to the language which they actually use, in practice, as a medium of communication in class.

The grading system of the Competency Based Curriculum according to the KICD Competency Based Assessment Framework is structured under the following aspects (KICD, 2021):

1. Exceeds Expectations (80 – 100%)
2. Meets Expectations (65 -79%)
3. Approaching Expectation (50 -64%)
4. Below Expectation (0 – 49%)

From the findings, the Urban Schools met expectations of the School Based Assessment in English. On the other hand, the learners in the rural schools performed below expectation as judged by their mean scores.

4.6.2 Achievement Scores in Mathematics SBA

Table 4.24 presents the achievement scores of Grade 4 learners in Mathematics SBA of 2020.

Table 4.24: Mathematics SBA Results

	School Code	Boys	Girls	Total	Task 1 Numbers	Task 2 Measurement	Task 3 Geometry, Data Handling and Algebra	Total Score / 25	Percent Mean Score	Average Mean Score
Semi Urban	MAT	74	79	153	3.0	2.0	1.0	6.0	24.00%	24.68%
	NAU	67	55	122	2.0	2.0	1.1	5.1	20.40%	
	KIL	26	26	52	3.8	2.0	1.2	7.0	27.92%	
	VIC	34	26	60	3.5	2.0	1.1	6.6	26.40%	
Urban	BRI	37	28	65	7.2	4.7	3.0	14.9	59.60%	58.20%
	CHK	37	27	64	8.0	6.0	4.0	18.0	72.00%	
	ELS	32	35	67	6.0	4.0	3.3	13.3	53.20%	
	BUD	26	36	62	5.0	3.0	4.0	12.0	48.00%	
Rural	CHE	51	55	106	2.0	3.4	1.0	6.4	25.60%	22.40%
	EMU	62	64	126	2.0	3.2	1.0	6.2	24.80%	
	KIS	51	42	93	1.0	3.0	1.0	5.0	20.00%	
	MAK	55	50	105	1.0	2.0	1.8	4.8	19.20%	
MEAN		46	44	90	4	3	2	9	35.09%	
TOTAL		552	523	1,075	44	37	24	105		

The mean score was obtained from Task 1 (Numbers), Task 2 (Measurement), and Task 3 (Geometry, Data Handling and Algebra) which summed up to a total score of 25 marks. The marks were then converted to a percentage mean score for each of the schools in the three categories.

The mathematics SBA scores were drawn from the same set of schools, and the tests were done by the same learners. The school results were drawn from the schools whose teachers responded that they actually implement the language policy as stipulated.

However, the mean scores are evidently lower than those of English across all three categories of Rural, Urban and Semi-urban schools.

Dissatisfactory achievement in Mathematics has been the subject of research for several years. These findings are consistent with those of Mberia (2017) who reported that achievement in Mathematics has been persistently low over the years as compared to the national mean score.

Upon observation, it is apparent that the urban schools had a higher mean score (59.60%; 72.00%; 53.20% and 48.00%). The Rural schools had lower mean scores (25.60%; 24.80%; 20.00% and 19.20%).

On the other hand, learners in the semi-urban school averaged 24.00%; 20.40%; 27.92% and 26.40% in their Mathematics SBA.

In terms of the competence scales set by the KNEC, the learners in rural and semi-urban schools performed below expectation. However, the mean scores by learners in the urban schools were higher than their counterparts in semi-urban and rural schools and were approaching expectation.

4.6.3 Testing of Hypothesis Three

The third hypothesis was:

H₀₃: There is no significant relationship between the language of instruction in Grade 1 to 3 and the academic achievement of learners at Grade 4;

The hypothesis was tested at a level of significance of 0.001. To test this hypothesis, the Spearman's correlation coefficient was used. The languages of instruction were assigned dummy variables with 1 = English; 2 = Kiswahili and 3 = Mother Tongue. The relationship between the language of instruction and learners score in Maths and learners Score in English were the variables under investigation.

First, the hypothesis was split into two sub-hypotheses, thus:

H₀₃ (1): There is no significant relationship between the language of instruction in Grade 1 to 3 and the academic achievement *in English* of learners at Grade 4;

H₀₃ (2): There is no significant relationship between the language of instruction in Grade 1 to 3 and the academic achievement *in Mathematics* of learners at Grade 4.

The results are presented in Table 4.25 on the next page:

Table 4.25: Results of Spearman's Coefficient Test

Correlations					
			LANGUAGE OF INSTRUCTION	LEARNER SCORE IN MATH	LEARNER SCORE IN ENGLISH
Spearman's rho	LANGUAGE OF INSTRUCTION	Correlation Coefficient	1.000	-.659**	-.393**
		Sig. (2-tailed)		0.000	0.000
		N	1075	1075	1075
	LEARNER SCORE IN MATH	Correlation Coefficient	-.659**	1.000	.281**
		Sig. (2-tailed)	0.000		0.000
		N	1075	1075	1075
	LEARNER SCORE IN ENGLISH	Correlation Coefficient	-.393**	.281**	1.000
		Sig. (2-tailed)	0.000	0.000	
		N	1075	1075	1075

**.

Correlation is significant at the 0.01 level (2-tailed).

