

**PREPAREDNESS FOR IMPLEMENTATION OF MOTHER TONGUE
EDUCATION POLICY IN PUBLIC LOWER PRIMARY SCHOOLS
IN MERU COUNTY, KENYA**

MAGAJU JACINTA KAGENDO

**A Thesis Submitted to the School of Education and Social Sciences in Partial
Fulfilment of the Requirements for the Conferment of the Degree of Doctor of
Philosophy in Leadership and Education Management of Kenya Methodist
University**

SEPTEMBER 2024

DECLARATION AND RECOMMENDATION

Declaration

This thesis is my original work and has not been presented for the award of a degree or any other award in any other university.

Signed _____

Date _____

Magaju Jacinta Kagendo

EDU-4-1278-2/2019

Recommendation

We confirm that the candidate carried out the work reported in this thesis under our supervision.

Signed _____

Date _____

Dr. Charles Kanyi, Ph.D
Kenya Methodist University

Signed _____

Date _____

Dr. James Kubai Taitumu, Ph.D
Kenya Methodist University

COPYRIGHT

© 2024

Magaju, Jacinta Kagendo

All rights reserved. No part of this thesis may be reproduced, stored in any retrieval system or transmitted in any form or by any means electronically, by photocopying or otherwise, without prior written permission of the author or Kenya Methodist University, on that behalf.

DEDICATION

To my late husband and best friend Franklin Magaju. A great dad and partner.

ACKNOWLEDGMENT

To God I owe this degree for personally revealing it to me when I had lost hope. I thank Him for His love and provision throughout this program. I render to Him His worth, honor and praise. I am grateful to my supervisors Dr. Charles Kanyi and Dr. James Kubai Taitumu for their professional guidance continually reading and guiding me to improve my work. Your faith in me encouraged me throughout this document's formation and development. My appreciation to my trainers Prof. Paul Maku, Dr. Tarsilla Kibaara, Dr. Severina Mwirichia, Dr. Flora Mutwiri and colleagues in the Department of Education for their encouragement and support.

To my classmates Dr. Adam I. OHirsi, Dr. Zachary Mutwiri and Dr. Sabina Murithi. I relished the classtime with you in Main Campus, revision time and lunches before exam! I acknowledge my parents Mr. Joseph Ndegwa and Mrs. Julia Wanja Ndegwa for parenting me and inspiring me to achieve the highest education level.

To my children Mburu, Kinya, Mukami and Mwenda and my treasured grandsons Zane and Gavin. Thank you for your patience and understanding when I was too busy studying, correcting, defending and working. You cheered me on with pride.

I appreciate my dear high school and college friend and prayer partner Jane Kinya Miriti who wholeheartedly encouraged me to focus on completion of this work.

Special appreciation of the families of Rev. Dr. Simon Mwangi and Mr. Samuel Mwiti for praying and standing with my family as we transitioned through many life seasons.

My committed research assistant Jens Elvis Mawira, you fully gave your all during the entire process of having this project complete.

I thank all the Grade three classroom teachers, the headteachers and government officers in Meru County who took time to participate in this research. Their valued responses and feedback are the reason we have this document complete.

TABLE OF CONTENTS

DECLARATION AND RECOMMENDATION	ii
COPYRIGHT	iii
DEDICATION.....	iv
TABLE OF CONTENTS	vi
LIST OF TABLES	ix
LIST OF FIGURES	x
ABSTRACT.....	xi
ABBREVIATIONS AND ACRONYMS.....	xii
CHAPTER ONE.....	1
INTRODUCTION.....	1
1.1 Background of the Study	1
1.2 Statement of the Problem	8
1.3 Purpose of the Study	12
1.4 Objectives of the Study	13
1.5 Research Hypotheses.....	13
1.6 Significance of the Study	14
1.7 Scope of the Study.....	14
1.8 Limitations of the Study	15
1.9 Delimitations of the Study.....	15
1.10 Assumptions of the Study	16
1.11 Operational Definitions of Terms	17
CHAPTER TWO	20
LITERATURE REVIEW	20
2.1 Introduction.....	20
2.2 Implementation of Mother Tongue Education Policy	36
2.3 Teacher Preparedness for the implementation of MTE policy in Meru County.....	50
2.4 Instructional Material Preparedness for the implementation of MT language policy	61
2.5 Institutional Preparedness in the Implementation of Indigenous Language Policy....	69

2.6 Teachers attitude towards indigenous language policy implementation	85
2.7 Summary of literature gaps	100
2.8 Theoretical Framework Literature Review	101
2.9 Conceptual Framework.....	112
CHAPTER THREE	117
RESEARCH METHODOLOGY	117
3.1 Introduction	117
3.2 Research Philosophy	117
3.3 Research Design.....	119
3.4 Location of Study	119
3.5 Target Population	121
3.6 Sample Size and Sampling Techniques	122
3.7 Instrumentation.....	123
3.8 Piloting of the Research Instruments	126
3.9 Methods of Data Collection	128
3.10 Data Analysis Procedure and Presentation.....	129
3.11 Ethical Considerations.....	133
CHAPTER FOUR.....	135
RESULTS AND DISCUSSION	135
4.1 Introduction	135
4.2 Response Rate	136
4.3 Reliability of the Data	138
4.4 Profile of Respondents	139
4.5 Diagnostic Tests of the Study Data.....	150
4.6 Results Based on the Main Variables of the Study	157
4.7 Results on Implementation of the Mother Tongue Education Policy	158
4.8 Teacher Factors in the Preparedness to Implement MTE Policy	198
4.9 Instructional Materials Factor in the Preparedness to Implement MTE Policy	219
4.10 Institutional Factor in the Preparedness to Implement MTE Policy	232
4.11 Teachers' Attitudes towards the Implementation of MTE Policy.....	250

4.12 Results on the Overall Purpose of the Study.....	268
4.13 Results on Test Moderation Effect of Teachers' Attitude.....	275
CHAPTER FIVE	283
SUMMARY, CONCLUSION AND RECOMMENDATIONS	283
5.1 Introduction	283
5.2 Summary of The Study's Findings.....	283
5.3 Conclusions	297
5.4 Recommendations	304
5.5 Implications of the Findings on Theories, Policies and Practices.....	310
5.6 Recommendations for further Studies.....	318
REFERENCES.....	320
APPENDICES	353

LIST OF TABLES

Table 3.1: Target Population of the Study.....	122
Table 3.2: Sample Size Grid.....	123
Table 4. 1 Study’s Response Rate.....	136
Table 4. 2 Reliability of data based on the main variables.....	138
Table 4. 3 Demographic characteristics of grade three teachers	140
Table 4. 4 Numbers of ethnic diversity among grade three learners in Meru County	144
Table 4. 5 Ethnic composition among grade three teachers in Meru County	146
Table 4. 6 Use of Kimeru language when teaching lower primary school	148
Table 4. 7 Normality Test on preparedness to implement the MTE policy	151
Table 4. 8 The Autocorrelation test on preparedness to implement the MTE policy.....	154
Table 4. 9 Multicollinearity Test on preparedness to implement the MTE policy.....	156
Table 4. 10 Descriptive results on implementation of the MTE policy	159
Table 4. 11 Use of mother tongue languages in teaching and completion of syllabus.....	165
Table 4. 12 Ethnic groups among lower primary teachers and learners.....	170
Table 4. 13 Effectiveness of the use of Kimeru mother tongue language in teaching	177
Table 4. 14 Teacher Preparedness to Implementing Mother-Tongue Language Policy	200
Table 4. 15 Correlations analysis between teacher preparedness and MTE policy.....	208
Table 4. 16 Instructional Materials Preparedness.....	220
Table 4. 17 Correlations between instructional resources preparedness and MTE policy	226
Table 4. 18 Institutional Materials Preparedness	233
Table 4. 19 Correlations between institutional preparedness and MTE policy	240
Table 4. 20 Teachers’ attitudes towards Implementing MTE policy	252
Table 4. 21 Model Fitting Information on State of School’s Preparedness to Implement MTE. 269	
Table 4. 22 Pseudo R-Square Results on State of School’s Preparedness to Implement MTE .. 270	
Table 4. 23 Goodness-of-fit on State of School’s Preparedness to Implement MTE..... 270	
Table 4. 24 Parameter Estimates on State of School’s Preparedness to Implement MTE	271
Table 4. 25 Results on test of parallel lines on school’s preparedness for MTE policy.....	274
Table 4. 26 Model fitting information on teachers’ attitudes and MTE preparedness	277
Table 4. 27 Pseudo R-Square on teachers’ attitudes and MTE preparedness	278
Table 4. 28 Goodness-of-fit regarding on teachers’ attitudes and MTE preparedness.....	278
Table 4. 29 Parameter Estimates on teachers’ attitudes and MTE preparedness	281

LIST OF FIGURES

Figure 2.1 Conceptual framework.....	113
Figure 4.1 Histograms on preparedness to implement the MTE policy.....	152
Figure 4.2 Scatter plots showing the linearity of predictors and dependent variables...	153
Figure 4.3 Heteroscedasticity test on preparedness to implement the MTE policy.....	155

ABSTRACT

The Kenya Basic Education Curriculum Framework introduced Indigenous languages as a subject in early years of education in 2017, recognizing their crucial role in education. Despite its implementation, the effectiveness of this policy remains unclear. The purpose of the research was to investigate the implementation preparedness for the execution of the MTE policy in the public lower primary schools in Meru County, Kenya. The main objectives of the study were to assess teacher preparedness, instructional materials preparedness, institutional preparedness, and the extent to which the attitude of teachers moderated the execution of the MTE policy in Meru County, Kenya. Paul Sabatier's Advocacy Coalition Framework, Chomsky's Linguistic Theory, Cummins Underlying Proficiency Theory, and Piaget's Cognitive Development Theory underpinned the study. The study used a descriptive survey design and adopted the mixed methods approach. A sample of 20% of the population was deemed adequate for the study. Data were collected from Grade 3 teachers using questionnaires and focus Group Discussions collected data from head teachers and sub-county Quality Assurance Standards Officers, Curriculum Support Officers, and the County Director of Education data were collected using interviews. The research permit was sought from NACOSTI after clearance by the Kenya Methodist University Directorate of Postgraduate Studies. The authority to conduct the pilot study in Tharaka Nithi County and the main study in Meru County was granted by the County Directors of Education. The instruments were tested for reliability by use of Cronbach alpha coefficients which yielded a $P > 0.7$ and the content, construct and face validity were confirmed by experts and supervisors. Quantitative data were analyzed through descriptive statistics where the mean, mode, and percentages were computed. Additionally, inferential statistics were analyzed through Spearman's correlation and Ordinal logistic regression. The research hypothesis was tested through correlation and regression. Qualitative data was analyzed thematically and data was presented in tables and graphs in line with the study objectives. Overall findings of the study confirmed that teacher preparedness, instructional resource preparedness, and institutional readiness were key for a successful implementation of the MTE policy. The attitude of teachers fairly moderated between teachers, instructional resources, institutional preparedness, and MTE policy implementation. Areas of further research included the impact of using MT on performance, the influence of learners' attitudes on the implementation of MTE, and a comparative study on performance in subjects taught in MT. Recommendations included prioritizing teacher training and in-service training, sufficient and relevant instructional materials adequate resources, and infrastructure to support MTE policy implementation.

ABBREVIATIONS AND ACRONYMS

CBC	-	Competency Based Curriculum
EFA	-	Education for All
IL	-	Indigenous Languages
IDIL	-	International Decade of Indigenous Languages
KICD	-	Kenya Institute of Curriculum Development
L1	-	First Language
L2	-	Second Language
LAD	-	Language Acquisition Device
MoI	-	Medium of Instruction
MTBE	-	Mother Tongue-Based Bilingual Education
MTE	-	Mother Tongue Education
QASO	-	Quality Assurance and Standards Officer
SDG 4	-	Sustainable Development Goal 4
TL	-	Target Language
UNICEF	-	United Nations Children Education Fund
USAID	-	United States Agency for International Development
YIL	-	Year of Indigenous Languages

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Globally, developed countries such as China, Korea, Japan, the USA, Nordic countries and South Eastern Asia have embraced their mother tongues (MT) also known as indigenous languages and are the leading economies of the world.

Japanese is the national language in Japan and with 99% of Japanese studying and speaking Japanese, there is a clear distinction between the official tongue and teaching language. Language education is prioritized (Sachiyo & Maher, 2017). To ensure quality, studying materials are provided; leaders and teachers are given quality training to ensure that they effectively deliver to learners (Saru & Honna, 2019).

A survey by UNESCO revealed that North and South Korea, Japan, the Maldives, and Vietnam of which up to 90% of the learners could access education in their MT (UNESCO, 2005). In South Korea, the language policy provides for Korean as the national language and it is offered from the elementary to the secondary schools regardless of the student's economic or social background (Jean, 2019). The policy on MTE policy implementation is so strict that special consideration is sought for Korean returnees and foreign residents to be considered either through offering other international languages or considering them while teaching in a Japanese class.

Hong Kong's government decided to implement a policy to increase the use of Cantonese in schools. The Hong Kong Department of Education upheld the policy decision and increased use the of MT in schools. They justified their decision on facts that educational

research worldwide showed that learners comprehend using their vernacular. Further, as pointed out in the Hong Kong Certificate of Examinations students who had been taught in Chinese performed better than those taught in both English and Chinese.

Most of Sub-Saharan countries did not deviate from the languages of their colonial rulers but accepted them automatically perhaps because the systems of government were based on those languages (Mbah, 2012; Githinji, 2014). Preference for use of non-mother languages for instruction was and is tied to their perceived advantage to such avenues as prosperity in economic development, technology and scientific knowledge (Draai et al., 2013). People viewed indigenous languages in education as a problem barrier to successful education and pushed for 'straight to English' or early exit from indigenous languages to foreign language in lower primary education (Herbert & Bailey, 2002). Teachers who have inadequate capacity on English coupled with school-based challenges like teaching overload and general deficits that face educational institutions, the use of English in communication and teaching it as a second language becomes difficult (Trudell, 2016; Wolff, 2015). In this scenario, children whose ideal resource is their mother tongue and whose concept of the world is well framed in it is forced to an unfamiliar language that often leaves them at a disadvantage.

Besides Somali and Southern Sudan, there are other African countries that are seriously institutionalizing Mother Tongue (MT) use as a policy. Ghana has a policy for the instructional language in lower primary championing the use of the mother tongue from Grade 1 to Grade 3 and thereafter English takes over from Grade 4 onwards (MOESS, 2008; Bamgboṣe, 2019). This strategy has seen learners improve greatly in classroom work. However, Owu-Ewie (2006) supported by Davis and Agbenyega (2012) claims that

a substantial number of Ghanaian schools have not complied with the requirements for the policy. In Mozambique, language education policy supported the implementation of a bilingual curriculum in the year 2002. The nation is highly multilingual and linguistically diverse with up to forty-three (43) Bantu-based languages indicating that it is possible to implement a Mother Tongue Education (MTE) policy in such an environment (Guthrie, 1967; Kathupa, 1985). Kenya has almost similar characteristics to Mozambique, having been a British colony, is highly multilingual with a little over forty-five (45) ethnic groups, 50% of the Bantu language group but has managed to support an MTE policy successfully despite the challenges. Reports indicated that, only 1% of the rural population and 11% of the urban population spoke Portuguese which is the language of education, official discourses and government (Sandra, 2021). This privilege of Portuguese as other colonial languages like English in Africa reduces and dims the advantages of a mother tongue and a multilingual approach which include comprehension of subject content, a stronger identity, and self-respect for learners not to mention the possible high transfer of literary skills to the second language (L2) (Sandra, 2021). By 2017, with a mental shift and structures that were more favourable to bilingual instruction as opposed to Portuguese, the country's Ministry of Education and the USAID funding bilingual education tools and activities were developed for Mozambique.

According to Steigertahl (2019), Namibia as most African nations is a highly multicultural and multilingual with around 30 different languages spoken and the dominant indigenous languages include Oshiwambo, a Mother Tongue spoken by half of Namibian population (50%) followed by Rukavango (9%) and Otjiherero and Damara>Nama at 7%. The Indo-

European languages spoken are Afrikaans, English and German are at 10.4%, 3.4% and 1% of use respectively.

Oshiwambo being the largely spoken has seven dialects which are mutually intelligible. Two dialects of them however, Oshindonga and Oshikwanyama are codified and are used as the medium of instruction from grade 1 to grade 3 as well as taught as a subject from grade 4 to grade 12 (Iipinge, 2018).

Ethiopia has successfully implemented the use of the Mother Tongue as the language of instruction (LOI) in the lower primary with a recent study by USAID showing that the government policy is for the national language Amharic to be used as the compulsory medium of instruction up to Grade 9 (USAID, 2021). English language is only considered the transitioning language to higher education (USAID, 2021; Ramachandran, 2012). Presently, Ethiopia has been rated one of the leading countries in the use of Mother Tongue Education in the system of education globally and top in Africa. These research findings reveal that the Mother Tongue Education policy is being implemented successfully in some African nations. It was the interest of this study to establish the challenges facing the implementation of mother tongue policy in lower public primary schools in Kenya.

According to Kyeyune (2023), Uganda enacted language policy in 1989 and was implemented in 2007. The policy stipulates that, in the first four years of the learner's education, Mother Tongue is the language of instructional whereas English is included as a subject. The 2007 curriculum policy mandated the adoption of native languages to be used in lower primary as the language of instructional while the English language is considered in upper primary and in higher learning institutions (Uganda National

Examinations Board, 2012). The Uganda National Examinations Board (UNEB) in 2012 confirmed that the performance of Class 3 learners in mathematics was exceeding the English language hence proving that the numeracy being taught in the first language enabled better understanding of the concepts by the pupils (UNESCO, 2016). In support Draai et al. (2014) confirms that native languages as the instructional language has contributed to improved skills in literature and participation of children in lessons.

Internationally, there exists debate and tension in both the policy contexts and academia regarding first language of instruction in an education system based on mother tongue (Martinez, 2022)). Other concerns are differences between languages practice and policy (Trudell & Piper, 2014; Piper & Misc, 2011) although it is confirmed that solution to declining academic results is ensuring that learning and teaching is done in a language that is used at home and well understood by learners (Krause, 2018).