The Spearman's Correlation test indicated a strong, negative correlation between language of instruction and academic achievement in mathematics, which was significant ($r_s = -.659$, $p = .000$).

Likewise, the Spearman's Correlation test indicated a strong, negative correlation between language of instruction and academic achievement in English, which was significant ($r_s = -.393$, $p = .000$).

The interpretation of the negative correlation is that when learners are taught in languages '2' and '3', being Kiswahili and Mother tongue on the dummy variables scale, their mean score in Grade 4 English and Mathematics SBA decreases.

We therefore reject the null hypothesis. The results of the statistical test indicate that it is highly likely there is a significant relationship between the language of instruction in Grade 1 to 3 and the academic achievement of learners at Grade 4.

4.6.4 Testing of Hypothesis Four

The fourth hypothesis was:

H₀₄: There is no statistically significant difference in the Grade 4 achievement scores of learners across the three language(s) of instruction;

This hypothesis focuses on learner achievement outcomes as a consequence of the language of instruction they were taught in. In testing this hypothesis, the interest was in determining whether there is a statistical difference between the mean scores of the learners grouped into either of the languages of instruction, that is, those who were taught in English, those taught in Mother Tongue, and those taught in Kiswahili from Grade 1 to 3. To test this hypothesis, an analysis of variance (ANOVA) was conducted to assess whether learners' achievement was higher in one or the other language of instructions, as measured by the Grade 4 SBA results.

School Based Assessment learner scores for the Grade 4 Assessment of 2020 were analysed. The means of the scores were calculated for each language of instruction group, that is Urban, Rural and Semi-Urban Schools and compared using an ANOVA to the language of instruction at Grade 1-3 level.

An ANOVA ($p < .05$) was performed to analyse the effect of language of instruction on learners' score in Mathematics and learners score in English. Table 4.26 and Table 4.27 present the results of the ANOVA.

Table 4.26: Report for ANOVA on LOI Groups and Learner Score

		Report							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
LEARNER SCORE IN MATH	English	258	56.430	8.678	0.540	55.366	57.494	31.00	84.00
	Kiswahili	387	25.979	8.844	0.450	25.095	26.863	9.00	50.00
	Mother Tongue	430	22.402	7.898	0.381	21.654	23.151	9.00	54.00
	Total	1075	31.857	16.259	0.496	30.884	32.830	9.00	84.00
LEARNER SCORE IN ENGLISH	English	258	56.764	10.912	0.679	55.426	58.101	39.00	78.00
	Kiswahili	387	51.184	16.147	0.821	49.570	52.797	21.00	78.00
	Mother Tongue	430	42.512	12.606	0.608	41.317	43.707	19.00	84.00
	Total	1075	49.054	14.789	0.451	48.169	49.939	19.00	84.00

Table 4.27: ANOVA for Learners' Score in Between Three LoI groups

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Learner Score In Math	Between Groups	207599.462	2	103799.731	1458.242	0.000
	Within Groups	76306.476	1072	71.181		
	Total	283905.939	1074			
Learner Score In English	Between Groups	35494.877	2	17747.439	95.404	0.000
	Within Groups	199417.994	1072	186.024		
	Total	234912.871	1074			

The ANOVA revealed that there was a statistically significant difference between the mean scores of learners taught in English, those taught in Kiswahili and those taught in Mother Tongue.

For the learners' score in Mathematics, the F-value 2 degrees of freedom was 1458.242 [$p = .000$]. For the learners' score in English, the F-value 2 degrees of freedom was 95.404 [$p = .000$]. The p-value was less than the significance level ($p < .05$), therefore the null hypothesis is rejected. There is a significant difference between the Grade 4 SBA mean scores of learners who were taught in English, those who were taught in Kiswahili and those who were taught in Mother Tongue in Grade 1 to 3.

A post-hoc analysis shows that the learners who were taught in English have an overall higher SBA mean score than the other two groups. It is the supposition of the researcher that the learners who were taught in English in lower primary advance to Grade 4 with sufficient grasp of concepts in the language. Those who have been taught in other languages will first have to decode the concepts as delivered to them in the language of instruction or assessment, before proceeding to gain competence in the specific learning area.

Further, teachers generally do not have a hospitable attitude towards the language policy, despite their awareness of it. It is also clear that the use of varying languages has an impact on the learners' academic achievement. Learners who have been taught in other languages in lower primary are at a disadvantage achievement-wise when compared to those taught in English.

4.7 Summary of Chapter Four

This chapter covered presentation of findings, data analysis, and discussion of the findings. In the following chapter, Chapter Five, a summary of the present study is presented and conclusions made in the context of the objectives and findings. Recommendations for further research are suggested based on the findings and conclusions of the present study.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the entire content of the research by outlining the research design, the findings of the study and the conclusions drawn. Subsequently, some recommendations are made based on these conclusions.