Legal and statutory frameworks in Kenya that support the implementation of Mother Tongue Language Education (MTLE) have been in place long before Kenyan independence because of the proved benefits accrued by the use mother tongues in lower primary education (Mose & Russell, 2019). Commissions put in place by the colonial government in Kenya include the Commission on Education in the East African Protectorate (1919) which recommended the use of mother tongue in teaching the first three classes and teaching in Kiswahili in class four and five. Later Phelps-Stokes Commission (1924) was established and also stressed for use of mother tongues for teaching in early education. This one specified Kikuyu, Luhya and Dholuo as the first languages of instruction while Kiswahili would be used at the coastal region as it is the language used in that catchment area. Following closely was the East African Commission

(1925) and the Education Conference of 1929 all of which stressed the use mother tongues in the lower primary and the introduction of a second language in the latter levels of education (Mose & Russell, 2019). A very notable recommendation of the East African Commission of 1925 was its resolution that even after the three years use of mother tongue in teaching, a second native dominant language, suggested as Kiswahili was recommended for use until such a stage when English could be introduced to the learners. Post-independence education commissions each, making diverse recommendations on differing features of curriculum implementation in Kenya were witnessed. These post-colonial education commissions, the Ominde (1964); Gachathi (1976) and Koech (1999) commissions illustrated the benefits that learners get when they begin formal education in a language that they understand and recommended a need for them to be taught using the native language while schools with diversified occupants could use Swahili.

In the Kenya Constitution promulgated in 2010, the language policy provision is found under Article Seven in Chapter Two which stresses that the diversity of the Kenya people should be promoted and protected through the development, promotion, and use of the native languages (Mandillah, 2017; Kibui, 2014). Currently in Kenya, the language in education policy presupposes sufficient literacy in mother tongues at the end of grade three and that the languages should no longer be taught nor used as a medium of instruction beyond this level. Kiswahili and English should both be taught as subjects henceforth while English assumes the role of language of instruction (LoI) in all subjects. This is a further presupposition that by the end of grade three, Kenyan pupils would have developed sufficient literacy skills in English to be able to read and learn in the language (Kobia, 2016).

Wotzuna (2012) indicates that in Kenya the survival rate of learners at the primary school level is about 40%. This number suggests that many children are not sufficiently literate in English and literacy in their mother tongues could be an invaluable asset in their subsequent lives outside school. Wolff (2010) confirms the above fact by adding that with literacy in their mother tongue, should any children drop from primary school early, they could make 'better farmers, gardeners, herdsman, craftsmen, and small-scale traders. Both studies suggest one of the ways of strengthening mother tongues was to change teachers' attitudes towards the language since they are key stakeholders. An Education Conference held at Kisii University in August 2014 sought to interrogate the remedy for repeated poor performance in primary schools in Kisii County. Further, a survey by UWEZO (2010; 2011; 2012) coupled with KNEC results showed that basic literacy as well as numeracy abilities in Gucha and Kisii districts caused the decline in educational outcomes. The participants of the conference dubbed 'Africa and the New World Order' resolved that the remedy would be the use of the mother tongue as a language of instruction (LoI) in lower primary education. This corroborates with UNESCO (2000; 2003) which confirms that Mother Tongue Based Instruction or first/home language benefits and enables learners to achieve more rather than when using a second language, mainly a colonial language (Onchiri et al., 2016).

In Tana River, Abiyo (2017) revealed that 91.7% of the respondents on the implementation of mother tongues for instruction, results affirmed that a well-planned language in education based on Mother Tongue (MT) was effective for delivery of quality teaching at the lower primary level of education. However, as the previous researchers, the study noted a challenge of non-adherence to policy and inadequate teaching resources. This provides a

gap for the current study in that the researcher in this study will delve deeper than the study conducted in Tana in by investigating how Meru public primary schools are prepared in the area instructional resources, teacher's attitudes and policy implementation as the study by Abiyo investigated Tana River County and not Meru County.

Safari (2013) and Kiamba (2016) on the Kimeru proficiency among teachers were keen to understand the communicative practices that emerged in multilingual children in the grade four classroom in North Imenti. They established that teachers lacked training and recommended that teachers needed to be sensitized on the need to teach in the Kimeru language and that grade four students had not acquired the requisite native language or English language proficiency that would enable them to effectively speak respectively. The studies revealed that L1 was lowly perceived with some parents saying that they lit fire using L1 books and teachers resorted to teaching for examination purposes. Schroeder (2018) carried a study in Tharaka Nithi on effect of training teachers on relevant instructional materials, support and right teachers' attitude towards implementation of MTB-MLE approach to learning in lower primary schools. The program's objective was to improve the standards of education provided to primary schools in Tharaka County, Kenya. The results of the five-year program revealed reduced high levels of attrition by end of primary school education and improved reading skills.

1.2 Statement of the Problem

According to the United Nations Sustainable Development Goals (SDGs), education is a key requirement as a means of achieving development in Health, Agricultural development, Technology and all other. While the above studies were conducted in other areas including Tharaka Nithi, this study investigated the implementation of MTE policy

and sought to establish how prepared teachers are on the ground, the teaching resources available, how supportive or unsupported institutions are, and whether the attitude of the teachers has an effect on the implementation process in lower public primary schools in Meru County, Kenya.

International bodies and organizations such as UNESCO and UNICEF have established the need for literacy worldwide as well as learning using a child's mother tongue. Education content delivered in the first language (L1) of a child is the best for knowledge acquisition to the child (Fafanwa et al., 1989; Yohannes, 2009). In 1979 Cummins put forward a very influential hypothesis known as the interdependence hypothesis which argues that added language development is relatively a part of language development in a native language (Piper & Miksic, 2011) while Piper 2016 solidifies the claim revealing that Mother Tongue Language (MTL) has a positive effect on a child's ability to learn a second language.

Most Sub-Saharan countries did not deviate from the language of their colonial rulers but accepted it automatically perhaps because the systems of government were based on those languages (Mbah, 2012; Githinji, 2014). Preference for the use of non-mother tongue languages for instruction has been tied to their perceived advantage to such avenues as prosperity in economic development, technology, and scientific knowledge ((Draai et al., 2013). Indigenous languages in education have been viewed as a problem to successful educational outcomes and consequently, a push advocating straight use of foreign languages or early exit from Indigenous languages to favor foreign languages in lower primary education (Herbert & Bailey, 2002).

In countries where adequate preparations have been put in place, there has been reported success in the implementation of the first language (L1) policy. Countries like Japan, Korea, the South West States of America (Martinez, 2022); Asian countries like India and the Philippines have all successfully implemented the mother tongue (MT) policy (Saru & Honna, 2019). In Somalia Cassanelli and Abdikadir (2007), Nigeria Bukoye (2019), South Africa Gumbi (2017), Uganda Draai et al. (2014) and Tharaka Nithi (Trudell and Piper (2018) the policy has been implemented with a lot of success although a few challenges have been witnessed. Policy formulators, theorists, linguists and educators have all established that instruction in first language (L1) has immeasurable benefits to the learner Gachathi (1976), Koech (1999) and Nikiema (2011). After mastering the first language (L1) structures, they transfer the same familiar language structures to the second language (L2) which in turn facilitates easier comprehension of educational concepts unlike immersion into a language that they have never used before (Cummins, 1996; Cummins, 2000; Ambiyu & Nyarigotti, 2014). The call to adopt use of mother tongue (MT) due to the positive learning outcomes it produces in learners has been continually recommended by various institutions (UNESCO, 1953, 1968, 2014, 2022); (Asmara Language Organizers, 2000); (KICD, 2017) and (Kenya Constitution, 2010).

The mother tongue education (MTE) policy has been unsuccessful, or partially implemented or even failed to take off in countries where little or no implementation preparedness policy and teachers not trained in first language (L1) pedagogues (Mufanechiya & Mufanechiya, 2011). Ghana has suffered lack of training materials for teachers (Tackie-Ofosu et al., 2015). It has also been curtailed by parents, learners and teachers negative attitude towards instruction in L1 as in Tanzania (Roemer, 2023) and

Zimbabwe (Mkandawire, 2017). In multilingual environments there is lack of clarity which language should be embraced as L1 like the case of Nigeria, Iyamu and Ogiegbaen (2007) that has experienced lack of policy monitoring strategies for quality policy implementation in schools where the policy has slowly been implemented (UNESCO, 2016; Kyeyune, 2003).

In Kenya, although constitutional and statutory provisions are clear on mother tongue (MT) policy that dates back to the precolonial era, the policy largely remains unimplemented and with little concern (Trudell, 2019; Mandilla, 2017). The current system of education curriculum; Competency Based Curriculum (2017) introduced indigenous languages as a subject to be studied in the lower primary education in 2018 (KICD, 2018). However, it has not been fully monitored for implementation (Ng'asike, 2019). Lack of teacher preparedness, insufficient instructional materials, little or lack of institutional support and monitoring coupled with indifference in attitude has been blamed for failure for the MT language policy. Instructional materials are developed by the Kenya Institute of Curriculum Development (KICD) which in 2018 sanctioned mother tongue(MT) evolution of instructional resources in four communities (Nyariki, 2020). A follow up in November 2019 saw the KICD organize workshops that gathered experts on native dialects for the first time in the history of the curriculum with some indigenous dialect modified to enable focus on studying their languages up to higher education (Nyariki, 2020). Kimeru language together with thirty more other indigenous were left out. The languages that KICD identified were the Abasuba, Turkana, Somali, Pokomo, Maragoli, Kitubheta, Kidigo, Kiitharaka, Giriama, Bukusu, Borana, Kamba, Dholuo, Gikuyu, Kalenjin, Ekegusii, Chiduruma and Maa hence a glaring gap in teacher, resource, institutional preparedness.

Education budget allocation has gone up from Ksh. 494.8 billion in 2018 to Ksh. 554.4 billion in 2022. From this budget, the Teachers Service Commission an institution in charge of teachers in the country receives 50% of the education budget with 80% of this money going to teachers' salaries. Further Ksh.1.2 billion used for CBC preparation and implementation (Ngware, 2019). The amount of investment coupled with the benefits MTE accrues namely access to education, equality and equity is the background advising the need to investigate the status of mother tongue (MT) policy and the preparedness in terms of teacher training, instructional materials and institutional preparedness in lower public primary schools in Meru County concerning the Mother Tongue Education (MTE) policy. Although studies have been carried out around this subject in Kenya none has been carried out on implementation preparedness with regard to mother tongue policy. It is against this background that this study was carried out to establish implementation preparedness of the Mother Tongue Education (MTE) policy in Meru County Kenya with reference to teacher preparedness, instructional materials preparedness, institutional readiness and the moderating effect of the teacher's attitude towards Mother Tongue as a medium of instruction in lower public primary schools.

1.3 Purpose of the Study

The purpose of the study was to determine the preparedness for the implementation of mother tongue education policy in the lower public primary school education in Meru County, Kenya.

1.4 Objectives of the Study

The objectives of the study were to:

- i) Assess the aspect of teacher preparedness in the implementation of the MTE policy in lower public primary school education in Meru County, Kenya.
- ii) Examine the instructional materials preparedness in the implementation of the MTE policy in lower public primary school education in Meru County, Kenya.
- iii) Determine institutional preparedness in the implementation of the MTE policy in lower public primary school education in Meru County, Kenya
- iv) Determine the moderating effect of teachers' attitudes towards the MTE on the relationship between preparedness and the implementation of MTE policy in lower public primary school education in Meru County, Kenya.

1.5 Research Hypotheses

The study sought to test the following hypotheses.

Ho1: There is no significant relationship between the school-based teacher preparedness and implementation of mother tongue education policy in lower public primary schools in Meru County, Kenya.

Ho2: There is no significant relationship between instructional material preparedness and the implementation of mother tongue education policy in lower public primary schools in Meru County, Kenya.

Ho3: Institutional preparedness has no significant effect on the implementation of mother tongue education policy in lower public primary schools in Meru County. Kenya.

H04: Teacher's attitude has no significant moderating effect on the preparedness to implementation of mother tongue education policy in lower public primary schools in Meru County, Kenya.

1.6 Significance of the Study

It is expected that the findings and recommendations will have a positive general effect on the overall education policy implementation. The training of lower primary school teachers on bilingual/multilingual classrooms teaching is expected to help them to engage fully. This is when faced with learners from diverse ethnic backgrounds, the teacher is skilled fully to engage them in learning. As the study has revealed, there was need for the relevant stakeholders to equip schools in Meru county with relevant and culturally relevant instructional materials such as primary learner's books, teacher's guides, supplementary readers, dictionaries and ICT based resources for instructors and learners. Parents and the local school community reading the results and implications of this study will have an opportunity to be educated on mother tongue and policy so as to demystify the often mis advised perceptions of the mother tongue, second and foreign languages as evidenced in the results of the study.

1.7 Scope of the Study

The study was carried out in selected public primary schools in Meru county. Public primary schools were scientifically sampled from each sub county in Meru County for the purpose of this study. The metrics of the study namely teacher preparedness, instructional and institutional preparedness and the moderating effect of teacher's attitude were considered key in the implementation of The MTE policy in Meru County was the focus

of this study. The study targeted Grade three (3) classroom teachers, head teachers, CSOs, QASOs and the Meru County Director of Education as the respondents in this study.

1.8 Limitations of the Study

The lower primary schools considered for this study were the public and not private. The reason is that it was in these schools that our research variables such as schools, teachers and instructional materials in schools are a direct responsibility of the government. Their capacity, willingness and ability to implement the MTE policy reflected the government and her agents.

The study was focused on the education language policy and in a particular ‘the language of the catchment area, Kimeru in Meru county. Other languages such as Kiswahili and English were not the concern of the study unless they are putting the mother tongue into context. The study largely focused on the policy aspects rather than the linguistic aspects. The linguistic aspects were explored only in as far as language competence and orthography are concerned.

1.9 Delimitations of the Study

This research was carried out in government graded schools in Meru County. Three independent variables namely teacher preparedness, instructional materials preparedness and institutional preparedness in the implementation of MTE in Meru County, Kenya were the focus of the research while the teacher’s attitude towards MTE was the moderating variable of the study. In this study, data were gathered from head teachers, grade three teachers, sub-county curriculum support officers (SCSOs), county quality assurance and standards officer (SQSAOs) and the Director of Education. These respondents were easily available either in their schools and offices.

1.10 Assumptions of the Study

The assumptions made by the research include:

- i. Education stakeholders the graded schools were aware of the MTE policy in instruction at in Grade 1 to Grade 3 and the accompanying requirements for its implementation.
- ii. The representatives of key curriculum support namely the Teachers Service Commission, the Ministry of Education and County education officers are familiar with their functions especially those that are key to the implementation of the language in education policy.
- iii. The composition of the teachers in the schools is largely in favor of the local community and is competent in the language of the catchment area.
- iv. Respondents will provide correct information during the investigation.

1.11 Operational Definitions of Terms

Bilingualism: speaking two languages fluently

Bi-literacy: the capacity for dual language reading and writing

Code-switching: in a discourse, switching between two or more languages

Curriculum framework: a comprehensive document that, among other things, specifies requirements for curriculum implementation, monitoring, and evaluation as well as the structure

of the curriculum, its subjects or learning areas, and the justification for each one's inclusion in the curriculum. It also allots time to different subjects and/or learning areas.

Curriculum Policy: formal choices made by government or educational authority that have a direct or major impact on the curriculum, its development, and execution, and are typically documented in a variety of official documents

Education policy: formal decisions made by a government or educational authority that are usually recorded in a variety of official papers and that have a direct or significant impact on the curriculum, its development and execution.

Implementation: the act or procedure of carrying out a choice or plan; specifically, it is equivalent to "beginning to use something".

Indigenous Languages: a language learned in the early years of life that is used by a group of individuals who are believed to be locals in a certain area.

Institutional preparedness: this relates to the level of readiness or preparations the school is in at all levels to provide instructional support for learning in indigenous languages

Instructional materials: this relates to the teaching and learning resources meant to be used in aiding the teaching of subjects using indigenous languages

Learning outcomes: the total details, expertise or skills, a trainee has mastered upon the successful completion of an educational plan

Lower Primary School – (In the current CBE system of education referred to as the Early Years) In this study it refers to the first three grades of learning where the children ages range from 6 to 9 years and where the children are usually taught by one teacher for half the school day.

Mother tongue: The language that a person has been using since they were birth.

Official language: A language used by the government, including the parliament, courts of law, and administration, and which has unique legal standing within a nation.

Orthography: a language's typical spelling pattern.

Pedagogy: The process and practice of teaching, particularly when applied to a field of study or theoretical area. In this study it will refer to the process and practice of teaching mother tongue.

Policy: A strategy or guiding concept that has been embraced or put out by a group, company or person.

Policy implementation: The effective application of the policy, including several parties (both public and private) acting to advance the objectives of the policy.

Public schools: Schools that are government run and funded.

Preparedness: Readiness or preparation to execute the use of mother tongue directive

Reform: Make improvements to anything, particularly an institution or practice.

Skills: Is the acquired capacity to move with deliberate intent and good execution frequently in a predetermined window of time or energy, or both.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter undertook empirical literature analysis conducted by earlier scholars and academicians concerning the implementation preparedness in Mother Tongue Education (MTE) policy. The study discussed the concept of Mother Tongue and its use as a medium of instruction in knowledge acquisition, the language policy in Kenya through the pre-independence, post-independence to the present day. Literature on the implementation of the MTE was reviewed together as well as literature on teacher preparedness, institutional preparedness, and instructional materials preparedness. A review of the literature on the attitude of the teachers towards the use of MTE policy closed the section together with a summary of literature gaps. The theoretical framework that guided the study was discussed and finally, the chapter closed with the study conceptual framework.

2.1.1 Different realizations of First Language (L1)

UNESCO (1953) defined mother tongue as “the language that a person has been using since they were young”. The Kenya Institute of Education (2002) defined native language as “as a child first dialect and which they are expected to know”. According to Diane et al. (1991), L1 is the language that someone acquires first in his or her life. The issue of L1 is however controversial in that although L1 is seen as the family language although a child may not acquire their mother or father’s language. L1 therefore takes different realizations which can be used in teaching lower primary. There is a possibility of the lingua franca having a bigger influence on the child than others. For example: the child in the Kenyan

setting might acquire Kiswahili structures which he or she finds easier to understand and speak. In this scenario, Kiswahili becomes the child's L1 even if the parents speak one other language. More often than not, the language of the environment, for example, one that children acquire when they are taken to pre-primary school commonly (referred to as a nursery school) in Kenya or the language of the neighbourhood is the one they acquire first and that becomes their L1 (Diane et al., 1999). Knowledge is best acquired if the exercise of imparting knowledge is done in the language that the child knows well which is their L1. The language policy in Kenya recommends that the lower primary be instructed in first language L1 and, is better done in the language that a child understands best (Mandillah, 2017; Nyarigotti & Ambayo, 2014). This lays a better instructional foundation in a manner to prepare the child on further high levels of knowledge acquisition. In Kenya this is normally done in English from grade 4 upwards.

Popkin et al. (1981) defines the concept of meaning in the exercise of knowledge as carried by language. That is, using language to impart knowledge. They argue that there are different ways of passing the same meaning using language. Therefore, L1 can be used to impart knowledge. Since imparting of knowledge in lower public schools is done better in the language they understand best. There has to be a preparation as to how the child can be helped to advance to higher levels of knowledge using the language of the school. According to Diane et al (1991), there are different stages of imparting knowledge. To a toddler, the use of a toddler native speech is illustrated below:

Kimeru:	Kirimaara kiri na nkamia
English	Mt. Kenya is snow-capped

Here, the child gets to know that ice can be found on top of a mountain. The second stage is the transitional stage. In this stage, the first language of a child and the knowledge thereof is translated verbatim, word for word from the child's L1 to the instructional language in schools as seen below:

Kimeru	English
Kirimaara	Mt. Kenya
Kiri	has
na	
Nkamia	ice

When this is done, the child realizes that English as the instructional language in Kenyan schools has a relation with the languages that he/she knows. In this scenario, L1 is used in imparting knowledge even when as the child progresses towards L2 acquisition which is the language of the school. As the children study in the translations to English, by and by, they acquire structures in English at least to a point whereby they can communicate. From then on, as per policy, English can be used to teach high level concepts in English language.

It should however be noted that how the L1 can be used in an academic advancement as the learner gradually acquires full competence of the language of the school which is ideally Grade four. It was therefore the concern of this study that the merger of the language that the child knows and the language policy be investigated in the exercise of imparting knowledge in lower primary education and this was the concern of the study.

2.2.1 Language in Education Policy (LiEP) in Kenya

The general LiEP in Kenya embraces a bilingual approach to education where the child's mother tongue (hereinafter, MT) (or relevant local languages) is used as a language of

instruction (hereinafter, LOI) in lower primary classes while English is taught as a subject. In upper primary classes, English takes over from MT as the LOI (Mose, 2018; Ngetich, 2022).

Durk and Jasone (2017) in their exploration of the intersection of language education policy and assessment of multilingualism in education, with a focus on the preparedness towards the implementation of mother tongue language policy revealed that the spread of multilingualism in education has become increasingly common due to the mobility of the population. Equally, is the motivation to learn English as a second or foreign language in non-English speaking countries. Language education policies has occasionally tended to be developed to solve emergent problems related to multilingualism, while in others such policies are implemented to enhance the learning of specific languages. The assessment of language proficiency and achievement in academic content is usually closely related to language education policies. Therefore, educational institutions must prepare themselves for the implementation of mother tongue language policy by adopting a holistic approach to language teaching and assessment. Language policy in general is an all-important decision in education that concerns the choice of medium of instruction, which determines the language(s) to be learned, for how much time, etc.

Since the 1950s, there have been some significant developments in the field of language policy and language planning studies.

Originally, the focus was the standardization and promotion of national languages and then the emphasis on the maintenance of minority languages and the promotion of multilingualism. The use of mother tongue languages in education in some countries has been limited due to monolingual ideologies and traditions that do not give way easily.

However, the shift towards a holistic approach to language teaching and assessment is necessary for the effective implementation of mother tongue language policy.

Gorter and Jasone (2017) claim that the implementation of mother tongue language policy requires a shift from language isolation policies in language teaching and assessment towards more holistic approaches considering language as a resource and promote the use of the whole linguistic repertoire. This approach recognizes the importance of mother tongue language in the development of cognitive and academic skills, as well as socioeconomic and cultural growth. It also acknowledges the need for multilingualism in today's schools, as students who speak different languages share the same class while learning English (and other languages). Therefore, the implementation of a mother tongue language policy requires that educational institutions adopt a more inclusive approach to language teaching and assessment that recognizes the diversity of learners in the classroom. In this regard, the assessment of language proficiency and achievement in academic content must be closely related to language education policies that promote the use of mother tongue languages in education.

However, the implementation of programs based on holistic approaches is limited, and application in language assessment is modest. To effectively prepare for the implementation of the mother tongue language policy, educational institutions must develop new and creative ways to develop multilingual competence and cross-lingual skills. This can be achieved through the use of innovative teaching methods, such as content and language-integrated learning (CLIL), which is effective in promoting the use of mother tongue languages in education. It was therefore the interest of the study to

investigate the implementation problems and application of mother tongue policy in lower public primary schools in Meru County, Kenya

2.1.2 The Language Policy in Pre-colonial and Post-colonial Kenya

Nabea (2009) and Mazrui (1998) noted that the language policy in Kenya can only be understood from a historical perspective starting from colonial to post-colonial periods. In the colonial language policy, numerous stakeholders were involved in the formulation of a language policy but only two were key. Firstly, were the Christian missionaries who realized that the gospel would be spread best using the mother tongue and started the translation of the bible into mother tongues. The colonial administrators on the other hand supported use of Kiswahili only out of fear that Africans would be Europeanized by their use of the English language. It is the pre-colonial policy that in turn impacted the post-colonial language policy in Kenya. The genesis of English's hegemonic and divisionary tendencies, between the elite and the masses started during the colonial period and the prestigious position that English still occupies until to date has been perpetuated through education commissions and task forces.

2.1.2.1 The Colonial Language Policy

In the colonial period, the Africans had already realized that the English language was a gateway to white-collar jobs and wealth. They viewed denial of a chance to learn the language as being akin to condemning them to menial jobs (Nabea, 2009). The Independent schools were started by the Agikuyu people in the 1920s for the sole purpose of studying English (Whiteley, 1974). Akala (2019) adds the English was akin to leaving the menial jobs preferred for Africans and preparing to take up the white collar jobs earlier denied

from the British. The colonial administration and the missionaries instituted several committees and commissions for their own reasons. Specifically, the researcher however, focus on how the mother tongue was placed for use in education by each of them.

The United Missionary Conference in Kenya of 1909

At the United Missionary Conference in Kenya in 1909, the role of the mother tongue, Kiswahili and English in the domain of education was discussed (Kiramba, 2016). The Conference adopted the use of mother tongue in the first three classes in primary school, Kiswahili in two of the middle classes in primary, while English was used in the rest of the classes up to university (Gorman, 1974).

The Phelps Stoke Commission of 1924

One of the objectives of the Phelps Stoke Commission (1924) was to make the individual efficient, promote and advance agriculture, develop native industries, improve health, train people in the management of their affairs and inculcate citizenship and service (Bogonko, 1992; Sifuna, 1990). To achieve the above objective, the commission recommended that the languages of instruction should be the native language in early primary classes, while English was to be taught from upper primary up to the university. Schools were urged to make all possible provision for instruction in the native language. However, the Commission recommended that Kiswahili be dropped from the education curriculum, except in areas where it was the first language. (Mazrui & Mazrui, 1998).

The Beecher Report of 1949

At the end of World War II and the British colonialists started a campaign to create some Westernized educated elite in Kenya when self-rule became apparent following the struggle for freedom. This elite group was for the protection of the British colonialists in the independent Kenya after their exit. This was another effort that strengthened the English hegemony (Mandillah, 2019). English was introduced in the lower primary to be taught alongside the mother tongue and Kiswahili was dropped from the curriculum, except in areas where it was the mother tongue. Provisions for textbooks in vernacular in rural areas were to be provided and the vernacular languages were to be the medium for oral instruction in rural areas. The Beecher Report is considered as the foundation of the government's policy on African education in Kenya.

The Prator-Hutasoit Commission of 1952

This is the commission that officially endorsed English be the only language of instruction in all school grades at the expense of local languages. The Prator- Hutasoit Commission heralded the New Primary Approach (NPA) also as known as the English-Medium Scheme (Sifuna, 2009). In readiness for the implementation of recommendations, teachers were to be trained in English, while their mother tongues were relegated to teaching the lower primary schools (Mukuria, 1995). This commission however maintained that, the mother tongue be used in the lower primary school education.

The Binns Commission of Education (1952)

Sponsored by the Secretary of State for the Colonies and the Nuffield Foundation, the main objective of this commission was to examine educational policy and practice in British

Tropical African territories (Sifuna, 1992). Its main recommendation was to have the English language introduced in the lower primary and be taught together with the mother tongue. It also recommended that Kiswahili be dropped from the curriculum and be left to be used in areas where it was the mother tongue.

In summary, it is clear that five pre-colonial reports recommended mother tongue for use in the lower primary school level education. These recommendations are the basis on which this study sets out to find the implementation status in Meru County, Kenya with a view of investigating how prepared the teachers are and whether the instructional materials are sufficient and relevant as well as the preparedness of institutions in support of the MTE policy. In addition, the attitudes of the teachers will be investigated.

2.1.2.2 Post-Colonial Language Policy in Kenya

After independence in 1963, the official language of instruction was declared as English hence re-emphasizing the colonial rule language policy. It was the language that would be used in all important governmental sectors (Nabea, 2009). Many other post-independence commissions and working reports were involved but a few had a direct influence on the indigenous/mother tongue language policy which advised the current status of the language.

The Kenya Education Commission of 1964 (Ominde Commission)

The three languages were assigned educational roles. English and Kiswahili were preferred for education from lower primary to the university level and the mother tongue considered for verbal communication especially in rural areas. Although Kiswahili was recommended as a compulsory subject in primary schools and was allegedly favored in education for

purposes of national and regional unity and a language for the pan Africanism, Mazrui and Mazrui (1996) argues that Kiswahili was not anchored into the school curriculum. For a long time, it remained an optional subject as opposed to English language which was considered to expedite learning in all subjects by ensuring smooth transitions from “vernaculars” (Mazrui & Mazrui, 1996). It was during the Ominde commission that English was introduced in beginners’ classes in primary schools through the New Primary Approach (NPA) and its learning heavily emphasized. As far as mother tongue was concerned, the Commission recommended that schools include a daily story-telling session in the vernacular up to standard three (3).

The Bessey Report of 1972

Considered one of the post-independence that was very pro-mother tongue in education, the report noted that when school life begins and to avoid the shock of confrontation with a new language, good command of a child’s language are vital developmental benefits to children and cultural benefits to the community. The ideal language situation in this report is when every Kenyan can first enjoy a good command of his or her mother tongue they *will develop competence in Kiswahili and competence in English.* Kiswahili was to be compulsory from the primary level and the primary school curriculum was to be revised to suit the needs of the Kenyan and African context.

The National Committee on Educational Objectives and Policy of 1976 (Gachathi Report)

The Gachathi Report recommended the use of languages of instruction to be the predominant language spoken in the school’s catchment area for the first three years of

primary education. Secondly, it was recommended that “English be taught as a subject from standard one and then as a language of instruction from the fourth grade in primary school to the university” (Republic of Kenya, 1964; Republic of Kenya 1965).

Unfortunately, it is this same commission that entrenched the supremacy of the English language in the Kenyan education system. This is because although the commission declared Kiswahili an important subject in primary and secondary classes, Kiswahili received inferior status when compared with English in the school curriculum. English was allotted 8-10 periods out of the 40 hours per week while Kiswahili was allotted 3 hours (Chimerah, 1998). In 2024 sixty years after independence, the status quo remains the same in schools. In addition, teachers training to teach English and literature were considered to be trained in two different subjects while a teacher of Kiswahili and Fasihi must teach a third subject since Kiswahili is considered less tasking and less superior to English. Notably the teaching areas in English grammar and Kiswahili as well as set books are the same.

The Presidential Working Party on the Second University of 1981 (Mackay Commission)

Key implications of the PWP on MTE was its advice for the mother tongue be used in lower grades of primary schools, in areas where this was possible (Njoroge, 1991) and secondly proposed that Kiswahili be made a compulsory and examinable subject in primary and secondary level. English was to remain the language of instruction, while Kiswahili was made a compulsory subject in both primary and secondary education.

The Presidential Working Party on Education and Manpower of 1988 (Kamunge Report)

The Commission did not have a clear direction on the role of indigenous languages in the promotion of education in Kenya but indicated the prestige English language continued to receive. English to be used as the medium of instruction and recommended the establishment of primary school libraries in all schools and properly stocked to improve the learner's proficiency in English and to ensure the development of good reading habits.

The Commission of Inquiry into the Education System of Kenya of 1999 (Koech Commission)

The Commission came up with the Koech Report (1999). Its main objective was to recommend ways that could be used to provide quality education in the Kenya. One of the major recommendations was that the medium of instruction in lower primary. The commission advised this language to be the learner's mother tongue or the dominant language within the schools' catchment area. In urban centers (where population is made up of people from different ethnic groups), Kiswahili would be the medium of instruction.

Notably, the Koech Commission consisted of eminent persons, renowned educationalists and researchers who included clergy, educationists, scholars, senior government officers and community leaders of various backgrounds: Dr. Davy Koech (Chairman), Florida Karani (Vice-Chairman), Hastings W.O. Okoth—Ogendo, Filemona Indire, Jack G. Okech, Joseph D. Kimura, Abdulghafur H .S. El— Busaidy, Abdisalam S. Mohamed, David M. Mbiti, Ambrose A. Adongo, George K. King'oriah, Mwakai K. Sio, Nicodemus Kirima, Jasper M. Mumo, Joel J. Ngatiari, Jackson Kong'ali, Michael Ndurumo, Nathaniel

Chepkener, Noah N. Chune, Peter M. Kavisi, Joan A. Okudo, Swafiya M. Said, Eddah W. Gachukia, Joseph M. Mungai, David K. Some, (Joint Secretary) and Johnson Hungu (Joint Secretary).

The Commission noted that the use of the learner's mother tongue would enhance concept formation and articulation in linguistic communication. Moreover, the commission recommended that the ministry responsible for education works out modalities for ensuring the publication of instructional materials in all the local languages in the country. This was a step in the right direction as far as indigenous languages are concerned.

The Ministry of Education argued that the report was not implementable and cited cost, structural, and institutional limitations. According to Amutabi (2003), the rejection of the Koech Report brought into question Kenya's respect for education planning, curriculum development and recognition of professionalism in research.

The Taskforce on the Re-alignment of the Education Sector to the Constitution of Kenya 2010 (Odhiambo's Task Force of 2012)

Odhiambo's task force recommended that the use of the language of school's catchment area in lower primary be maintained. Secondly, the task force recommended the teaching of English and Kiswahili as subjects in the lower primary to facilitate the switch to English at primary class onwards.

2.1.2.3 Current Language in Education Policy in Kenya

In Kenya the language-in-education policy supports the use of the learner's first language as the language of instruction in the first three years of school but the policy has not been properly implemented. Some of the reasons include the multiplicity of first languages and

attitudes of teachers besides inadequate teaching and learning resources (Nyaga, 2015; Mose 2016; Mandilla 2019; Safari 2015).

In Sessional Paper No. 14 of 2012 titled “Reforming Education and Training Sectors in Kenya.” Under Section 2.10, states that the Circular observed that the Sessional Paper recommended the National and County Education Boards shall encourage the use of the two official languages namely Kiswahili and English both in and out-of-school as provided for in the Constitution of Kenya 2010. The language of the catchment area (mother tongue) shall be used for child-care, pre-primary education and in the education of Lower Primary children (0-8 years) (MOEST, 2014).

According to Wamberia (2016), the English language that was inherited from the colonialist is still associated with professions, white-collar jobs, upward mobility, power and material prosperity. Mother tongues on the other hand signify lack of sophistication, pre-modernity and so some backwardness. Kiswahili language which is a mother tongue for some Kenyans, a national and official language in Kenya alongside English is placed in-between English and the other mother tongues in a three-tier language prestige hierarchy (Wamberia, 2016; Nyaga, 2013). Due to the prestige accorded English compared to the other languages, many parents prefer their children learning in the language.

According to Wamberia, a leading professor of Kiswahili in a top university posits that the policy that is perpetuating the use of mother tongue in formal learning as was directed 50 over a half a decade ago, is has continuously been met with skepticism at best level to hostility at the very worst. This attitude comes from parents, members of society, and worse still scholars who consider the language of little or no value. In spite of these challenges,

Wamberia still believes the policy is reasonable and the challenges are easily resolvable. (Njoroge, 2017).

Among claims of perceived retrogressive perspectives in the use of mother tongue as a language of instruction was made by Dr. Abagi (Kithaka, 2016) who perceived that mother tongue has been overtaken by socio-economic and technological development as spelled out in the Kenya's Vision 2030. In addition, it contradicts the commitment of the government to promote cohesion and national unity, is difficult to implement and that the policy goes against the rights of children whose parents work in communities outside their original home areas. Besides, Dr. Abiyio noted that such a policy would further lower the learning outcomes in most public schools which are already lagging behind private school. The perspective is however refuted by the Commissions in Kenya such as the Bessy Commission (1972), Ominde Commission which confirmed that the Kenyan mother tongues (indigenous languages):

‘bring developmental benefits to the children and the cultural benefits to the community when school life begins without the shock of the confrontation with a new language (English or Kiswahili in the case of Kenya).’

The current policy of education is faced with challenges such as the teacher competence in local and languages learning resources but as Wamberia observes, curbing the challenge is cheaper than the loss to be suffered if when policy is unimplemented. One way of resolving challenges in the current language in education as proposed by scholars include popularization by government of African languages, introduction of African languages as LoIs, translating major masterpieces into African languages and massive governmental financial support. All of these efforts would possibly help in promotion and mainstreaming

of local languages further in education. It was noted however that major donors support English hegemony and are reluctant to support local languages for use as medium of instruction. A good example is the USAID-aided Tusome program which ignored policy and for four (4) years promoted English literacy in lower primary schools. Based on this background, the study was set to find out how prepared the County is in the implementation of the MTE policy (Lingam, 2022).

The UNESCO land mark publication in 1953 underscored the importance of educating children in their mother tongue: an education that is packaged in a language which the child does not understand is simply difficult for the child. Children are found to learn better when they start off education in mother tongue then transit smoothly to a second language (English in Kenya, for example). The pre-colonial education commissions such as Phelps Stoke Commission (1924), recognizes the significant role played by indigenous languages in development of character and acquisition of life skills in learners. Bessy Commission notes that there are many benefits that accrue when a child starts formal education in a language that he or she understands hence underpinning the benefits of the indigenous languages in education. in a language that he or she understands. The post-colonial commissions such as Gachathi (1976); Koech (1999) and Odhiambo (2012) all recognize the place that indigenous languages occupy in a child's education and all three recommend that the child should be taught using the predominant language in the school catchment area and Kiswahili should be used only in schools with heterogeneous school population. In view of the above background, this study sought to investigate how prepared primary schools in Meru County are in implementing highly recommended policy. The area of preparedness include teacher, instructional material and institutional implementation.

Additionally, the study sought to establish whether the attitude of the teachers moderates or does not moderate the implementation of the mother tongue education policy in Meru County.

2.2 Implementation of Mother Tongue Education Policy

The implementation of mother tongue language policies has been a topic of discussion and debate in many educational systems worldwide. This is particularly relevant in countries where there are multiple languages spoken and where there is a need to balance linguistic diversity with the need for a common language for communication and education. Highlights of the United Nation's Proclamation of Indigenous Peoples' Rights (UNDRIP) Art 13:1 states that Native people have the freedom to conserve, utilize, expand, and pass on their cultures, including their past, oral culture, speech, and doctrines. Article 14:1 states that 'the Native peoples possess the freedom to provide education in their native speech, in accordance to their cultural beliefs' (UNESCO, 1953).