5.2 Summary of the Study

This study aimed at achieving the following objectives:

- 1) to establish the difference between the languages used for instruction in lower primary and the language prescribed in the language policy;
- 2) to assess the teachers' attitude towards educational language policy across different languages of instruction;
- 3) to analyse the relationship between language of instruction at lower primary school and learners' academic achievement at Grade 4; and,
- 4) to compare the academic achievement of learners at Grade 4 who were taught in English, Kiswahili or Mother Tongue in Grade 1 to 3.

The focus was on the classroom practice with regards to the educational language policy in Kenya and the implications of this on academic achievement. The study area narrowed down to Kakamega County, which was selected on the basis of its distinct mix of urban, semi-urban and rural schools for which the different languages of instruction are prescribed in the language policy. Questionnaires were administered to teachers of Grade 1 to 3, which comprises lower primary school in the current curriculum. School-Based Assessment scores of learners in Grade 4 were evaluated to obtain the relationship between language of instruction and the learners' academic

achievement. The data obtained was analysed and reported using descriptive and inferential statistics.

The findings of the study, based on the objectives, are summarized as follows:

5.2.1 The Difference between Language Practice and Educational Language Policy at Lower Primary School

The first objective of this study was to establish the difference between the languages used for instruction in lower primary schools and the language prescribed in the language policy. To achieve this objective, the null hypothesis which states that there is no significant difference between the language(s) used for instruction in lower primary school Grade 1 – 3 and the language(s) prescribed in the language policy was tested. The findings were that there is a significant difference between educational language policy and the language practice at institutional level with a significance level of $[p = 0.001]$.

Teachers are generally aware of the existence of a government policy on language of instruction with 98.65% of the respondents affirming they are aware. A significant number of schools (87.84%) have specific regulations on the languages that teachers ought to use with 41.89% of the schools subjected to the study stipulating teachers are free to choose the languages they prefer. However, a number of teachers and school managers do not implement the language policy as prescribed, due to varying reasons. The questionnaire section of the study adduced evidence to this effect, in that majority of the teachers reported finding it practical to use different languages from those prescribed by the language policy.

5.2.2 Attitude of Teachers towards Educational Language Policy across Different Languages of Instruction

The second objective of this study was to assess the teachers' attitude towards educational language policy across different languages of instruction. To attain this objective, the null hypothesis which stated that there is no significant difference in teachers' attitude towards language policy across different groups of language used in the classroom was tested using a non-parametric statistical test. The results revealed that there was no significant difference in the attitude of teachers towards the educational language policy across different languages of instruction as categorized by the location of the schools. Hence the null hypothesis was not rejected. Teachers' attitude towards the language policy is largely similar across the different categories of schools. This was corroborated by the questionnaire section of the study, which showed that majority of the teachers were in agreement that teachers should be free to use the language they deem best for instruction in the classroom.

5.2.3 The relationship between the language of instruction at lower primary school and learners' academic achievement at Grade 4

The study sought to analyse the relationship between the language of instruction at lower primary school and learners' academic achievement at Grade 4. This was achieved by formulating and testing the null hypothesis that there is no significant relationship between the language of instruction in Grade 1 to 3 and the academic achievement of learners at Grade 4.

The Spearman correlation coefficient revealed that there is a strong relationship between the language of instruction at lower primary school and the learners' academic achievement at Grade 4. This was corroborated by evidence from the questionnaire

part of the study which showed that teachers feel the language of instruction has an impact on the learners' academic achievement.

5.2.4 Comparison of Academic Achievement of Learners who were taught in English, Kiswahili or Mother Tongue between Grade 1 to 3

Lastly, the study sought to compare the academic achievement of learners who are taught in English, Kiswahili or Mother Tongue between Grade 1 to 3. This was the fourth objective. To attain this objective, the null hypothesis that there is no significant difference in the Grade 4 achievement scores of learners across the three language(s) of instruction was formulated and tested. The statistical test, ANOVA revealed a significant difference in the Grade 4 achievement scores of learners across the three languages of instruction. The learners who were taught in English performed better in their mean scores in English and Mathematics than those who were taught in Mother Tongue and / or Kiswahili in Grade 1 to 3.

5.3 Conclusion

This study contributes new knowledge about how the educational language policy is being practised in schools in Kenya and how it affects learners' academic achievement.

Literature suggests that learners acquire concepts in the early years more efficiently if they are taught in their first language (UNESCO, 2008). In Kenya, the language policy prescribes that the language commonly spoken in the school's catchment area or the learners' mother tongue should be used as the language of instruction for learners in Grade 1 to 3 in rural areas. For schools in urban and semi-urban areas, English or Kiswahili should be used. English is used from Grade 4 onwards as the language of instruction and assessment.

However, this study has shown that implementation of this policy has evident discrepancies between the language used for instruction and the languages prescribed in the language policy. Whereas teachers are aware of the policy, and some schools have institutional guidelines on language of instruction, most teachers prefer to practise the use of languages which in their opinion would be more effective for instruction.

Kenya is a multilingual society with over 40 languages spoken, each with its own variant and dialects (Dwivedi, 2014). This multilingual landscape of Kenya is a key contributing factor to the gap between policy and practice. Statistical data from the study identify significant differences between the actual language practice and the language policy as prescribed for various school categories.