The studies have confirmed that the use of the mother tongue (henceforth referred to as L1) in classroom instruction enhances the classroom participation of learners, expands the possibility of households and society to engage in the studying of learners and decreases attrition. Further, it is proven that using the native language as the instructional medium improves the intellectual development of the trainee, and the efficiency of school learning is ensured by carrying out the learning in a language the child speaks (UNICEF, 2020). L1 as an instructional medium has been recommended globally for pupils in lower primary schools (UNESCO, 2003). For children joining school for the first time, L1 is an essential foundation.

Njoroge and Gathigia (2017) and the UNESCO (1953) recommend the use of mother tongues in the lower primary school education, not in Kenya but worldwide because of the numerous benefits to the learner as compared to a foreign language. Wotsuna (2015) confirms in countries such as Ethiopia, Somali and Tanzania where the use of MT has been adopted for use in primary school level, there is reported lower percentage of illiterate people, repeaters and higher enrolments compared to the counterpart countries such as Kenya and Uganda where due to the use of English after the initial years of schooling. In addition, there have been many recommendations that have informed Kenya's education sector over the years on the way indigenous languages should be utilized for both individual and national development. The author study proposes that educational policies be implemented to revitalize indigenous languages so that the Kenyan learner can reap the benefits that accrue from the use of indigenous languages in education.

Globally, Saru and Honna (2019) revealed that the education policy and in particular the National Language education in Japan has experienced reforms based on the changing economic and social situations. Clear distinction has been made between the official tongue and teaching language in Japan, and in terms of execution, 99% of all Japanese study and speaks Japanese, which is the national language. Language education is prioritized (Sachiyo & Maher, 2017). To ensure quality, studying materials are provided; leaders and teachers are given quality training in an effort to ensure that they are effective in delivering to learners effectively (Saru & Honna, 2019).

In the United States, the rights to learn, access, and the ability to learn in one's native dialect(s) poses a contentious issue among education policymakers in the country (Tollefson, 2013). This is because the USA continually attracts diverse people from various

linguistic cultures and ethnicities worldwide. Some of the state's policies on language of education for minorities have been progressive, a good example being Pennsylvania (Johnson, 2011).

In the state of Israel, incorporation of Hebrew as the MT into EFL classrooms proved difficult for teachers in the past since the majority of English teachers were newcomers and had no knowledge of Hebrew themselves. Later however, Hebrew became a language spoken commonly among the students and teachers alike but teachers avoided using it in teaching often because it was considered pedagogically inappropriate. This points to one construct in this study which is the moderating effect of teacher's attitude towards the MT policy. As seen in Israel, when the attitude of the teacher is not appropriate, implementation of policy suffers.

Several Asian countries provide MT as their basic language of instruction. A survey by UNESCO revealed that North and South Korea, Japan, the Maldives, and Vietnam of which up to 90% of the learners could access education in their MT (UNESCO, 2005). Specifically, in South Korea, as Jean (2019) revealed, the language policy provides for Korean as the national language and it is offered from the elementary to the secondary schools regardless of the student's economic or social backgrounds. The policy is so strict on MTE policy implementation that there has been calls for special consideration to Korean returnees and foreign residents to be considered either through offering other international languages or considering them while teaching in a Japanese class. Japan as one of the developed country in the world shows that MTE language implementation is usable in the development of a nation.

At the beginning of the 21st century, the government of Hong Kong made a decision to implement a policy to increase the use of Cantonese in schools. Although the choice was met with opposition as English was strongly viewed to be a medium of education that leads to better levels of proficiency and valuable, the Hong Kong Department of Education however stood and upheld the policy decision to increase use of the MT in schools. Their justification was based on the fact that "educational research worldwide (and in Hong Kong too) showed that learners comprehend best using their vernacular." In reality, they pointed out, on the Hong Kong Certificate of Examination; students who had been taught in Chinese had outscored those who had been schooled in English in both Chinese and English (Hong Kong Department of Education, 1997). In support, Ho and Lu (2019) came to the conclusion that MT training has provided a helpful and welcoming learning environment for students, despite initial antagonism from students, trainers, parents, and administrators in the preceding year.

The Philippines Bilingual Education strategy places a strong emphasis on the need to foster literacy both in English as a language of greater communication and in Filipino as an emblem of identity and national unity. Young (2010) contends that the majority of Filipino children start school in their L1, which they cannot speak or comprehend well. Only the learners' first language in this context can include both a national and an ethnic dimension by serving as a sort of link to an individual identity. Hamroev (2019) claims that expository teaching is widely used in education and has some advantages but the lack of this type of teaching reflects the weaknesses of explanatory and illustrative education, such as poor attendance of learners in the teaching and learning process, and the general nature of

negative feedback. To address these weaknesses Hamroev suggests creative learning opportunities.

The implementation status of MTE policy shows that countries such as USA, Israel, Japan, Hong Kong, South Korea and North Korea have been fairly successful. This implementation has not come without opposition from stakeholders like parents, teachers and learners who perceive other (mainly foreign) especially the world lingua franca English. It has been established that governments who have established the benefits of using MTE in education have stood their ground and implementation has been successful. In other nations, adoption of a bilingual policy has also worked so as to increase inclusivity. These research findings guided the current study as researcher set out to establish how MTE policy is in Meru County, Kenya and how prepared schools are in terms of teachers, instructional materials, institutionally and the attitude of teachers as a moderating factor.

In Africa, majority of nations use their inherited colonial languages as their main form of instruction during the first years of formal education (Walter & Dekker, 2011). These languages include English for nations like Kenya, Uganda, Cameroon, and Mauritius, and French for nations like Mali and Senegal. However, many young people entering classrooms for the first time are illiterate in those languages. Literacy levels in the early grades in sub-Saharan Africa remain low despite some improvements in access and learning. The renewed need for improved quality of teaching and learning focus has turned to the importance of the instructional language (USAID, 2021).

Towards this end, the African Union (AU) has long been interested in the inclusion of African native languages in educational curricula to fully rehabilitate African languages in

media, education, literature, and daily life. In addition, the Academy of African Languages (ACALAN) has also been entrusted by AU with the mission to fully promote the native languages in the African continent “Mother Tongues across the border” a project in the East African region involving 13 countries namely Uganda, Somalia, Seychelles, Kenya, Mauritius, Rwanda, Comoros, Tanzania, Eritrea, Sudan, Ethiopia, Djibouti, and Madagascar. Implementation of MTE policy in African countries has been established in countries like South Africa. The policy has legal and statutory inclusion policy was enacted over 15 years ago in South Africa.

Gumbi (2021) indicates that there was a crisis as learners failed to achieve satisfactory results during their academic pursuit because the dominant language in the curriculum of most schools was English. An empirical study in 2017 showed that teachers resorted to code-switching in their daily teaching to deal with communication barriers. This technique helps learners to unlock their brains and to give a better understanding of the subject matter and complex concepts. Currently, the isiZulu has been embraced and teachers have been encouraged to continue usage of isiZulu (code-switching) in assisting in mastering difficult concepts of all school subjects by learners. The freedom to select the teaching language is vested in the individual, according to South Africa's Language in Education Policy (LiEP) as of 1997, which shows strong support for L1 instruction (Trudell, 2016). Kangira (2016) highlights that the implementation of the MTE language policy includes the low variety status of the L1 languages against English status of prestige and power, lack of monitoring of the implementation processes, inequality of indigenous languages, effects of globalization and inadequate resources for teaching (Kangira, 2016). Eleven (11) indigenous languages are accorded official status to enhance the use of several languages,

to widen the range of national tongues, and to reduce the limitations arising from the misunderstanding between the dialect spoken in the homestead and that in the learning environment (Kamwangamaku, 2004; Trudell, 2016).

In Ethiopia the MT policy was enforced in 1994 via Article 5 of the FDRE Constitution and in alignment with the Ministry of Education states that under the policy, any language that is the MT of all children in an area can become the LOI (USAID, 2021). The national language, Amharic was adopted as the LOI in primary education for the entire duration of primary education to grade 8 while English is offered as a course of study from Grade 1. As a follow-up for implementation, the government provides pre-service teacher training and preparation of teaching materials (Barnes, 2013). In primary schools, about 30 dialects are presented as an area of study or used as an instructional language (Derash, 2013). Three of these languages are taught as a lesson above the primary level of education, and several of these languages are used in the training of primary teachers (Trudell, 2016). Experts generally concur that Ethiopia's pro-L1 policy is the most progressive national policy in Africa and that, in terms of developing nations with multilingual populations; it falls within the "best policy" boundaries.

According to Karikari et al. (2022), it is noted that in Ghana Education Service language of instruction (LoI) policy does not allow mother tongue usage in upper primary schools and this causes great harm to fostering quality teaching in rural areas. In a study examining the impact of mother tongue as the LOI and pupils' success in mathematics in rural upper primary classes in Ghana, researchers put a claim that research has shown there is a gap between LOI and the language used by learners. There was poor performance in mathematics across all levels in Ghanaian schools which was a cause of concern to

education stakeholders. This issue is seen to be worse in rural areas with low levels of English literacy which is the LOI. Primary data was collected with questionnaires distributed among 38 upper-primary-class teachers. A quasi-experimental study using pretest and posttest homogenous group design was carried out in three classes. A control group was exposed to mathematics instruction in English which is the L2 and an experimental group was exposed to instruction in the mother tongue only the L1. Results showed that a great and positive relationship existed between LI as LOI and mathematics success in rural upper primary classes. Learners ask questions and respond confidently when they are well-versed with the LOI. Effective communication builds a better teacher-student interaction which leads to cognitive development. Challenges in implementation of the policy were cited as lack of proficiency in teachers teaching MTs, teachers challenge in getting exact words for mathematics written in English when translating to their mother tongue and instructional resources. As other African countries, there was a great challenge of English supremacy. For example, teacher training in colleges based on English as the LoI makes teachers less prepared to educate learners using their mother tongue. Teachers claim that the lack of materials makes teaching using their mother tongue difficult. The researcher recommended the government to allow teachers use their mother tongue in teaching primary school learners and introduce English to junior high schools in rural areas.

Trudell (2016) reports that The National Guide document in 2013 emphasized the language-medium policy in Zambia and stated that the primary causes of the low level of reading in the past were the improper use of the instructional language, English (MOESVTEE, 2013; Trudell, 2016). In support of Trudell (2016), Wakumelo (2011) noted the use of Zambian languages allows citizens to actively participate in the economic,

cultural, social, and political affairs of the country. Even in the classroom, learners can express themselves freely. Challenges in implementing MT as an instructional language in the lower primary in Zambia according to Ogawa and Sanfe (2023), was found to be insufficient training of teachers. To surmount this challenge teachers apply code-switching techniques in teaching while students on the other hand are allowed to use their native language in specific pedagogical situations such as when explaining complex discussions and concepts.

Tanzanian language of instruction policy is that Swahili be strictly used as LoI at the primary school level of education and English takes over in the secondary school level (Roemer, 2023). The study reported that children who are non-Kiswahili speakers such as the Ngoni, Hehe and Makonde faced challenges in learning. The parents on the other hand insisted that their children be taught in English which is considered the ‘miracle-working spoken language (Roemer, 2023). Ritha et al. (2022) while reporting on the findings of the perceptions and perspectives facing pupils, particularly in the rural areas of Tanzania recommend that because L1 will give the pupils access to quality education, the planners and policymakers need to include native languages in the learning processes. This is confirmed by the UNESCO 2018 report that shows Tanzania ranked in the 31st percentile in learning among the countries in the world which is at the relatively lower side.

Uganda's current language policy was enacted in 1989 and implemented in 2007 (Kyeyune, 2023). It stated that, in the first four years of the learner's education, MT should be used as an instructional language, whereas English should be included as a subject. The 2007 curriculum policy mandated the adoption of native languages to be used in lower primary as the instructional language while the English language to be used in upper primary and

in higher learning institutions (Uganda National Examinations Board, 2012). In 2012, the Uganda National Examinations Board (UNEB) confirmed that the performance of Class 3 learners in mathematics exceeded the English language, proving that the numeracy being taught in the first language enabled a better understanding of the concepts by the pupils (UNESCO, 2016). In support, Draai et al. (2014) confirmed that native languages as instructional language have contributed to improved skills in literature and participation of children in their lessons.

Rwanda now has two official languages of instruction throughout the educational system with Kinyarwanda in the lower primary years and English from upper primary through university (UNICEF, 2016). The Rwandan genocide of 1994 led large numbers of Rwandans to return from exile in the surrounding Anglophone countries. In response, in 1996 Ministry of Education (MINEDUC) announced a new education reform that designated Kinyarwanda as the medium of instruction for grades 1 to 3, with English joining French as the medium of instruction for grades 4 to 6. In addition, Article 5 of the current 2003 Constitution of Rwanda (Constitution of the Republic of Rwanda, Art. 5⁴²) lists Kinyarwanda as the national language and Kinyarwanda, English and French as the official languages of Rwanda. The Rwanda government adopted the Literacy, Language and Learning Initiative (L3) is a 5-year initiative to improve Rwandan students' reading and mathematics skills. Implemented through a partnership led by the Rwanda Education Board (REB), and is funded by USAID, the project initiative's purpose is to assist the Rwanda Ministry of Education in implementing a national-scale early literacy and mathematics program, using Kinyarwanda as a medium of instruction in the first three years and later transitioning to English as a medium of instruction in Grade 4 (UNESCO,

2016). Other efforts to compliment the use of Kinyarwanda in the classroom, is the Save the Children's Rwandan Children's Book Initiative (RCBI) implemented to improve literacy. This is through the supply and demand for Kinyarwanda children's books and ensuring that books are used effectively in the classroom (UNICEF, 2016)

In Kenya the National language policy mandates use of the language of the catchment area as the medium of instruction in Grades 1 to 3 (Nyatuka, 2014); but English is used extensively as the medium of instruction even in Grade 1 classrooms (Trudell & Piper, 2014; Bunyi, 2013; Muthwii, 2002). English and Swahili are supposed to be taught in these schools as subjects. Despite the policy, English remains the dominant language and is considered the powerful, revered, and prestigious language (Dubeck et al., 2012; Trudell, 2014). Children are taught in English as early as Grade 1 or teachers mix MTs, Kiswahili, and English (Ruto, 2004). The country has a wide sociolinguistic context with close to 47 local dialects spoken in the nation hence making it a multi-cultural and multilingual country. However, English and Kiswahili are the national languages of the country. Native languages are mostly used in locations in which they are recognized and are spoken (Ondodo, 2020). Although numerous research has highlighted the role of native languages in development and their essential function in matters related to technology, health, farming, national cohesion, democracy, and growth as a whole, it has not successfully been embraced. This is confirmed by Adebayo and Babalola (2021) who observe that it was the realization of the importance of MT in the teaching-learning process that Kenya imposed language laws in schools way back in 1976 with a decree that trainers be to be trained in their L1 in early stages of learning despite its multi-lingual nation.

Mwakira and Mwangi (2021) verify the claims made by other academics that in Kenyan day schools, where students come from a local environment and speak their native language, students face a lot of difficulties on how to manage the transition between their homes where the only mother tongue is spoken and in school where the language of communication and instruction is English. They observe that in boarding schools where English speaking would remain consistent such students may be at an advantage. This points to a clear issue of equity and disparities in education. This increases the chance of such students dropping out of school, repeating classes, and finally poor academic performance. Omoniyi and Owolabi (2013) add their voice to the MTE debate by recommending that the L1 be prioritized in the teaching of physics while advocating for the deemphasizing the use of English language to enable the physics teacher to explain in the native language whenever they are teaching. An additional voice is from Mandillah (2019) claims that the implementation of mother tongue education (MTE) remains a challenge in many African countries, including Kenya, despite its critical role in facilitating second language (L2) learning, developing additive bilingualism, and continuous cognitive development. In Kenya, the ongoing curriculum reforms from the 8-4-4 system to a new system of 2-6-3-3-3 have re-emphasized the role of MT, which has not received as much attention as it deserves in the past (Mandillah, 2019). The language policy in Kenya has been influenced by several education commissions, including the Phelps-Stokes Commission (1924), the Beecher Report (1949), the Binns Commission (1952), the Ominde Report (1964), the Bessey report (1972), the Gachathi report (1976), the Mackay report (1981), the Kamunge report (1988), the Koech report (1999), and the Odhiambo report (2012) (Mandillah, 2019). However, the implementation of the MTE policy in

Kenya is likely to face challenges if it is not supported by careful implementation strategies that take care of teacher training, the production of teaching/learning materials, and attempts to change the attitudes of parents towards indigenous languages (Mandillah, 2019).

Several initiatives have been progressively put in place to revitalize the use of MTs in Kenya. BTL, a Kenyan NGO had in conjunction with the KICD and the Ministry of Education conducted pilot projects in among other communities the Sabaot, Tharaka, and Pokomo. The programs have been designed to develop and test effective reading materials, train teachers, and write instructional materials to provide evidence of the concept for the efficiency of MTE as a form of increasing educational achievements to Kenyan children, especially the small language communities (Trudell, 2016).

In the implementation of MTE globally, great success was registered in countries like South Africa, and Zambia, Gaps in literature as seen globally, continental regional, and local levels indicate issues in code-switching between English or other national languages and the ILs as evidenced in (Mwakira & Mwangi ,2021) and (Mwangi,2009). Orthographic barriers were noted in (Ondondo, 2020). Teacher code-switching was reported in (Kodawole, 2002) and (Mkandawire, 2016). Indigenous language of instruction faces stiff competition either from the supposed colonial languages, languages that are carriers of religion, or the lingua franca of the region as espoused in Ho & Lu in China where Chinese is preferred, (Walter & Dekker, 2011; Meganathan, 2011). These gaps advise our intention to investigate the readiness to implement ILE in the County of Meru government lower grade schools.

The findings revealed that the implementation of MTE policy is likely to flop if it is not supported by greater resource allocation, teacher training on L1 methodologies, a change in attitude concerning MTE, political will, and clearer policy objectives (Mandillah, 2019). Therefore, to avert these challenges, the paper advocates for implementation strategies such as greater resource allocation, teacher training on L1 methodologies, a change in attitude concerning MTE, political will, and clearer policy objectives. These strategies ensured that the implementation of the MTE policy is a success by taking care of teacher training, the production of teaching/learning materials, and attempts to change the attitudes of parents towards indigenous languages (Mandillah, 2019). It is crucial to note that indigenous languages are crucial vehicles in the acquisition of education, and the recommendations made by the education commissions over the years have emphasized the need to teach using the language of the school's catchment area (Mandillah, 2019). Therefore, implementation strategies such as those suggested in this paper will go a long way in ensuring that the MTE policy is implemented effectively in Kenya.