In relation to the second objective the study, reveals that there is no significant difference in attitude towards the language policy across all categories of schools. Teachers' attitude was surveyed on an attitudinal scale of 1 to 5. A statistical analysis was run to determine the statistical significance of the results, and it emerged that teachers are aware of the language policy (mean = 3.96), wish to be free to select the language policy (mean = 3.85), and they generally agree that the use of other languages negatively affects learners' scores at Grade 4 in English and Mathematics (mean = 3.64 and mean = 2.95) respectively. The attitude of teachers informs the choice of language, regardless of prevailing policy. Subsequently, the choice of language influences academic achievement as has been demonstrated in this study.

With regards to the third objective, the study has established that there is a relationship between the language of instruction and academic achievement, which is in agreement with various other studies in this field (Qorro, 2010; Garcia, et al., 2010). A statistical

correlation showed that the academic achievement is higher in the mathematics scores for learners who were taught in English than that of learners who were taught in Mother Tongue or Kiswahili. Likewise, the academic achievement is higher in the English scores of learners who were taught in English than that of learners who were taught in Mother Tongue or Kiswahili. English continues to maintain a prominent position in commerce, academia and society. The Kenyan curriculum is designed with English at the core of instruction, and it is imperative that learners are familiar with English at an early age.

With regards to the fourth objective, the study established a significant difference in the academic achievement of learners across the different languages of instruction. Learners in rural schools whose schools adhered to the language policy and were taught in Mother Tongue performed poorly at Grade 4, in comparison to their counterparts in urban schools who were taught in English in lower primary school. Contrastingly, learners in rural schools whose schools did not adhere to the language policy performed marginally better than their counterparts in rural schools who were taught in Mother Tongue. This finding is indicative of the disparity between language of instruction and academic achievement.

The shift to English as the language of instruction at Grade 4 puts the learners who were taught in languages other than English in lower primary at a disadvantage. This is especially so because the learners are assessed in English regardless of what their foundational language was. The consequence is that the academic achievement of learners who switch to a new language is compromised.

5.4 Recommendations

On the basis of the findings of this study, the researcher makes the following recommendations related to the implementation of an Educational Language Policy in primary schools in Kenya:

- i) The Ministry of Education through the Kenya Institute of Curriculum Development should formulate and enforce a policy that ensures equity for learners who come from diverse ethnic and linguistic backgrounds. The policy should entail the use of a uniform language of instruction and assessment from lower primary onwards to upper primary levels and beyond.
- ii) Teachers should not be left to their own preferences as to their choice of language of instruction. One of the National Goals of Education in Kenya is to promote social equity and responsibility. Language plays a key role in this. A unified language of instruction will inculcate a sense of national unity and social equity in learners.
- iii) It is critical that learners are taught to acquire adequate vocabulary for competence in communication in English from an early age. Whilst there is a need to preserve the heritage of local languages, when it comes to learning the ability to interact globally is the foundation of social and economic development. This interaction is best done through a language that is widely spoken, such as English.
- iv) It is critical that learners are taught to acquire adequate vocabulary for competence in numeracy. Mathematical activities at the lower primary level enable the learners to engage in cognitive analysis of problems and to process their logical and problem-solving capacity. The significance of language in this

learning process must be underscored. The learners' acquisition of basic numeracy skills in the early years should be imparted in the language they are likely to use in their future, which is English.

- v) Language education initiatives should be up-scaled and intensified. Already, there exist some initiatives such as Tusome Early Grade Reading Activity, Primary Mathematics and Reading Initiative (PRIMR). This programme focuses on provision of learners with high-quality English and Kiswahili reading material in the early years. Such initiatives can improve the early acquisition of English as a second language for all learners. In that sense, the learning of concepts in English from lower primary would not be an issue. As posed by UNESCO (2016): "If you do not understand, how will you learn?"

5.5 Suggestions for Further Research

The following recommendations for further research are proposed for other investigators:

- i. Expand this investigation to include counties that are located in heterogeneous urban areas with more ethnic diversity than Kakamega County.
- ii. This study was carried out at the inception of the Competency Based Curriculum where the Grade 4 scores drawn from the first and single assessment were evaluated. A future study may consider adopting a pre-test-post-test research design from the same population.
- iii. Expand the study to ascertain the effect of other variables such as multilingualism and languages spoken at home on ease of adapting to a prescribed language of instruction.

REFERENCES

- Adamson, L. (2014). *Language, literacy and learning in Tanzanian Secondary schools: an ethnographic perspective on the student experience*. Berkshire: Education Development Trust.
- African Education Commission. (1952). *The Binns Report*. Nairobi.
- Alumu, D. S., & Tekleselassie, A. A. (2006). Instructional Language Policy in Ethiopia: Motivated by Politics or the Educational Needs of Children. *Planning and Changing* , 151-168.
- American Psychological Association. (2019). *Publication Manual of the American Psychological Association (7th ed.)*. Washington DC: The American Psychological Association .
- Anderson, G. J. (1970). Effects of Classroom Social Climate on Individual Learning. *American Educational Research Journal* , 135-152.
- Auer, P. (1998). *Code-switching in Conversation: Language, Interaction and Identity*. New York: Routledge.
- Awuor, Q. E. (2015). *Acquisition of English Passive Constructions by Dholuo Speaking Students*. Thika: Kenyatta University .
- Awuor, Q. E. (2019). Language Policy in Education: The practicality of Its implementation and way forward. *Journal of Language, Technology & Entrepreneurship in Africa*, 10(1), 94-109.
- Awuor, Q. E., & Nyamasyo, E. (2016). Cross Linguistic Effects of the Passive Construction: A Case Study of Dholuo and English Language. *Imperial Journal of Interdisciplinary Research (IJIR)*, 581-591.
- Aydin, H., & Dogan, F. (2019). Teacher Attitudes Toward the Principal of Multilingual Education: Advancing Research on Mother-Tongue Education in Turkey. *Journal of Educational Research and Practice*, 9(1), 202-223.

- Bach, T., Niklasso, B., & Painter, M. (2012). The role of agencies in policy-making, *Policy and Society. Policy and Society*, 31(3), 183-193.
- Baldwin, L. (2018). *Research Concepts for the Practitioner of Educational Leadership*. Leiden: Brill Sense.
- Benson, C. (2005). *Girls, Educational Equity and Mother Tongue-based Teaching* . Bangkok: UNESCO.
- Bezcioglu-Göktolga, I. (2019). *Family Language Policy among Second-Generation Turkish Families in the Netherlands (Thesis)*. Tilburg University.
- Brent Educational Council. (2021, October 22). *School admissions: School catchment areas*. Retrieved from School catchment areas: <https://www.brent.gov.uk/education-schools-and-learning/school-admissions/school-catchment-areas>
- Brevik, L. M., & Rindal, U. (2020). Language Use in The Classroom: Balancing Target Language Exposure with the Need for Other Languages. *TESOL Quarterly*, 925-953.
- Brock-Utne, B. (2008). Learning through a Familiar Language versus Learning through a Foreign Language: A Look into Some Secondary School Classrooms in Tanzania. *International Journal of Educational Development*, 27(5), 487-498.
- Brown, D. (1979). *Mother Tongue to English: The Young Child in the Multicultural School*. Cambridge University Press; 1st edition.
- Brown, E. K., Asher, R. E., & Simpson, J. M. (2006). Encyclopedia of language & linguistics, Volume 1. *Elsevier*, 181.
- Bruner, J. (1966). *Toward a Theory of Instruction*. Cambridge: Belkapp Press.
- Bruner, J. (1975). From communication to language: A psychological perspective. *Cognition*, 255-287.

- Bull, W. (1964). The use of the vernacular in education. In D. Hymes, *Language in culture and society* (pp. 527-533). New York: Harper and Row.
- Bunyi, G., Merritt, M., Cleghorn, A., & Abagi, J. (1992). Socialising Multilingualism: Determinants of Codeswitching in Kenyan Primary Classrooms. *Journal of Multilingual and Multicultural Development Volume*, 103-121.
- Canvin, M. (2015). *Language and Education in Mali*. University of Reading: Doctoral Thesis.
- Chabal, S. (2015). Speakers of Different Languages Process the Visual World Differently. *J Exp Psychol Gen*, 539-550.
- County Government of Kakamega. (2020). *List of Primary Schools in Kakamega County*. Kakamega: County Government of Kakamega.
- Creswell, J. W. (1994). *Research design: Qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
- Creswell, J. W., & Creswell, D. J. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks, California: Sage.
- Criper, C., & Dodd, W. (1984). *A Report on the Teaching of the English Language and its Use as a Medium in Education in Tanzania*.
- Crystal, D. (2002). *English as a global language*. Cambridge: Cambridge University Press.
- Cushing, I. (2019). The policy and policing of language in schools. *Language in Society*, 425-450.
- Dixon, R. M. (2016). *Are some languages better than others?* Oxford University Press.
- Dwivedi, A. V. (2014). Linguistic Realities in Kenya: A preliminary survey. *Ghana Journal of Linguistics*, 27-34.
- Edwards, N. (2017). Educational Policy Theory and Practice: Designing Comprehensive Frameworks for Evaluating and Managing Changing