In the implementation of MT policy, the reviewed literature indicates that countries that have successfully planned their language in education such as the Philippines, Japan, and Israel have laid down solid mechanisms that have supported an effective and sustained policy of education. The same applies to countries in Africa where countries like Ethiopia have continually trained teachers, provided teaching and learning resources, and developed a mechanism to monitor the exercising of the rule. In South Africa, the success realized after IsiZulu was adopted for teaching, teachers and policy implementers call for instruction of sciences in L1. Challenges facing effective L1 implementation globally up to the local level were mainly noted to be cultural and linguistic diversity as seen in Kenya,

Tanzania, multilingual nature (USA). Parental, teacher, and community attitudes or basic ignorance of the gains of the use of MT was recorded as a key barrier to embracing the implementation of MTE. Lack or insufficient instructional materials are a hindrance to MT policy implementation as in Hong Kong, and Japanese, these research gaps were key in this study because they provided a guide on the key pertinent areas that influence the preparedness to implement the MTE policy in Meru County. The key variables of the study were teacher preparedness, instructional preparedness, and institutional preparedness. The attitude of the teachers towards that MTE policy implementation was considered as the variable to moderate the preparedness on implementation of the MT policy in Meru County, Kenya.

2.3 Teacher Preparedness for the implementation of MTE policy in Meru County

Dennis and Malone (2011) claim that the success of mother tongue-based- multilingual schooling (MTB-MLE) programs relies largely on classroom trainers. As such, in the school setting, instruction success depends to a large extent on the teacher factors. This includes teachers' attitudes, competence and the equipment of teachers for teaching in MT (Dennis & Malone, 2011). This section examined the teacher preparedness factors in the implementation of the MT from the perspectives of various contexts across the globe. The focus was mainly on teachers' training and competency in MT, teacher attitude and teacher-child interaction. According to USAID (2015) the teaching and recruiting of teachers should be accompanied with the instructional and languages approach. This may include recruiting trainers who are fluent in the instructional language (Ball, 2011), training trainers to train particular subjects in a target dialect (USAID, 2015), and trainers being

deployed to schools where the expertise in language goes one-one-on-one with those of their trainers (Ball, 2011).

According to Bold et al. (2017), the school enrolment increased universally over the last thirty years. This enrolment does not guarantee that children acquire qualifications set out in the curriculum. There has also been a rise in the number of children in lower and middle-income countries completing primary schools but they still are not competent. Teacher quality is key in students' learning and their excellence but little is known about specific extent of teacher's quality matter. For a teacher to be well prepared to teach successfully, they have to spend adequate time in teaching, have the relevant knowledge content to basic and higher order skills and to possess pedagogical knowledge and skills to transfer what they know to learners (Bold et al., 2017).

Bold et al. (2017) conducted an investigation through direct observations, unannounced visits, and tasks from primary schools in seven sub-Saharan African countries namely Kenya, Nigeria, Mozambique Senegal, Tanzania, Togo, and Uganda. The key findings from the study were that firstly, learners were taught for about 2 hours and 50 minutes per day largely because even when teachers were in school they did not teach. Secondly, teachers' subject knowledge is low and only about one out of ten teachers, fourth-grade teachers master their learners' language curriculum, and thirdly, a quarter of the teachers failed simple tasks like subtracting two-digit numbers. This ill-preparedness draws attention to initial training and continuous development of the teacher, commitment to their career and their attitude towards the teaching career.

In MT teaching, the teacher must have the right attitude and some knowledge about bilingual literacy and other skills that ensure the desired learning outcomes in education.

On the other hand, a teacher may be well trained but is faced with factors such as unclear policy in MT learning and teaching, unfamiliarity with the benefits of MT to themselves, the learner, and society, and lack of training in handling diversified MT classrooms.

The attitude of parents, learners, administration, or colleagues toward MTE may be a challenge even to the trained teachers. Teachers of MT require instructional resources to support MT learning. Use of ICT in instances that, the teacher and learner do not get a word or vocabulary to express a concept while learning. It is expected that when armed with the above and the desired attitude, a teacher is well prepared in teaching a MT classroom hence enabling the mother tongue policy to be implemented.

Inadequate and poor Chinese training materials, resistance to parental pressure and fear of the uncertainty of government dialect regulations also were noted as the main challenges interfering with teacher preparedness in Hong Kong. Ameer (2016) claims that whereas teachers are responsible for finding pleasing and interactive methods to teach their students in MT, they face the challenges throughout the switching period from English to Chinese as a method of instruction (MOI). According to Tse et al. (2001), who investigated teachers' perceptions on a successful enforcement of MT regulations, results showed that trainers had a good reaction towards the evolution of instructional language generally but they faced challenges, such as inadequate experience in using contemporary benchmark Written Chinese (MSWC) as an instructing language.

In Saudi Arabia classroom teachers used games to avoid boredom during classes, since children love to have fun and play. This plays a key role in enhancing efficiency in teaching foreign languages. Games create the desire to communicate and create predictability. While playing learners need to use the language and repeat designs which improve their

capabilities. Games make classes fun and interesting to learners and bring their concentration back to class as they are participants. Ersoz (2000) and Orolick (2006) encourage collaboration, cooperation, contention and turn taking. Games should not be overused instead should be used appropriately and must be relevant to the topic and lesson plans. In teaching using MT, teachers should spend much of their time figuring out how the learners operate and think their attitudes, interests and environment. Use of real objects that, children can envision later in a good way to learn vocabularies of languages. Another method of teaching is that, the learners should listen and repeat the words being taught in class.

In India, Rajathurai (2020) argued that MT education requires teachers who share the culture and language with the children. The language used in teachers' training should be used in the teaching process. While agreeing with Rajathurai, Benson (2004) found that teachers face a challenge in teaching local schools when they are from different local areas and require training on the most capable technique to do local language-based teaching. This is a common phenomenon as experienced in Kenya during a process known as de-localization. Primary school teachers were deployed in locales whose MT was very different for both the learner and the teachers making instruction in MT difficult. It was discovered that this category of teachers were bitter and unfocused at work. Asking them to go an extra mile to learn a different language and culture was asking too much.

In the United States of America which has a large cultural diversity emanating from the immigrant populations, Goodwin (2017) sought to address the questions about how well teachers are prepared for immigrant children and newcomers entering the US because in the US classrooms, there are diversified learners because of the immigrant children. The

classrooms have a concentration of newcomers from Europe, Mexico, Africa, and Latin America. Immigrant families are therefore in the emergent bilinguals because they represent the multiple diversities. Teachers must understand the meaning and effect of different ordeals in everyday life as well as the socio-political effects of immigration status on life in the US. Data shows that a large number of English language learners in the US are native and hence conversations about English as a second language encompass immigrant children solely. In order to successfully add value to learners in these classrooms, survey data indicated that teacher educators to diversify classes and consider multicultural matters. Secondly the teachers' preparation curriculum should explicitly and intentionally address immigrant children at teacher training level. It was not clear however whether the government policy provides for the bilingual teacher training.

According to Sullivan and Sjolander (2019), Philippine the government supports teacher training for MT education. These are specially trained teachers who are on alert in various provinces and take students in and learners can move from one province to another to learn. At any given time when there is a quorum of about 5 learners, a teacher moves in to train. This is as opposed to teachers who are in regular schools with a full teaching load, may not be have good time for MTE lessons. The only challenge the teachers face is the conflict of use of English at home by parents hence pulling the learner back. Parents may also not deliver their children for training when they are due for classes (Sullivan & Sjolander, 2019).

Teaching using MT in Sweden is viewed by teachers as the notion of a common heritage. Ganuza and Hedman (2015) says that teachers visualize themselves as advocates and role models for the MT. The fifteen (15) mother tongue teachers of Somali, Bosnian, Croatian,

and Serbian for grades 1-5 had completed teacher education in their country of origin or Sweden. Through direct interviews by the researcher, these teachers reported that the challenges they faced was time limitations and the difficulty in catering to all needs of students due to varying degrees of proficiency in MT as well as teaching materials. The teachers expressed a strong commitment to their learners and their interaction went beyond a normal teacher-pupil interaction with them taking the duties of an advisor, pal, or parent. This motivated them to work as MT teachers. The teachers referred to their learners as disadvantaged in Sweden and came up with MT as a subject to make a difference for the pupils and success in society.

Comparatively in Saudi Arabia during English classrooms where it is taught as a foreign language (EFL), most learners feared their teachers and opted to remain silent (Edge, 1992) The education system in Saudi Arabia is deeply anchored in Islamic values and ethos hence a natural resistance to languages like English which can be termed as cultural erosion. There are many challenges to teachers of English which include the mother tongue of Arabs which is Arabic. These research findings have been included here to show how suitable it is for a teacher to utilize their mother tongue in learning. Teachers face problems as a result of policy making and implementation. The researcher whose data was through direct interviews makes an interesting remark, ‘an international language belongs to its users not to the countries whose national languages have become internationalised.’ Learning outcomes are compromised as teachers and learners to make sense of a language whose writing system is not close to their mother tongue.

In South Africa, Mashige et al. (2019) carried out a study on the experiences of instructors in isiXhosa as an instructional means. Results revealed that teachers lacked training in

teaching subjects using isiXhosa as an instructional language. It also pinpointed that trainers face a lot of challenges in vocabulary in training life skills and mathematics using isiXhosa. The writers recommended that teacher education centres should be collated with relevant and adequate professional development to teachers for optimal teaching in isiXhosa.

Majority of teachers in Namibia resorted to translanguaging in order to allow students to express themselves in their mother tongue because their English proficiency is usually poor. This pedagogical approach, to use mother tongue, other local languages and English as Second Language (ESL), has a potential to contribute in academic achievement (Lipinge & Banda, 2020). Retrogressively however, regardless of the above implemented National Language in Education Policy that spells out for English language to be taught from grade 4 upwards, teachers in Namibia who are non-native are expected to teach in English because of its prestige and availability of teaching resources (Töttemeyer, 2017). Agreeing with Töttemeyer, (2017), Lipinge and Banda (2020) indicate that both teachers and learners are highly challenged in the use of English as a language of instruction. This challenge impedes the ability of the teacher to deliver a MT lesson appropriately.

Implementation of MT as an instructional language in lower primary in Zambia according to Ogawa and Sanfe (2023) just as the case of South Africa encounters insufficient training of teachers. Due to this challenge teacher apply code-switching techniques in teaching while students on the other hand are allowed to use their native language in specific pedagogical situations such as when explaining complex discussions and concepts while in Uganda. Ssentenda (2016) found that teachers were not allowed to use Luganda to teach Ugandan primary schools. Teachers also have pronunciation problems in English because

of poor English expertise and also English is not commonly used in their community. Lipinge and Huddleston (2023) confirmed the same lack of preparedness for teachers. The remedy used by teachers was by having remedial classes for further teaching and use of code-switching to Oshiwambo for learners to understand. They also included the use of dictionaries when creating lesson plans. The use of trans-language is important to learners because it encourages them to participate and engage their minds during class. This is an indication that MT plays a vital role in the education of learners as noted by Lipinge and Huddleston (2023) which is another reason why teachers are negative towards the use of English as a Lingua franca in learning and teaching. This would make the policy shift from having English as the language of learning and teaching to having it being used alongside Namibian's indigenous languages.

Teachers in Zambia engage code switching mechanisms a lot in order to enable their pupils to understand the concepts because although Cinyanja is the national language, teachers tended to use English and Bemba language. Mkandawire (2017) in Zambia found that there were differences in the preferred instructional language in both primary and public institutions in the country. In private schools, teachers showed consistency in using English as an instructional medium in class without referencing any other language. In government schools, the trainers use three dialects when training. This challenge is as a result unclear and enforced language in education and enforcement. Curriculum support officers and Quality assurance officers are expected to play their respective roles as they represent policy implementation at school level.

Himbutane and Benson (2012) noted that there was the inclusion of teacher capacitating, resource creation, and institutional support since the implementation of the bilingual

program in Mozambique. Terra (2021) too agrees that teachers require training on the advantages of bilingualism for re-culturing to occur. As in the case of Zambia, support is also required from schools and the government. Testing in other languages must be provided by the Ministry of Education and educational policies are inclusive of bilingual practices. This makes L1 more successful and useful and would make teachers not shift to L2 which is Portuguese hence achieving the aim of instruction in MT and subsequent positive learning outcomes. Teachers should be provided with resources and priority given to teachers from the local community.

In Kenya as elsewhere globally, at the continental and regional level, ideally, teachers should perform optimally in teaching using mother tongue and must therefore be prepared if learning is to effectively take place. Teachers require preparedness that includes training, continuous training, access to appropriate, relevant and up to date reading and teaching and reference materials. A study by Kiramba (2016) used a qualitative case study, which involved home visits, interviews, and collecting artefacts, to understand the Grade 4 multilingual communication in the North Imenti sub-county. The study noted that MT speaking was punished through monitoring with a punishment meted to any user. Teachers who were found to be linguistically and culturally diverse implemented the punitive 'school policy'. Ironically findings revealed that they appreciated that learners were more interactive in class when they used L1 to discuss and answer questions. The study proposed that, action research be conducted to offer opportunities for reflection on how their ideologies affect students learning practices and outcomes. Anyien (2017) in her study 'Challenges Faced by Teachers when Teaching English in Public Primary Schools in Kenya,' noted the mismatch between the language policy and actual practice in Kenya.

Ideally, mother tongue language ought to be used to reinforce instruction as recommended by the policy. Learners are not afforded the chance to learn from their familiar home language hence inhibiting their learning. Furthermore, learners' negative attitudes toward English pose a significant barrier to effective teaching. This negative attitude emanates from the fact that learners have limited competence in the language, preventing them from actively participating in classroom activities. Anyiendah's (2017) research validates the notion that the teacher is the most critical participant in educational reform, particularly in one that touches on what goes on in the classrooms. However, their training and innovative skills are necessary but not sufficient for effective learning. Other prevailing conditions pose a challenge to the teacher, hence impeding learning. Agreeing with Kiramba (2016), Anyinda (2017) gives an insight into the challenges that teachers face in Kenya classrooms and highlights the need for policymakers to address these challenges to improve the quality of education in the country.

In Turkana according to Ng'asike (2019), teachers reported that they were afraid government officials would reprimand them for using mother tongue in instruction. In the study conducted to establish how MT policy would benefit the Turkana nomadic community learners, part of the respondents were teachers who insisted on instructing in English, a language that was foreign to their learners' other tongue in schools because their target was the Grade 8 examinations which were presented in English. Performance in exams was noted to be key to government. The end result to this pedagogical technique was that learners ended up memorizing in rote learning and teachers focused on content that was necessary for the examination. These findings revealed that there were teachers who lacked resources, overwhelmed by foreign concepts and pressure from the government

to persist on using English for instruction even in the lower grades. Mose and Kaschula in (2019) investigated teacher preparedness for teaching English focusing on 5 lower primary schools (Grade 1-3) in Western Kenya through interviews and observation on teachers to collect data. Results showed that the performance of students was poor and connected it with the lack of competence on the part of the teacher to use mother tongue in teaching.

Begi (2014) noted that, to be able to start teaching, teachers must be well prepared. Continuous improvement of skills and knowledge through in service training is essential. The purpose of in-service training is to understand the rationale and importance of MTE, accept the new policy and consequently contribute in the successful implementation of MTE policy. When teachers are well prepared the positive results like retention of learners in schools, high scores are noted. Khejeri (2014) studied 40 primary schools in Western Kenya, Hamisi Sub-County. It was carried out by use of questionnaires, tape-recording and observations. Findings revealed that the teachers want learners to use English during learning. They viewed MT as interfering with English, the ticket to success in society. It was therefore recommended that the government needed to equip teachers with bilingual skills.

Chebet et al. (2018) in their investigation on the influence of preparation of teachers in MT language usage as an instructional medium in local Early Child Development Education institutions in Nandi County, their findings pointed out some of the challenges faced by teachers included including teachers' unawareness about the benefits of MTE, lack of access to training openings. Confirming the above findings, Begi (2014) confirmed that teachers unpreparedness in Kisii, Bondo and Kericho, was found to be a great hindrance to the adoption of MT as an instructional language in pre-primary and lower primary. In the

three sub-counties which were randomly selected, results revealed that majority of the teachers lacked training on usage of first language as an instructional medium although they were expected to implement the policy. Teachers mainly cited lack of training opportunities while others were unaware of the policy with training mainly focusing on Kiswahili and English (Begi, 2014). While these studies were in Kisii, Bondo and Kericho counties and not Meru County, this study investigated the status of mother tongue policy and its implementation preparedness in low public primary school of Meru County in Kenya.

Availability of materials, relevant orthography has seen a successful implementation of MT program in Tharaka-Nithi County that saw the training of children and adults. Sponsored by a non-governmental organization (NGO) Bible Translation & Literacy (BTL), the Ki-tharaka orthography was developed and used in the preparation of materials (Schroeder, 2000). Teachers were also trained and books used for training could be carried home. This improved the proficiency of teachers greatly and the training books were used by other persons and hence increasing the span of influence.

2.4 Instructional Material Preparedness for the implementation of MT language policy

Instructional materials refer to physical and electronic resources that are supposed to instil knowledge to learners in the training process (Faize & Dahan, 2011). Educational resources entail textbooks, prints, newspapers, magazines, slides, workbooks, pictures and electronic media among others. Teaching materials are important tools in any policy implementation process because they are used by students in developing their reading, solving, viewing, writing, listening, thinking, and speaking skills using media and technology. Once

instructional materials are available to teachers, and families have finances to help their children, students can improve their academic achievements (Faize & Dahan, 2011).

In the primary school MT curriculum, Khamroev (2021) in Uzbekistan served as a model for educator tasks during the designing of students' creative activities. His research showed that in order to develop engaging activities for pupils to engage in while learning a native language, a teacher must put out effort. Additionally, a connection between the trainer and the book, the trainer and the project, visual aids, and the teacher's connections are necessary for the success of training in the student's native language.

Lartec et al. (2014) in the Philippines conducted a study on problems and strategies encountered in a multilingual classroom by trainers in the enforcement of MT based instruction. The study established that among the challenges faced by the trainers included inadequate vocabulary and inadequate books written in vernacular. With the application of native tongue as an educational terminology, consistency is achieved by providing reading materials written in mother tongue. The preparation of these teaching resources was about the needs and interests of learners. Students' familiarization of their native language is enhanced through the utilization of resources written in native language thus leading to their proficiencies of the said language. Also, using MT instructional materials is appreciating one's native tongue. According to Dekker et al. (2008), 170 dialects of the Philippines, resource expansion seemed tasking inadequate availability learning materials. A study by Trujillo (2020) on the use of native language in instruction through the perspective of performance of pupils across the years in the Philippines revealed that lack of translated terms, programmed training and inadequate teaching resources in the teaching native tongue was constraining learning in MT. Teachers indicated that, steering their way

through this shift without relevant materials was difficult. These findings correlate with Alegada et al. (2014) who's study on the push and pull in the usage of native language.