- Educational Environments. *The Asian Conference on Education*. Yamaguchi National University, Japan: The International Academic Forum.
- Everret, C. (2016). *Linguistic Relativity: Evidence Across Languages and Cognitive Domains*. De Gruyter Mouton.
- Ford, K. (2014). *Competency-Based Education: History, Opportunities, and Challenges*. University of Maryland: UMUC Center for Innovation In Learning and Student Success.
- Foyewa, R. (2015). English: The International Language of Science and Technology. *English is the language of science and technology*, 34-41.
- Fraenkel, J., & Wallen, N. (1996). *How to Design and Evaluate Research in Education*. New York: McGraw-Hill.
- Gacheche, K. (2010). Challenges in implementing a mother tongue-based language in education. *Politics and International Studies Journal*, 1-45.
- Gachukia, E. (1970). The teaching of vernacular languages in Kenyan Primary Schools. In T. Gorman, *Language in Education in Eastern Africa*. Nairobi: Oxford University Press.
- Garcia, E. E., Lawton, K., & Figueredo, E. H. (2010). *Assessment of Young English Language Learners in Arizona*. Arizona: The Civil Rights Project.
- Githinji, W. (2014). *A Situational Analysis of Language of Instruction in Lower Primary School in Nyeri County, Kenya: Thesis*. Nairobi: Kenyatta University.
- Goldman, T. (2019, May 6). English Language Teaching in Zambia: A cultural analysis. *Critical Aspects of Teaching ESL*.
- Gorman, T. (1971). *Language in Education*. Oxford University Press.
- Gruenewald, L. J., & Pollak, S. A. (1990). *Language Interaction in Curriculum and Instruction: What the Classroom Teacher Needs to Know*. PRO-ED.
- Gupta, A. F. (1997). When Mother-tongue Education is not Preferred. *Journal of Multilingual and Multicultural Development*, 496-506.

- Hallak, J. (1977). *Planning the location of schools: an instrument of educational policy*. UNESCO IIEP .
- Hancock, G. R., Mueller, R. O., & Stapleton, L. M. (2010). *The Reviewer's Guide to Quantitative Methods in the Social Sciences*. New York : Routledge.
- Hatch, E., & Lazaraton, A. (1991). *The research manual: Design and statistics for applied linguistics*. Boston, MA: Heinle & Heinle.
- Heath, S. B. (1971). Dimensions of Language Development: Lessons from Older Children. In A. S. Masten, *Cultural Processes in Child Development: The Minnesota Symposia on Child Development* (pp. 59-76). Minnesota: University of Minnesota.
- Holmes, J. (2001). *Learning About language: An Introduction to Sociolinguistics*. England: Edinburgh Gate.
- Hudson, R. (1996). *Sociolinguistics*. Cambridge: Cambridge University Press.
- Kaplan, R. B., & Baldauf Jr., R. B. (1997). *Language Planning and Policy: From Practice to Theory*. Clevedon: Multilingual Matters.
- Kembo-Sure, E., & Ogechi, N. (2009). *Linguistic Human Rights and Language Policy in the Kenyan Education System*. Addis Ababa: OSSREA.
- Kembo-Sure, Mwangi, S., & Ogechi, N. O. (2006). *Language Planning for Development in Africa*. Moi University Press.
- KICD. (2016). *Report on Needs Assessment for ECDE School Curriculum Reform in Kenya*. Nairobi: Kenya Institute of Curriculum Development.
- KICD. (2017). *Basic Education Curriculum Framework*. Nairobi: Kenya Institute of Curriculum Development.
- KICD. (2018, September 24). *Kenya Institute of Curriculum Development* . Retrieved from National Goals of Education : <https://kicd.ac.ke/wp-content/uploads/2017/10/CURRICULUMFRAMEWORK.pdf>

- KICD. (2021). *Competency Based Assessment Framework For Early Years Education*. Nairobi: Kenya Institute of Curriculum Development .
- KLRC. (2010, August). *Constitution of Kenya*. Retrieved from Chapter 7 National-official-and-other-languages: <https://www.klrc.go.ke/index.php/constitution-of-kenya/108-chapter-two-the-republic/173-7-national-official-and-other-languages>
- KNBS. (2019). *Kenya National Census*. Nairobi: Kenya National Bureau of Statistics.
- KNEC. (2020). *Competency Based Assessment Framework for Early Years Education (EYE) in Kenya*. Kenya: Kenya National Examinations Council.
- KNEC. (2021). *Competency Based Assessment Framework*. Nairobi: The Kenya National Examinations Council.
- KNEC. (2021, September 30). *Who We Are: Quality Policy*. Retrieved from Kenya National Examinations Council: <https://www.knec.ac.ke/who-we-are/quality-policy/>
- Krauss, R. M., & Chiu, C.-Y. (1997). Language and Social Behaviour. In S. F. Gilbert, & G. Lindsey, *Handbook of social* (pp. 41-88). Boston: Mc-Graw Hill.
- Kruskal, W. H., & Wallis, W. A. (1952). Use of Ranks in one-criterion variance analysis. *Journal of the American Statistical Association*, 583-621.
- Laitin, D., & Ramachandran, R. (2016). Language Policy and Economic Development. *American Political Science Review*, 110(3), 457-480.
- Lopez, L. E. (2000, November 28). *The development and use of first and second languages in bilingual education: Cognition, Culture, Language, and Learning: An Introduction for Educational Planners in Multilingual and Multicultural Contexts*. Universidad Mayor de San Simón.
- Mackatiani, C. I. (2017). Influence of Examinations Oriented Approaches on Quality Education in Primary Schools in Kenya. *Journal of Education and Practice*, 51-58.

- Malekela, G. (1977). *Access to Secondary Education in Sub-Saharan Africa: The Tanzanian Experiment*. PhD Dissertation.
- Manel, M., Hassan, A., & Buriro, H. A. (2019). Learners' Attitudes towards Teachers' switching to the mother tongue (The Case of Secondary school learners in Algeria). *Indonesia TESOL Journal*, 1(1), 1-88.
- Mayne, A. J. (1999). *From Politics Past to Politics Future: An Integrated Analysis of Current and Emergent Paradigms*. Westport, Connecticut: Greenwood Publishing Group.
- Mazrui, A. A., & Mazrui, A. (2000). The Power of Babel: Language and Governance in the African Experience. *The International Journal of African Historical Studies* 33(1).
- Mberia, F. K. (2017). *Influence of Mathematical English Performance of Standard Eight Learners in Public Primary Schools in Miriga Meru West Division, Imenti North Sub-County, Meru County, Kenya*. Nairobi: MA Thesis.
- Mbithi, E. K. (2014). Multilingualism, language policy and creative writing in Kenya. *Multilingual Education : SpringerOpen*, 1-9.
- Mlay, J. (2014). *Fimbo ya mbali haiui nyoka: the question of language and education in Tanzania*. Illinois: Graduate Thesis.
- MoE. (2019). *Basic Education Statistical Booklet*. Nairobi: Ministry of Education .
- Moschkovich, J. (2002). A situated and sociocultural perspective on bilingual mathematics learners. *Mathematical Thinking and Learning*, 4(2-3), 189-212.
- Mose, P. (2017). Language-in-Education Policy in Kenya: Language-in-Education Policy in Kenya. *Nordic Journal of African Studies*, 26(3), 215-230.
- Mose, P. N. (2017). Language-in-Education Policy in Kenya: Intention, Interpretation, Implementation. *Nordic Journal of African Studies*, 215-230.
- Mtallo, G. R. (2015). Teaching and Learning English in Tanzania: Blessing or Curse? . *Journal of Education and Practice* .

- Mugenda, O., & Mugenda, A. (2003). *Research Methods, Quantitative and Qualitative Approaches*. Nairobi: ACT Press.
- Mutea, Z. K. (2015). *Relationship Between Instructional Practices and Standard Four Pupils' Achievement in English in Public Primary Schools in Nairobi City County, Kenya*. PhD. Thesis.
- Muthiani, N. T. (1986). *A survey of resources for teaching/learning Environmentatl Education in Kenya Diploma Colleges*. Nairobi.
- Muthwii, M. (2002). *Language Policy and Practices in Education in Kenya and Uganda*. Nairobi: Phoenix Publishers.
- Mwaniki, M. (2014). Mother tongue education in primary teacher education in Kenya: a language management critique of the quota system. *Springer Open*.
- Nabea, W. (2009). Language Policy in Kenya: Negotiation with Hegemony. *The Journal of Pan African Studies*, 121-139.
- Nkolola-Wakumelo, M. (2008). Barriers to the Use of Zambian Languages in Education. *Journal of African Studies*.
- Noss, R. B. (1985). The Evaluation of Language Planning in Education. *Southeast Asian Journal of Social Science*, 82-105.
- Nyaom, N., & Sarah, A. (2014). Mother Tongue in Instruction: The Role of Attitude in the Implementation. *International Journal of Research in Social Sciences*, 4(1), 77-99.
- Nyerere, J. K. (1967). Education for Self-Reliance. *The Ecumenical Review*, 382-403.
- Nyika, A. (2015). Mother tongue as the medium of instruction at developing country universities in a global context. *The South African Journal of Science*, 111(1), 1-5.
- Obanya, P. (1999). Popular fallacies on the use of African languages in education. *A Journal of African Studies* , 81-100.

- Oduor, J. A. (2015). Towards a practical proposal for multilingualism in education in Kenya. *Multilingual Education: SpringerOpen Journal*.
- Ogechi, N. (2002). *Trilingual Codeswitching in Kenya - Evidence from Ekegusii, Kiswahili, English and Sheng: Dissertation*. Hamburg: University of Hamburg.
- Ogechi, N. (2011). *Themes in Language, Education & Development in Kenya*.
- Oluoch, E. A. (2017). Language of Instruction in Kenya: Focus on Lower Primary in Schools in Rural Areas. *International Journal of Education, Learning and Development*, 5(1), 17-23.
- Ongeti, K. (2012). *Factors Affecting Academic Performance in Developing Countries: A Report of Findings from a Field Study*. LAP Lambert Academic Publishing.
- Orodho, J. (2004). *Elements of Education and Social Science Research*. Nairobi: Masola Publishers.
- Owu-Ewie, C. (2006). The Language Policy of Education in Ghana: A Critical Look at the English-Only Language Policy of Education. *Selected Proceedings of the 35th Annual Conference on African Linguistics*.
- Phelps-Stokes Education Commission. (1924). *Phelps-Stokes Education Commission 1924 Report*. Colonial Office, Downing Street.
- Qorro, M. (2010). *Does Language of Instruction Affect Quality of Education?* Dar-es-Salaam: Haki Elimu.
- Qorro, M. A. (2013). Language of Instruction in Tanzania: Why Are Research Findings Not Heeded? *Institute of Education Sciences*, 29-45.
- Racette, A., & Peretz, I. (2007). Learning lyrics: To sing or not to sing? *Memory & Cognition*, 242-253.
- Rodriguez, K. L. (2017). *The relationship Between Classroom Instructional Language and Academic Achievement Among English Learner Students: Thesis*. Washington, D.C: Georgetown University .