As an instructional mothertongue in the Philippines revealed that teaching resources MTB-MLE teacher's handbooks are unavailable due to too much delay. A study by Abano (2014) on whether MTB-MLE was a hindrance or a solution in enhancing quality learning also revealed that teachers blamed lack of instructional materials to serve as a guide in the teaching in mother tongue inside the classroom.

A study by Abacioglu (2020) on teacher's multicultural attitudes and perspective-taking abilities as factors in culturally responsive teaching, a total of 143 primary school teachers from different parts of the Netherlands responded to an online survey. Through a multivariate multiple regression analysis to investigate the relationship between these qualities and teacher's engagement. The study found that learning and teaching in multicultural classrooms have brought major challenges to both teachers and learners. Gay (2010; 2002) indicated that, for education to become more meaningful and engaging academic knowledge and skills should connect to personal experiences and form within the environment to the learners. Gay (2002) Culturally Responsive teaching includes developing a culturally diverse knowledge base by learning about differences in communication and learning styles and taking an interest in the cultural standards of learners (Morrison et al., 2008). This can be made possible by making home visits giving chances to learners to give their views in class or asking learners to explain their life stories on paper. This helps teachers understand schooling and how culture may differ from home cultures and how the cultures and language may contribute to their attitudes and behaviors.

In Namibia teachers indicated that they use English as a Lingua franca for it is advantageous and examinations are written in English. Again, if the learners travelled abroad, they can communicate well (Huddleston & Lipinge, 2023). This study was a qualitative research to analyze teacher's attitudes towards English as a Lingua franca and its advantages as the language of learning, teaching and problems that come with it and the solutions. The target group was non-English L1 teachers and data was collected through semi-structured one-on-one interviews with open-ended questions. The findings were confirmed by Ngcobo and Bames (2021) who pointed out that English has acquired its prestigious nature. These results confirm that in Namibia, there lacks clear government enforcement of MT. In addition, the learning outcome is detrimental to learner's learning outcome because teachers are not competent in English and insist on using it. It is also ironical how attainment of prestige, white-collar jobs and other benefits can be acquired in English yet no learning happens in it.

Gay (2002) and Ngasike (2019) call for government to have culturally responsive teaching materials for use in order to be useful for learner. It more so means also coming up with relevant curricula and culturally responsive instructions to make learning efficient and effective; Cuseo (2000) adds that creating an inclusive school environment helps learners to feel more calm when they give personal views and experiences. Harriott and Martin (2016) claim that cooperative learning opportunities among students who vary in their cultural legacy and achievement levels promote companionship and acceptance of differences between peers and support for the peers learning.

At the continental level, Bukoye (2019) in Nigeria examined instructional materials utilization as a form for students' successful academic excellence and its indications for

advice. The research findings noted that the learners in private schools established adequate access of training materials in schools as compared to government-owned schools. Effective teaching and learning are greatly determined by the accessibility of training/studying resources such as laboratories, print books, and other equipment as noted by (Adegbija 2008) also adding that, lack of instructional materials reduces the quality of training and studying.

Bacon and Finneman (1990); Berardo (2006) studies have affirmed that using authentic materials has a great effect on developing reading understanding by presenting new words and expressions to learners. Allen (1988) mentioned that developing learners' strategies in understanding authentic texts leads to developing their writing ability in the targeted language learning.

Ommagin (1993); Rodgers and Medley (1988) say that, if students are to develop functional ability in the language and to communicate using the language of the world in the classroom, Joiner (1989) suggested that teachers need to examine current practices and materials used in language classes so that teachers can decide what learners listen to, how much, and how they listen. Herron and Seay (1991) indicated learners who listen to radio tapes in class activities have better-listening understanding than others and Omid and Azam (2015) said that, studies have shown the positive effects of authentic materials taken by learners who have interacted with the same and dealt with them. (Miller, 2005; Thanajaro, 2000) authentic materials lead to aural language development.

Engelbrecht (2015) noted that, the South African educational system does not have the resources needed to enable them to prepare for implementation. Inadequate teaching materials and types of equipment as well as lack of financial and administrative aid from

district officers are key challenges in supporting teachers to implement the inclusivity educational policy.

Tackie-Ofosu et al. (2015) study in Ghana also found that constraints to teaching in native-tongue were inadequate instructional resources in the native tongue. Further, according to findings in study by Asenso (2013), instructional materials have been developed in only five major Ghanaian languages and these five languages cannot be imposed nationwide and citizens of cultural beginnings

In Zimbabwe Mufanechiya (2011) carried a research on the feasibility of using MT as an instructional means in teaching Mathematics. The study found that the major challenge faced was lack of reference materials and corresponding literature in MT to use in teaching mathematics. In this regard, mathematical training and studying in the school classroom was characterized by the usage of both English and the mother dialect as indicated by the researchers' observation that there was a need for harmonizing mathematical vocabulary.

According to the study by Begi (2014), only a third (33.33%) of the lower primary school teachers had culturally relevant materials while the rest (66.67%) of the teachers lacked culturally relevant instructional materials. As such, it was evident that a good number of the trainers lacked the culturally relevant materials required to facilitate the adoption of the native language as an instructional language. Lack of relevant instructional materials was attributed to inaccessibility to culturally sensitive resources in the market, lack of facts on the produced resources, and insufficient funds for acquiring and developing culturally relevant materials.

In the region, Uganda's preparedness in instructional materials for MTE is well exemplified through The Mango Tree Literacy lab that has been instrumental in fostering growth and the application of Leblango in the region through the innovation of materials as well as training. Sixty titles of various texts to support all categories of community members in the Lango Sub-region were developed as a means to promote the use of Leblango in the entire region. Among the materials developed include a Leblango orthography guide, junior dictionary, transition primer, and Lango grammar books.

As the government of South Sudan delineated themselves from Arabic in education, one of the strategy was to embrace instruction in schools in English language. They also embraced making mother tongue effective in delivering quality education is the studying plans for toddlers from bilingual communities, as part of the Great Mission for All Children to Read which provides recorded lessons, vernacular learning resources, electronic music players and trainers enhancing capacity in Dinka and Bari-speaking regions. Also established is the Sudan Literature Centre focusing on literature expansion in over 20 Sudanese languages on top of English and Arabic where dictionaries, folk stories and church-based books are produced (UNICEF, 2016).

In Kenya, the study by Chebet et al. (2018) on the teachers' influence preparation on adoption of MT as an instructional medium in local centres for young children's growth in Nandi County, Kenya also established among its key findings that teachers in the area lacked instruction materials on native dialects. While there is evidence that lack of teaching materials affect the indigenous language instruction policy implementation, it is not known how areas which have been overlooked in the development of indigenous language

resources like Meru County eventually implements the indigenous language for instruction in their schools.

Agreeably, a study by Ngasike (2019) who through collected stories by elders from 4 communities in Turkana, 6 teachers and 24 children, showed that Kenyan education policy consists of gaps and lacks knowledge of the role of local knowledge in pastoralists and native languages in curriculum instruction implemented using books that are designed for academic skills. The findings revealed that in Turkana children lost interest and are bored to go through materials in school that are not reliable in any way to them. Instead they were amused to see book with highways and skyscrapers on the cover page that what was inside which was a reflection to their lack of connection with the resource. This results to low literacy and school dropout. The researcher advised that culturally relevant teaching and studying resources that enable learners to bond to their cultural values and beliefs be provided. In 2018 the Kenya Institute of Curriculum Development (KICD) sanctioned the MT expansion of resources for four communities namely, Kikamba, Ekegusii Dholuo and Gikuyu (Nyariki, 2020). Later in November 2019, KICD organized workshops that assembled specialist on vernacular language for the first time in the historical portion of the course of study that, more than 18 indigenous languages are were being fully expanded so that students can pick to learn their native tongue up to the tertiary level. The 18 languages include, Turkana, Giriama, Pokomo , Kidigo, , Chiduruma Maragoli, Kiitharaka, Bukusu, Abasuba, Borana, Kamba, Somali Dholuo, Gikuyu, Kitubheta Kalenjin, Ekegus and Maa (Nyariki, 2020).

Notable in that Kimeru, the L1 in the scope of this research was not included among the languages above for preparation of materials posed the question of how the instructional


material preparedness in the Meru county addresses their implementation of MT language policy (Nyamai, 2022).

Figure 2

Pages from self-teaching transition primer

Lesson 4

Kitharaka has two vowels which are not written in Kiswahili. They are û and î. This lesson gives you practice with the letter û.





mûkûrû

Kiitharaka	English
mûkûrû	old man
gûtû	ear
ndengû	lentils, grams
kûgarûka	to change
mbûbûi	spider
ûgûri	price
ngûkû	chicken

Say the pictured words. Listen for the difference in sounds. Say the words below and listen.

Listening Practice

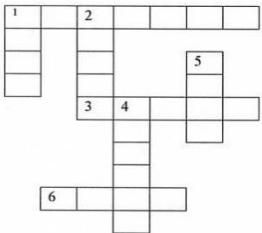
			
ngûkû	nguku	kûra	kura
		tûra	tura
		ûma	uma
		ngûkû	nguku

ACROSS

1. guava tree
3. fall over the edge
6. long ago

DOWN

1. flour
2. snatch
4. marriage
5. dirt



8

Another example of the introduction of features which are new to the readers (but not to their language) is vowel length in Tharaka. For each of the seven Tharaka vowels, minimal pairs are given, showing that there are times when vowels must be written as double.

2.5 Institutional Preparedness in the Implementation of Indigenous Language Policy

The implementation of an educational policy requires educational stakeholders and institutional partners that act collaboratively so that all the crucial features of quality education including the language of instruction are successfully addressed (UNICEF, 2016). Technical support to facilitate the deployment of educational policies and

mobilization of technical and human resources to guide policy decisions and promote their implementation is necessary. Institutional support such as the international agencies to build educational systems helps to bring out strong MT-based education. The USAID defines an education system as consisting of the people, public and private institutions, resources, and activities whose primary purpose is to improve, expand, and sustain learning and educational outcomes. Stakeholders include national and local governments, schools, teachers, instructors, unions, students, parents and caregivers, NGOs, faith-based and community organizations, universities, and the private sector, including firms that deliver education and training or ancillary services. In addition, collaborating with key institutions like the curriculum developers, teachers' recruiter, and the implementation support system such as standards and quality as well as curriculum support officers are essential in improving education. Akala (2020) supports this statement by noting that the implementation of the policy requires the participation and congruence of all stakeholders. Human and material resources are key and so does content and pedagogical practices.

Research conducted by Bhattacharya (2013) revealed that teaching through the translation method in which the school, teachers, and students used Hindi to translate English texts did not help students achieve the lesson objectives of learning the English language. In another case study, Rashid et al. (2016) observed the use of English and Urdu in EMI classrooms in Pakistan, where they found that a quarter of the words were used in Urdu and mixed language used (41% in English, 62% in Mathematics and 53% in science) and code-switching between Urdu and English. The students faced a problem in the EMI program as the teachers believed the use of Urdu contradicted the learning of Urdu-content and English.

Trans languaging has benefits which include the elevation of participants' confidence and motivation as well as the development of higher cognitive engagement when learning according to Duarte (2018). When languages are considered as not separate, it allows learners to have liberty from discrimination from issues like language power and identity hence the need to approve of its use in schools. GON (2019) study shows a contradiction in Nepal where although MTs are emphasized as the mode of learning in primary education, the policy approval for English as a language of instruction has made most public schools move from their language of instruction. This is despite the reality that most teachers are not equipped with English skills or training to keep up with EMI classrooms.

The head of this institution is a head teacher/principal/headmaster. Merikal and Emer (2014) reveal that school principals are the key factor in shaping a school climate that supports students and teachers. Existing research established the empirical link between school leadership and improved student achievement (Wallace Foundation, 2013) as well as job satisfaction of teachers (Shen et al., 2012). The role of a school head gradually metamorphoses with more emerging ever-demanding responsibilities emerging. The range of a school head includes but not limited to instructional, administrative, and managerial roles and other day-to-day that may arise within and without the school. At the advent of globalization/global village, and advancement in technology, a school head finds that there is diversity in matters of teachers, parents, learners, and the general community that he must address.

Internationally the evidence indicates that school principals juggle multiple responsibilities and work under increasingly stressful conditions. This frequently results in lower levels of job satisfaction, increased occupational stress levels, and sometimes burnout. However,

despite recent role changes, added job responsibilities, and increased accountability, some responding to the diverse needs of students and their parents. A study by Edge (1992) in Saudi Arabia, noted that the education system is anchored in Islamic values hence a resistance to the English language. Teachers are not trained in linguistics rather their main training is focused on the success in examinations for learners. There is also an issue within the curriculum which are not updated as per modern teaching methods. O'Mahony (2011); Merika and Emer (2024) argue that these voluntary boards often lack the knowledge and experience critical to carrying out their functions effectively. Similar conclusions were reached by Darmody and Smyth (2013) who found that Boards often rely heavily on the advice and work of the principal. In this context, establishment of an intermediate management tier between the board and MOE relies on the Education Act 1998 that lists the roles and responsibilities of school principals.

While some primary school principals have mainly administrative duties, there are a significant proportion of principals who have teaching duties. The significant workload that school principals have was recognized by the establishment of in-school management arrangements for primary schools in 2003, which recognized the need to share leadership, managerial, and administrative duties among members of the teaching staff (DES Circular 4/1998). Most problems tend to be caused by a growing workload, triggered often by overall cutbacks. The growing workload was seen to prevent the principals from keeping up with their working routine and to disrupt fulfilling their duties efficiently. In the implementation of the MTE policy, it is likely that the head teachers are overloaded with a lot of work and may interfere with policy implementation.

According to John (2016), the MTB-MLE implementation would have been more successful if the Philippines undoubtedly provided a stimulating educational setting for the successful implementation of a language policy that truly speaks of the needed language reforms and problems for over a hundred years in the country. These policies of language in the Philippines have evolved as a result of problems in politics, economy, and issues in culture at the local and national levels. Therefore, the country provides an avenue for researchers to delve into the top-down policy from the grassroots level stakeholders' perspective where pupils, teachers, administrators, and parents are key factors in a clearer comprehension in the pursuit of MTB-MLE management/higher authorities consulted the grassroots/local stakeholders. The National Board of Education must carry out various fora and conduct a nationwide conference to address the issues concerning to the subject. Curriculum design and methodologies can be devised based on efficacy, and pedagogy, for adoption by local schools. Moreover, the national government must provide enough funds for learning resources, appropriate learning assessments, and contextualized curriculum. Accordingly, local government units (LGUs) and their respective education districts must efficiently monitor and evaluate whether the application of MTB-MLE in their localities towards effective and sustainable objectives achievements.

Globally, in an effort to achieve the Education for All, school enrolment, at all levels, has increased universally, and most children in low- and middle-income countries now complete primary school. This does not necessarily mean or guarantee that children acquire the competencies set out in the official curriculum. On the contrary a big percentage of children in low-income countries complete their primary education lacking even basic reading, writing, and arithmetic skills. This has been traced to teachers who although they

are in school, are not teaching and their subject knowledge is strikingly low. Only about one in ten fourth-grade teachers master their students' language curriculum, and about a quarter of the teachers fail simple tasks (such as subtracting two-digit numbers for math teachers or choosing the correct pronoun or conjunction to complete a sentence for language teachers). Pedagogically, only a few teachers can assess children's abilities and evaluate their student's progress, and still a few exhibited practices that are typically associated with good teaching. The findings of the study implied that rapid expansions in school enrolment in developing countries have put substantial pressure on the education system's ability to provide quality education and that the rapid hiring of teachers to limit student-teacher ratios may have contributed to our findings of underprepared teachers. This resulted in schools reporting high rates of teacher absenteeism from school and absenteeism from the classroom while at school. The above challenges revealed systemic governance, accountability, and management issues. The above challenges would be resolved through institutions undertaking teacher recruitment, preparation, deployment, incentives, and motivation, along with ongoing professional development, which matter for creating a cadre of professional educators who provide high-quality education.

In Indonesia Sukistiyo, Haryanto, Widodo and Elyas (2020) studied the enactment of English as a locally tailored school subject in primary schools located in the western part of Indonesia. Empirical data was collected through multiple semi-structured interviews. There was use of Bahasa Indonesia to get elaborative information from participants. From the data collected, teachers did not side with the policy that English becomes a local subject in primary schools. The consequences of implementing the policy mean English learning hours decrease. Teachers acknowledged the benefits of English for learners to engage in

the world. English serves as a global lingua franca. Teachers also noted English is required for furthering studies. They said that introducing a new language learned as L1 from an early age can assist primary school learners become familiar with English if competent in local languages and English makes learners multilingual. The data also revealed that teachers have difficulty assessing students learning due to the non-existence of the English curriculum. They are not familiar with this kind of assessment and thus difficult to carry out.

Furthermore, the teachers revealed that the government did not support English teachers in implementing the teaching of English as a local subject. This makes teachers create their own syllabus and teaching materials, which requires their curriculum knowledge. This curriculum knowledge helps teachers create, implement, and evaluate their curriculum as their important duties as curriculum makers, classroom innovators, and assessors. The researchers suggest that there should be a relevant training program where teachers can develop their professional practices and improve primary school English.

The post-apartheid South Africa was caught between official multilingualism and English. The national language-in-education policy (LiEP) that advocates additive bi/multilingualism and a provincial counterpart, the language transformation plan (LTP). Research reveals that policy realization in education at legislative, institutional, and interpersonal levels, the LiEP's non-realization at the institutional level is indexed by a so-called 'gridlock of collusion' between political elites and the majority of African-language speakers hope to find the benefits and promises that English-medium education provides.

In Kenya, some problems are likely to hinder the execution of MTE despite all the education reforms to ensure a well-drafted 2-6-3-3-3 system and the Kenyan Constitution

(2010) are both directly impacted by syllabus revisions. Kangira (2016) examined the implementation challenges of language policies in southern Africa. The major challenges reported for the failure of the policy was among others the supremacy of the language of colonizers over indigenous African languages. The elites in education and government perpetuate their use and preservation at the expense of the rural child in Turkana and other rural non-English reachable areas as Ng'asike (2019) would put it.

Kangira's view is supported by Trudell (2016) who confirms that a close look at the lack of MTE policy to succeed is the failure on the part of educational institutions like the Ministry of Education, Kenya Institute of Curriculum Development, and the Teachers Service Commission that are the buttress of educational change. At the regional level, institutional preparedness is characterized by similar factors as the global and continental ones. Kangira (2016) records that in Zimbabwe, in most cases they pay lip service to the indigenous languages promotion but there is a lack of strict monitoring of language policies implementation. Community support, sustained campaigns could target parents, teachers, and other stakeholders such as non-governmental organizations and church-based organizations, that support education programs. These efforts could guarantee the implementation of the policy as possibly intended by the drafters. Such efforts could also address the defiance that is underpinned by teachers' attitudes and feelings regarding the policy. Both QASOs and school teachers must have a common understanding of these concepts to guarantee the implementation of the policy. Various reasons are advanced against the use of indigenous languages; lack of terminology, lack of books, lack of teachers, threat to national unity, and parental preference, etc (Bamgbose, 2000; Mose,2015). Others include inaction by the government, interpretation, and

implementation by classroom teachers, head teachers, and quality assurance and standards officers (QASOS). Findings indicate that there is a discrepancy between the drafters' intentions, implementers' interpretation, and operationalization of the provisions of the policy. The disparity between intention, implementer interpretation, and government silence seems to have bred both contempt and defiance of the policy by implementers, hence impacting negatively on implementation.