- Roy-Campbell, Z. M. (2014). Teaching English as a 'Second Language' In Kenya and the United States. *Global Education Review*, 84-98.
- Rubagumya, C. (2010). Teaching and Learning English in Africa: Do learners Matter? . *SUZA spine International Symposium*. . Zanzibar.
- Shiundu, J., & Omulando, S. (1992). *Curriculum: Theory and Practice in Kenya*. Nairobi: Oxford University Press.
- Siele, H. (2009). *Effects Of Code Switching On English Language Learning And Teaching In Bilingual Classrooms: A Case Of Bureti District- Kenya*. Eldoret: Masters Thesis, Moi University.
- Sifuna, D. N. (1975). *Revolution in Primary Education: The New Approach in Kenya*. East African Literature Bureau.
- Spolsky, B. (2012). What is Language Policy. In B. Spolsky, *The Cambridge Handbook of Language Policy* (pp. 3-16). Cambridge University Press.
- Steinmayr, R., Meißner, A., & Weidinger, A. F. (2015). Academic Achievement. In L. Wirthwein (Ed.), *Oxford Bibliographies* (pp. 1-16).
- Stern, H. H. (1983). *Fundamental Concepts of Language Teaching*. Oxford: Oxford University Press.
- Stewart, J. H. (2005). Foreign Language Study in Elementary Schools: Benefits and Implications for Achievement in Reading and Math. *Early Childhood Educational Journal*, 33, 11-16.
- The Kamunge Commission. (1988, March). *Kenya Law* . Retrieved from Presidential Working Party on Education and Manpower Training for The Next Decade and Beyond: <http://kenyalaw.org/kl/fileadmin/CommissionReports/Report-of-the-Presidential-Working-Party-on-Education-and-Manpower-Training-for-the-Next-Decade-and-Beyond-March-1988.pdf>
- Trudell, B. (2007). Local Community Perspectives and Language of Education in Sub-Saharan African Communities. *International Journal of Educational Development*, 552-563.

- UNESCO. (1953). *The use of vernacular languages in education*. Paris, France: UNESCO.
- UNESCO. (2005). *Language of instruction and the Quality of basic education in Zambia. Background paper prepared for the Education for All*. PARIS: UNESCO.
- UNESCO. (2008). *Mother Tongue Matters: Local Language as a Key to Effective Learning*. Paris: UNESCO.
- UNESCO. (2013). *Education in a multilingual world*. Retrieved September 24, 2021, from https://unesdoc.unesco.org/ark:/48223/pf0000129728_eng
- UNESCO. (2016). If you don't understand, how can you learn? . *Policy paper 24 of Global Education Monitoring Report*.
- UNICEF. (2016). *The impact of language policy and practice on children's learning: Evidence from Eastern and Southern Africa*. Nairobi: UNICEF.
- Viennet, R., & Pont, B. (2017). *Education Policy Implementation: A Literature Review and Proposed Framework*. Organisation for Economic Co-operation and Development.
- Vogt, W. P., Gardner, D. C., & Haeffele, L. M. (2012). *When to Use What Research Design*. New York: Guilford.
- Walliman, N. (2010). *Research Methods: The Basics (2nd ed.)*. Routledge.
- Wamalwa, E. (2020). Language Attitudes and Kiswahili Language Learning in Primary Schools in Kenya. *Journal of Education and Practice*, 168-179.
- Warschauer, M. (2000). The Changing Global Economy and the Future of English Teaching. *TESOL Quarterly*, 511-535.
- Whiteley, J. M. (1969). *Counselor Education*. Washington University.
- Whorf, B. L. (2011). *Language, Thought, and Reality: Selected Writings of Benjamin Lee Whorf*. Martino Fine Books (1956 Reprint).

- Wong, L. T. (2015). *English Language Education in a Global World: Practices, Issues and Challenges*. Hong Kong: Centennial College.
- Woodhead, E. W., & Harper, G. (1958). *Report on Asian and European Education in Kenya, 1958*. Kenya Colony.
- Young, A. S. (2014). Unpacking Teachers' Language Ideologies: Attitudes, Beliefs, and Practiced Language Policies in Schools in Alsace, France. *Institute of Education Sciences*, 23(1-2), 157-171.
- Zlatev, J., & Blomberg, J. (2015). Language may indeed influence thought. *Frontiers in Psychology*.

APPENDICES

Appendix 1	Teachers' Questionnaire
Appendix 2	English SBA 2020 Assessment
Appendix 3	Mathematics SBA 2020 Assessment
Appendix 4	Research Permit NCST
Appendix 5	Copy of Clearance
Appendix 6	Introductory Letter
Appendix 7	Table of Schools & Enrolment Kakamega County
Appendix 8	Navakholo Sub-County Schools
Appendix 9	Kakamega Central Sub-County Schools
Appendix 10	Map of Kenya with inset Kakamega County