Mose (2017) QASOs, head teachers, and teachers have a different understanding of the various provisions of the language-in-education policy in basic education institutions in Kenya. There is, however, some understanding among the implementers that mother tongues should be used either as subjects or as a language of instruction. This diverse understanding seems to breed criticism and defiance on the part of implementers, especially concerning the government's ambiguous stance on mother tongue education. National policy directives and school inspection regimes probably influence some pedagogical approaches and associated conceptions of learners and learning across most schools. The school organization influences the ease with which workshops and support networks can be put into place. In these studies, head teacher endorsement for interactive teaching along with the time commitment it entailed – was viewed as crucial by teachers, other head teachers, and the researchers. Capacity building therefore needs to focus on supporting, resourcing (especially with high-quality digital content), and raising the quality of subject teaching, Sara and Riikka (2020) with involved teachers in three Zambian primary schools says Programs need to support the professional growth of teachers over time, by encouraging not only their active participation in PD programs and effective integration of new pedagogies but also their creation, adaptation, and refinement of the programs

themselves. To implement the guidelines cost-effectively, they need to be embedded in policy, within national initiatives funded via both aid and government resources (such as SPRINT in Zambia).

With the recent language policy shift from English to Mother tongue (MT), in the context of the Philippines, as the medium of instruction in the teaching of mathematics in early grades, (which) examined how language proficiency in the MT relates to mathematics achievement. Study participants include 71 grade 2 students aged 6-8. The findings show that the respondents' mean achievement in mathematics and their mean proficiency in the MT are both described as 'advanced'. Moreover, the study revealed that there is a very strong positive correlation between the respondents' achievement in mathematics and proficiency in the MT. Significant consequences are the results of mere decisions on determining the language of instruction specifically in the early years of education. It means that rightful language choice leads to educational success. This is an inappropriate selection of a language proves to be detrimental in the taking place of learning. It is a reasonable conclusion that the success of any educational process relies much on the language to be used because it is a tool in the transmission of knowledge.

According to Cameron (2007), skills and knowledge in training language teaching require a special combination of knowledge and skills that is always hard to find, and finding teachers who have it should be the first concern of any good administration. It further reaffirms preparing a teacher of language during his or her initial teacher training involves providing him or her with certain types of knowledge, skills, and attitudes. The study made the case that, despite the difficulty of the endeavor, linguists, language users, and other interested parties must help defend African languages, which offer us a sense of our cultural

identities and indigenous knowledge systems and legacies. In light of the finding that no language is preferable to another, the study concluded that multilingualism and linguistic diversity must be preserved.

The challenge of providing instructional materials in native languages is attributed to the influence of donor interests, language attitudes, global power relations, and strong economic interests from overseas and publishing companies (Waruingi, 2009). Brock-Utne (2000) highlights the instance of the roles of French and British governments in supporting the usage of their dialects in learning institutions of their former colonies through two-sided help. The help, through text-based educational materials in either French or English or monetary aid to promote education in these languages, makes it challenging for financially strapped governments to concentrate on indigenous language development.

Local institutions do not support the MT language policy as elucidated by Mose and Kaschula (2019) who in a study in Western Kenya on MT policy observed that government Quality assurance officers, curriculum support officers and teachers, key players and actors in a policy implementation process did not know whether the L1 provides for MT to be taught as a subject or whether it was to be used as an instructional language LOI.

KICD in readiness to teach Indigenous Languages (LI) as a subject (BECF, 2017), has currently trained 229,292 teachers on the CBC curriculum at primary school (Nyamai, 2022). Trainer of trainers (ToT) were trained for 5 days then they would train teachers for a further 5 days in different regions. Each school was required to select six teachers for the training drawn from pure sciences, languages, humanities, mathematics, applied sciences, and technical subjects. Languages training would focus on foreign and indigenous languages, Kiswahili, English, and Kenya Sign Language instructors (Nyamai, 2022).

A gap is already very visible in that whereas with the five (5) languages, from which one was the teacher picked for training bearing in mind that at the IL, English, and Kiswahili are mandatory. Secondly, more than 1000 teachers were moved to the junior secondary majority of who may be the trained ones and would be curious to know whether the incoming ones would be trained. This study establishes the extent and the effects of such discrepancies on policy. A case study conducted by Erling et al. (2017) observed eleven teachers who worked in both low-fee EMI schools and Hindi medium schools in Bihar, India. Most teachers used Hindi and English for instruction with Hindi as the language for classroom coordination and explaining English texts. In the school teachers were not allowed to use MT denying the fact that the highest percentage of students were Bajjika students.

Students access to culturally and inclusive relevant curriculum and instructional materials in a familiar language enhances their learning (Bühmann & Trudell, 2007; Pinnock, 2009b; UNESCO, 2016). Confidence is also gained by learners when instruction materials use familiar content (activities, places, and people) when introducing new concepts. Another important consideration as part of the lengthy planning process is the accessibility of materials for training and studying in native languages (USAID, 2015; Ball, 2011).

Decentralised educational budgeting and planning can assist nations expand their local instructional materials (Benson, 2004). Collaboration of local communities with government linguists and agencies facilitates the creation of vernacular language resources (Ball, 2011; Benson, 2004; Pinnock, 2009b). Materials based on standardized templates produced in the official or national language can be cost-effective and rapid since they use technical expertise that is centralized in the development of curriculum, formatting,

illustrations, and other elements (Benson, 2004). Teaching and learning materials may be made more widely available through open technology and educational materials (UNESCO, 2016). Mose (2017) notes that for a policy to be well-implemented, questions like the intended purpose of the policy must be clear, what the implementers know about the core concepts in the language-in-education policy in basic education institutions means, the teacher's attitude towards the mother tongue requirement must all be addressed. In matters of human resources, a policy is normally implemented in a geographical space known as a school which in entirety is the policy-receiving institution.

Institutional preparedness has been highlighted as significant in the enactment of the school's strategy for the teaching of indigenous languages. However, it has not been established to what extent Kenyan schools are institutionally prepared, and more so in Meru County where the current study was conducted, there was lack of empirical literature on institutional preparedness of the schools in the area for indigenous language instruction.

The quality statement of Kenya Institute of Curriculum Developed formerly KIE is charged with the preparation of training and studying resources is 'commitment to providing quality curricula and support of curriculum materials through stakeholder engagement and research to nurture every learners' potential for sustainable development (KICD, 2018)'. The Scope of KICD Quality Management Systems is said to 'cover all processes and activities related to among others learners' books, teachers' guides, handbooks, electronic support materials and publications and guidelines' (KICD, 2017). Research shows that after the 1976 Commission that called for LoI to be MT, KIE lived up to their quality statement with Kenya Literature Bureau publishing all instructional materials in the MTs in Kenya (Mbaabu, 2002; Wamberia 2016) until the year. The KICD curriculum cycle with 7 stages

which include ‘Development of Curriculum Support Materials’ and the action production of course and teacher’s guides among others is the ideal position at KICD but it is not clear whether it has been achieved. Stage 5 mentions the ‘Preparation of Curriculum Implementers’ and 7 ‘National Implementation’ provides for the orientation of teachers’ education officers and other stakeholders (KICD website). According to the respondents, another challenge in MTE curriculum implementation is the high cost of implementation. QASOs reported that materials development and teachers’ preparation require a huge investment by the MoE. The principals noted that the economic difficulties in Kenya may deter large-scale implementation of MTE consideration by decision-makers (Mandilla, 2019).

The study’s findings by Ritha et al. (2022) also revealed that the implementation of MTE is possible if the government hires qualified teachers, and those who are not qualified be given training through seminars and workshops on how to use vernacular as an instructional medium in the classroom.

Kitur and Kirigia (2017) on the challenges of mother tongue education in Nandi County, Kenya noted that the education system as in other African countries failed to provide instruction in the language the child understands best or the mother tongue language. Most schools implemented systems that taught the learners using the second language rather than the L1 which is the learner's mother tongue. The policy of delocalization of teachers was also noted to be a hindrance to the implementation of the MT language policy in Kenya. Kitur and Kirigia (2017) stresses this fact by noting that in Nandi County the teachers from different ethnic groups were notable to teach in the new school’s catchment hence terming delocalization of teachers a threat to the implementation of MTE policy. These results

indicated that the mother tongue language policy was not being followed by the teachers in the institutions. The researchers recommended that the teachers be taught on pedagogical and other aspects of mother tongue education.

In Kenya's devolved government, the County governments countrywide may borrow a leaf from Uganda (Hulya, 2013) reports that after education processes were decentralized voluntary. District Language Boards largely developed the instructional materials, texts, and orthographies (Ward et al., 2006). While likely ethnic communities can spend an enormous sum of money to advertise their native tongue through radio, texts, and other media venues. In Kenya where practically every community has radio FMs in the MT, it is very practical. This study aimed to establish how such strategies are employed or adapted in the preparedness to implement the MT language policy.

Mose (2015) revealed that the public in Kenya including academics in education without language, linguistics and most other fields earning disciplines expressed ignorance of the mother tongue's central position in early child education (Wolff, 2015). A worldwide campaign towards change in attitude is necessary targeting teachers, parents, and other stakeholders such as NGOs and church-based organizations, supporting education programs. These efforts could guarantee policy execution as outlined by the drafters of the policy. UNESCO has been very vocal in this regard and all that nations of the world need to do is just to embrace it. Of the campaigns by the organization is World Mother Day celebrated every 28th February in 2022, World Kiswahili Day started in 2022, and International Decade of Indigenous Language (IDIL2022-2032) among other efforts that began in 1953.

Mose (2017) proposed use of the local radio and TV stations i.e that the country used media broadcasts in mother tongues on more than thirty (30) vernacular radio stations. These stations are avenues for mother tongue popularization efforts by the government. The study indicated that such efforts would help reach sustained campaigns that could target parents, teachers, and other stakeholders such as non-governmental organizations and church-based organizations, which support education programs. These efforts could guarantee the implementation of the policy as possibly intended by the drafters.

Ondondo (2020) reveals that Indigenous languages are indispensable cultural legacies without which all forms of human interactions can be carried out. National development, which entails the development of individuals educationally, socially, politically, economically, and culturally, is achievable through interaction with government agencies that disseminate policies through various indigenous languages. The government of Kenya must focus on language documentation which is considered as the cure for language death. This can be done by launching the departments of Linguistics and Languages in our universities to work out the best modalities and practices for the documentation of Kenyan indigenous languages. With documentation, the study of the MTs, and further teaching and learning at the secondary school level, not only in Grades 1-3 (Ondondo, 2020).

Other institutions that can support the implementation of the MT language policy for the government of Kenya NGOs, international bodies like UNESCO, and UNICEF, the mass media (Mose, 2017) and the speaker communities to fund language research in MTs. Funding and support by these groups help in the popularizing campaigns, training teachers, and the provision of instructional materials for the implementation of the MTE policy in the country. Attitudes towards MT and the use of the same in schools emanate from the

community (Mose, 2017; Khejari, 2019). The government should take this opportunity to help develop oral and written literacy in MT languages both for the native and non-native speakers of these languages. The interpreters be people from the same community and have resided in the community for the same time as the majority of the community members to guard against the cultural difference barrier.

According to Ondondo (2020), the final stage for the government to entrench MT into day-to-day use in society is to incorporate a language interpretation service into redesigned work processes. In the beginning, the jargon may be a challenge in terms of equal and one-to-one translation from English and/or Kiswahili to the target indigenous languages. However, inventions, nativizations, borrowings, and coinages are not unreachable targets. With time these can be developed into full-blown jargon ingrained in the specific indigenous languages. This will in the long run not only alleviate illiteracy in these languages but also the illiteracy that comes with the use of English and/or Kiswahili in development activities where people in the rural areas are concerned.

2.6 Teachers attitude towards indigenous language policy implementation

Attitude is explained as the condition of mental and emotional preparation, which develops through experiences, which influence an individual's behaviors towards all situations (Unal & Iseri, 2012). Ahmed (2015) noted that attitude is the perceptions that speakers of language varieties possess towards their language or each other's languages. Depending on the attitude towards a language, it may imply linguistic simplicity or difficulty, elegance, the degree of importance, ease or difficulty of learning, and social status among others.

Khejeri (2019) noted that the value placed on a given language determines the attitude towards that language and the way that language is used in various ways and situations. The amount of attention given to a particular language is greatly influenced by the value placed on that language. Therefore, to establish the attitude teachers hold towards mother tongue, the study sought to find out the value they place on it and, therefore, to establish what value the teachers held towards mother tongue, the researchers sought to find out the languages teachers like the learners to use

Mclvor (2020) revealed that when mother tongue is perceived and presented as the language of the uneducated, the rural masses, are less prestigious, and not necessary for progression or employment it may create a negative attitude in learning. Further, if the teachers are not well-trained or do not undergo continuous professional development in order to handle existing or emerging issues at the classroom and individual level, their attitude towards the language is affected. Positive attitudes towards the use of indigenous language are indicated by supportive institutions that clear guidelines on policy implementation, a supportive school community, out of school education stakeholders like parents, church and the overall community create the appropriate attitude in a teacher. Positive attitudes towards teaching and mother tongue are enhanced through provision of adequate, relevant instructional materials for the learner and the teacher. Ultimately, the attitude of the learner is enhanced when they have a lesson successfully delivered in MT, the learners show understanding and there is reflection in the learning outcomes, esteem and they embrace the instruction in school positively (Mclvor, 2020).

Policies concerning the use of mother tongue as a language of instruction and in some of the countries where citizens or immigrants are taught MT as a second language lacks

globally. Mose (2017; 2018) refers to it as luke-warmness and excuses to the MTE policy implementation. More than years after independence, most African countries the use of an African language at least up to the end of the primary cycle in schooling has not yet been achieved. The non-implementation and lack of general direction on policy in most countries goes hand in hand with lack of organization and policy in terms of content too. The subject syllabus and the knowledge requirements for mother tongue instruction are relatively vague, as they state only the overarching aims for all the minority languages/MTs encompassed by mother tongue instruction. The syllabus has no specification about the various individual languages. According to the syllabus, the aim is to provide opportunity for pupils to develop knowledge in and about the mother tongue. This vagueness of the syllabus offers the mother tongue teachers relatively large freedom to plan the instruction on the basis of personal pedagogical preferences which may not be a standard for all schools hence lack of uniformity in MTE policy implementation.

Struggles for legitimacy and professional satisfaction for MTE and lower primary teacher causes them to feel lesser teachers and professionals with parents, learners and colleagues even doubting their qualifications. In some countries like Sweden where MT is taught independently from as a subject, mother tongue teachers rarely have the opportunity to meet with other staff members and the children come to the mother tongue lessons after already having completed a full day's school work. The teachers feel like the second line teachers and are treated as lesser teachers by the mainstream ones (Natalia & Christina, 2015).

Allocation of teaching hours for MT is another cause for de-motivating the teachers. In many countries globally, mother tongue as a subject is not included in the school master

timetable meaning that it is not officially allocated any specific time. When time is specified in Sweden for example, it is allocated minimal time a week. If a child participates in mother tongue instruction throughout compulsory school, s/he will receive only about 360 hours of mother tongue instruction in total. Swedish as a second language, which is allocated approximately 1490 hours in compulsory school and English allocated at least 480 hours.

Positivity has guarded the MT and lower primary teachers in such scenarios are very dissatisfying and fighting an unending uphill battles. Although regretting not having equal opportunities as other teachers to do a good job, these teachers are joyous and proud in their profession. They have a strong belief that their abilities to make a difference for children who attend mother tongue instruction and these who need MT as a language will benefit because of them not giving up (Natalia & Christina, 2015).

Pedagogical challenges are too frequent in mother tongue classrooms. The teachers whose training makes use of the mother tongue are more likely to have the technical and pedagogical vocabulary needed to teach curricular subjects and the necessary confidence in their own language ability. For example, in India where Hindi is the official language, with over a hundred additional languages recognized among its 35 states, it gets hard for the teachers to decide who to memorize and drill to rely on 'safe talk' (Williams, 2014). As teachers who are not confident in English rely more on drilling and memorization, while they use more strategies when Sullivan and Sjolander (2019) reveal that the government supports teacher training and learners can move from one province to another to learn. Parental support was reported to be key with some indicating that they strived to speak MT at home in order to encourage their children. When governmental support was provided,

teachers warmed up to the policy even amidst other challenges (Sullivan & Sjolander, 2019).

Annastacia and Roula (2015) in Greece and Natalia (2015) in Sweden faults teacher training for a negative attitude towards use of MT in teaching. Majority of teachers revealed that, they feel unprepared to deal with issues of diversity in their classrooms and testified their need for further training. Many of them have no special training in intercultural education or second-language teaching but have interacted teaching experience with immigrant pupils in the schools. The case is the same in countries where teachers find immigrants in their classes as a result of migration, war or work related issue for parents. Quin (2019) adds that this provides the teacher with knowledge about the subject matter. Secondly, he or she should be equipped with language teaching skills and thirdly, the teacher ought to leave training with the correct attitude to language implementation.

According to Kristof and Huddleson (2023), in a comparative research in India and Ghana reports that in India, those who had influence to improve education do not send them to schools with Indian language being the language of learning and reading.

Surrain (2021) in a study that explored the beliefs and practices of Spanish-speaking mothers of preschoolers in a small Northeastern US city; done in a government, subsidized preschool with a relatively new Latin population. One third of the household spoke non-English language and 11% spoke Spanish at home. 40% were first generation immigrants. Fifteen languages were represented in the study, with 63% of all families speaking Spanish at home. Some classrooms had bilingual teachers as needed for understanding. The researcher used semi structured qualitative interviews to explore parent's views of bilingualism. It was found that mothers believed bilingualism in Spanish and English was

key for their child's future connections, economic prosperity and cultural legacy. The teacher attitude towards language policy was mixed up because some maintained Spanish only at home policies to sustain a Spanish monolingual context in the quest to counter balance the English monolingual context at school while others refused to set boundaries on language use. Those without a Spanish at home rule were more likely to be concerned about Spanish loss and motivated to seek out formed Spanish supports for their child at school. The above phenomena where the language policy is not well defined, enforced or adhered to make or leaves a teacher of MT as LoI or otherwise at a cross road when clear Mose and Kanchula (2019) perceives the negative attitudes towards teaching of lower primary children in MT as a mere surface symptom of the deep-seated erroneous world-view by the elite who believe that if education is not in English, then it is not enough education. The study observe dhow ironical it is yet leading technologies in the world have not been conceived in the English language. For instance, mummification in ancient Egypt which preserved the dead up to a thousand years was an indigenous invention long before the advent of the English language.

Trudell and Shroeder (2007) looked at the MT instruction scenario from as a post-independence imperialist view of doing things. It further noted that, even applying reading methodologies developed in the West in African classrooms is a form of linguistic and pedagogical imperialism. The authors go on to invoke the words of Ngugi (1986) who says that the elite, have been culturally uprooted from their cultural roots and anything local is looked at as backward, including language. These, according to him, are the neo-imperialists who perpetuate the original white man's agenda.'

Kangira (2014) indicates that in Zimbabwe, parents have a very negative attitude towards MT as the instructional language in schools. In fact, the study reported that the parent's perception of English as a superior language caused them to forbid teachers to never attempt to teach their children in Shona language. Instead of naming their children in the native names, parents have named their children *Ignorance, Fierce, Godnows, Nonsense* and other MT. The author reports of how while he advocated for use of MT due to its benefits to learner, neighbour parents often requested him to take their children through private tuition in English. This resonates with parents in Ghana who withdrew their children from a school where MT was used for instruction and strictly warned the receiving school 'not to teach their children any mother tongue. This attitude from parents created a very negative attitude to teachers and caused them to deviate from a well intended policy to teach children at Grade 1 - Grade 3 in MT. Parental attitude towards mother tongue has a direct effect on the learner. Regardless of the countless benefit MT has on learning outcome, a teacher is unlikely to effectively change the attitude because the parents do not offer any support. Mkandawire summarizes it as follows:

'parents criticized the government for allowing pupils to learn in local languages from grades 1-4 as outlined in the 2013 national literacy framework policy. It is important to realize that the restless debates on whether or not Zambian languages are needed for teaching, reading and writing skills in primary schools of Zambia as noted by some parents are merely a parental attitude cancer. This cancer is still a serious disease that has masked the faces of minority urban communities in towns and cities especially families of the crossroads. The mask does not distinguish what is good and bad for the innocent child but

it is there because one is a parent. Being a parent is one thing and deciding what is good for a child is another issue (Mkawandire, 2017).

Nigeria Konita and Adeosun (2013) confirms the parental attitude towards MT when he conducted a study correlating parental attitude towards MT to their language choice of their children and how its influence on their children's performance in English Language. Descriptive research design was utilized in the research in Nigeria that comprised six states confirmed that MT had a positive effect on performance. In another study by Ezeokoli and Ugwu (2019) that explored the beliefs of native language among learners, parents and teachers in twelve public schools. A descriptive survey was adopted, the study sample was purposively selected and data was collected by means of questionnaires. The study showed a strong positive belief about the relevance of mother tongue pedagogically and socio culturally. 85% of students believed that mother tongue is the best language to learn with, 75.2% confessed that they thought in their native language first and then translated into English and 67.8% proposed that if lessons are taught in their native language their participation in classroom activities would increase Ezeokoli and Ugwu (2019) reported that influence a positive attitude in learner's home video producers are expected and mandated to mainly produce in the native languages with English translation as well as programmes monitoring on radio stations and television as the electronic media.

Twamusi (2021) and Mkandawire (2017) conducted a study and discussed it in his article 'Familiar Language Base Instruction versus Familiar Language for the Teaching of Reading and Writing Literacy Skills. A focus on Zambian languages and English at two primary schools in Lusaka'. This case study was qualitative and data was collected from 67 respondents from two primary schools where at one school they used Cinyanja and the

other English as a medium of instruction. Data was collected through interviews focus group discussions and observation of lessons. The study observed that the classes in both schools were multilingual. Some parents had a negative attitude toward the use of local languages in learning and teaching.

Mkandawire (2017) says that a country is nothing without its culture and local languages are what bring about the culture. The study amplifies that the language used at home should be used in education to empower cultural heritage. Also noted that teaching in MT allows the principle of education which is moving from known to unknown. Tembo (1975) says this encourages quick learning to the learners. Teachers cannot teach in a language they do not fully understand especially at the primary level.

In-service or skills development training to expose teachers to MT teaching is essential. Due to lack of institutional good will and apathy towards MT, in a study conducted by Chimbutane (2011) revealed that, when a course support teacher on 'Linguistics of Bantu Languages' was added to pre-service education curriculum, undergone training (say the general college training) prior to this course creation did not take this course. In addition, it was observed that the only guidance the MT teachers received prior to beginning the mother-tongue modality of the bilingual program was only of a ten-day seminar offered by the Ministry of Education. Government in-service training is still primarily focused on monolingual programs. Teachers who are grudgingly put through a hurried ten-day program while their counterparts luxuriously enjoy a longer training do not have a negative attitude but heartbroken. Their attitude is less likely to moderate the relationship between MTE policy implementation and the level of preparedness.

Terra (2021) presented a case of the bilingual education policy in Mozambique through document gathering multiple individual interviews as well as classroom observations in nine months in Mozambique primary schools. The author noted that, attitudes play a vital role in teacher's decisions and teaching behavior in the classrooms. Breen (2001); Smith and Sunderland (2007) as cited by Terra (2021) suggested that teachers' attitudes can interfere with the curriculum and have an effect on educational activities. The study by Terra (2021) revealed that teachers transitioned from using the L1 to Portuguese earlier than required by the curriculum given that national examinations are in the L2 in fifth grade as well as classroom conditions and limited L1 resources. But also the teachers were positive about bilingualism since learners participate more in class; can communicate more with ease in L1, are more confident, and do not have many challenges when it comes to subject matters in class.

Fulan in Sandra (2021) indicated that, a teacher's beliefs do not occur in a vacuum, and policy choices regarding the language of mandatory exams impacts teacher attitudes and practices. Findings reached through interview and participant-observation data, collected over nine months in central Mozambique, despite awareness of bilingual benefits in student involvement, teachers' transition early to Portuguese, preferring to teach classes in the official language to prepare students for the national exam. This behavior is also caused in limited mother-tongue resources, teacher training, and language proficiency.

In Namibia parents, teachers and learners hold negative attitudes towards the MT that learners who try to express themselves in their mother tongue (Oshiwambo) in lessons that are presented in English are ignored by their teachers. Ssetanda and Ngwaru (2019)

observed that, in Africa, parents believe that children must learn English at an early age for them to succeed academically. The author quoted the acclaimed Kenyan author Ngugi wa Thiongo (1998) noted that, in schools, ‘any achievement in spoken and written English was highly rewarded, whereas achievements in the indigenous languages were never rewarded’.

Besides little or no MTE resources, Chimbutane and Benson (2012) reported that in multilingual countries (having a mother tongue and a nation/official language, mainly foreign), there is no funding for printing for MT material, publishers were inexperienced and the political will was minimal. A teacher who knows the benefits of a teaching resource and does not get is bound to have a negative attitude towards the cause.

Namibian learners are in favor of using their home language as the LoI. Some teachers understand that their learners would learn better when taught through the medium of their mother tongue and therefore try to use the mother tongue when teaching different content in subjects offered in English (Lipinge & Banda, 2020). The understanding of the use of MT is however affected when such teachers are regarded by other teachers as weak and incompetent. As a result, the use of MT as a LoLT has potentially created negative attitudes towards African indigenous languages (Lipinge & Banda, 2020).

In Ghana, as reported by inadequate and complete lack of resources in all government-sponsored languages create a negative attitude in teachers towards use of MT in teaching. Teaching syllabuses and teaching materials for primary schools, apart from text books on Ghanaian languages as subjects, are in English. This means that the teachers had to translate the lessons from English to the language of the locality. Children are also punished for speaking in mother tongue in classrooms and in the school compound, even during play

or break time Ansah and Agyeman (2015) and has instituted various forms of punishment to students for not speaking English (Ansah & Agyeman, 2015). The study indicated that, low grades in English has caused children to repeat classes. It further observed mother tongue-based education may not be supported because indigenous languages are associated with ‘powerlessness and insufficiency’ and also a way of perpetuating marginalisation.

In the East African region Ssentanda (2013) confirms that for over five decades since the MT policy came into force in the 1960s in most countries, the failure to implement the use of L1 as instructional language can be blamed on government agencies who have failed to enforce the policy which has been accompanied by a lack of government initiative to train teachers. Consequently, teachers develop a low opinion of the language and the learner’s attitude is indifferent (Odongo, 2022).

In Uganda for example, Diaz (2013) reveals that the use of L1 is key in literacy improvement and that children participate more in lessons and boosts content understanding. However, parents, teachers, and authorities at the national and district levels have fiercely differed in opinion on the L1 policy due to lack of a clear government directive. Through the UNICEF, the Ugandan government initiated The Mango Tree Literacy Initiative which has recently changed the attitude of learners towards the MT language in Northern Uganda. A Parent Literacy Guide Book specially designed for parents so that they can help their children improve their literacy levels at home for parental support is key to the learner perception which in turn ignites and gives the MT teacher to steer teaching in MT (Odongo, 2022). This situation perception is different from Tanzania where Ritha et al. (2022) found the perceptions and perspectives facing pupils, particularly in the rural areas of Tanzania recommend that because L1 will give the pupils access to quality

education, the planners and policymakers need to include native languages in the learning processes.

Nyarigotti and Ambiyio (2019) in Kenya recommended the education policy in mother tongue be used as the LOI but this has not been implemented since stakeholders express mixed attitudes towards its relevance. Teaching learners important concepts in a familiar language to, the child's first language, which is the mother tongue, should be applied in early childhood programs, preschool, and lower primary classes. However, this has not been the case because teachers are found to be using English from pre-school. The core of this research was to enable clarify the continuous synthesis of the attitudes and opinions regarding the language that is supposed to be used and the enticers of the attitudes and opinions. The researcher used a qualitative design to review the attitudes of teachers, parents, and language specialists concerning the use of the mother tongue as the LOI in lower primary schools in Kenya in Nairobi, Machakos, Kakamega, Muranga, and Kajiado counties. Data was also collected from lecturers in universities and government body staff who directly involved themselves in curriculum development and implementation. Parental attitude toward policy was that for learners to succeed academically, their knowledge and proficiency in English was key because job interviews and the mode of communication was English and not vernacular. National examinations too were conducted in English. The researcher found that a lack of knowledge and understanding of the language meant failure in the children's ambitions and life goals. Parents who are pro-mother tongue use instruction reported the benefits the learner's appreciation of their cultural values, history and promotion of indigenous languages. Use of MTs enhanced understanding during teaching and learning reduced dropout rates, and truancy, and improve relations and

communication among teachers and learners. Citing the benefits of use of non-English one of the teachers noted that sometimes she had to read and interpret the English exams in Kiswahili for learners to understand and perform better in the examinations. Language specialists noted that learners easily understand and learn English or Kiswahili, the learner's second language, once they gain an understanding of their mother tongue which is also a better way of preserving culture. All of the above differing perspective about MT have an effect on teaching and learning usually leave teachers at a crossroad and confused about their role in facilitating the implementation of MTE policy in schools and especially in Meru County, Kenya.

Other studies have investigated other areas of L1 and how their relationship with the implementation of L1 policy implementation. These include Mother tongue proficiency in lower primary learners, teacher attitude towards MT as an instructional medium, significance, challenges of MT education, and the prospects of a multilingual education (Manyonyi et al., 2016; Khekeri, 2014; Mwangi & Mwakira, 2021).

Quin (2019); Kobia (2017); (Kiramba 2016) and (Mose & Kuschula, 2019) established that the attitude of the teacher was highly influenced by the negative attitude toward learning in L1 by the laxity by government to provide clear policy and support regarding MTE implementation. This is coupled with parental ignorance on the benefits of L1 on their children, intention, fellow teacher's attitude and community attitude, lack of examinations in the local language, ethnically mixed regions and perception that English is the language and the tool for advancement. Recommendations of (Kobia, 2017) and (Khejeri, 2014) is that the Ministry of Education, Science and Technology organizes open for countrywide (not clear) for sharing views among the experts in a language with the public, teachers and

parents through masses forums in correcting the misconception on mother tongues which is believed to go a longevity in public education on the intrinsic value of using native language as educational medium but would and a sense of ownership of the policy (Wamberia, 2016).

The reviewed literature used varying methods to investigate the attitude of teachers in the implementation of L1 policy globally, continentally and locally such as non-probability sampling techniques, snowballing and purposive sampling and by use of interview and focus group discussions from teachers, Ward education officers and District education officers survey design and questionnaires on teachers, parents and learners, descriptive survey design and use of interviews and questionnaires to attain data from lower primary teachers, tests administration, casual comparative research design (Ritha et al., 2022; Ezeokoli & Ugwu, 2019; Twumasi, 2021; Manyonyi et al., 2016; Khejeri, 2014; Nyarigotti & Ambayo, 2014). The researchers of the reviewed literature used varying sampling and data collection instruments of population such as teachers, parents, education officials, lower primary, high schools and university students. It provided a framework for situating this study as well as help reveal gaps. The previous studies investigated the perception of students on the introduction of MTs as courses to be taught at the university, learning using MT in high schools, effect of the teacher and parental attitude L1 instruction. None on the studies investigated the possibility of teacher's attitude being a moderating variable in the implementing of L1 policy in lower primary school. Teachers are the key focus in all learning and therefore policy implementation must consider their perception, understand their attitude and how they relate with a successful of unsuccessful L1 policy implementation. This study examined the link between the attitude of the teacher on using

L1 as a language of instruction and how this influenced the execution of the regulations. The information was gathered through questionnaires for Grade 3 trainers and school heads, interview schedules for the County director of education. This study is different because the CSOs and QASOs in Sub counties in Meru County. Observation guides were also used to record and gather information to establish on the extent of the moderating role of learners' attitudes on the implementation of L1 policy.

2.7 Summary of literature gaps

Despite the positive view on using mother tongues as the media of instruction in lower primary schools, teachers worldwide face common challenges that hamper the implementation of language policy. Locally, teachers in countries like Zambia, Namibia, Sweden, Philippines, and USA have faced challenges in implementing mother tongue language policies due to unclear or ambiguous policies. Teachers often choose to use English for their perceived prestige and social economic value, and they often use various strategies to deal with linguistic diversity.

In Kenya, the teacher wage bill absorbed 84% of the Ministry of Education, Science and Technology's budget in 2005b, leading to concerns about the placement of non-native speakers in schools where the catchment area's language is different from their own native language. This shortage of teachers is crucial for effective usage of local languages for instruction, as the effectiveness of L1-based systems depends on the ability of teachers to efficiently and effectively transmit cognitive skills and values in learners' L1.

Instructional materials are essential for policy implementation of mother tongue language policy, but many countries lack them, contributing to the inability of teachers to support the policy requirement to use MT, especially in lower primary schools. In some cases, instructional materials that are not representative of the user countries' languages or dialects are impossible to generalize for use in schools.

In addition to budget constraints, head teachers, teachers, and parents are critical and defiant towards the MTE policy due to their negative perceptions of African indigenous languages. The high status accorded to English as a foreign language (FL) in the Kenyan Constitution and the language in education policy favors English by setting final examinations in English and using English as the language of instruction. Governments should ensure serious and dedicated support and enforcement mechanisms for the implementation of mother tongue language policies through their institutions.

2.8 Theoretical Framework Literature Review

According to Cooper and Schindler (2006), a theory is a collection of organized definitions, concepts, and assertions that are developed to foresee and clarify phenomena. The study was guided on the Advocacy Coalition Framework, Innateness Theory and the Cognitive Development Theory. The Advocacy Coalition theory grounded the independent variables while the Innateness Language Acquisition and Cognitive Development Theory underpinned the dependent variable.

2.8.1 Chomsky's Linguistic Theory

The Linguistic Theory was developed by Naom Chomsky in 1957 mainly to challenge the Behavioural Theory in which Skinner had suggested that children do not learn and reproduce utterances but rather create new ones by internalizing rules of language from other speakers. The theory has three major components namely the language universal, the innateness concept and the syntactic structures argument (Dash, 2023; Chinyere, 2022). The theory has two features of Chomsky theory composed of three key components namely the innateness principle, Universal grammar and the Language Acquisition Device (LAD) (Faraj, 2018; Dash, 2023; Chinyere, 2022)

Innateness suggested children typically ignore adults' corrections and alternatively, embrace the approach of correctly using a variant form of a word, making errors, and then going back to using the term flawlessly. Chomsky indicated that, as a child makes mistakes as they brush or tie their shoes, language is an innate, passive process (Sihombing, 2022). The universal grammar (UG) according to (Chinyere, 2022) enables the child to process all utterances that invades his/her auditory sense and come out with a grammar of his/her language. As noted by Chomsky, if a child's language acquisition relies solely on linguistic input, they would never learn to speak in complete phrases. The major justification for this idea is that creativity is one of the core components of human nature (Chomsky, 1968). Humans have the ability of creating a limitless amount of words that have never been written before, and we accomplish so with accuracy. In China Wun (2013) described how Chinese parents give 'extra' lessons to their children, require them to learn language skills and proposes that they should trust the innate (LAD) ability to acquire a language without injection of external mechanisms (Paradis & Genesee, 1996)

However, detractors of Chomsky's Innateness object to its omission of adult speech's potential function in helping children learn language and the difficulty of uncontroversial describing the specific characteristics of LAD (Sampson, 2005; Gethin, 1999) the theory was very applicable to this study's dependent variable which was the execution of L1. The first Language (L1) is the Mother tongue which they acquire from their environment as they grow. In their native language, it is easy to learn words, make meaning of the word and critical thinking. A child starts learning in the early years using a foreign L2 language is likely to fall out of school as they experience difficulties, repeat class. The LAD gets weaker as one gets older. The observation that children easily learn their LO1 and use it for learning the second language is particularly important to the present study as it underscored the need for use of indigenous language in instruction of young pupils.

2.8.2 Piaget's Cognitive Development Theory

The Cognitive Development Theory was expanded by Jean Piaget in 1936. The theory examines how people develop, acquire, and use knowledge throughout time. In cognitive theory, the main argument is based on child's intellectual development from language acquisition. Secondly the theory indicates that linguistic structures will emerge only if there is an already established cognitive foundation. It focuses on exploring the links between the stages of cognitive development and language skills (Sassonian, 2009).

Piaget asserts that, psychologically maturity of children ascertains them to undertake certain tasks enough to do so. According to this theory, the mental processes are progressively reorganized resulting from environmental experience and biological maturation. Mwamwenda (2009) made the argument that children need an education that supports their cognitive growth by teaching logical procedures and concepts using Piaget's

theory. The idea was investigated by Rotumoi and Kipkoech (2014) as they examined the wide range of educational and instructional resources accessible and in use in a few secondary educational institutions in the Baringo District. The use of instructional media in instruction has a solid theoretical foundation since it helps students comprehend ideas and literary concepts. The study discovered that because Kenya is a country with multiple languages, teachers and students are exposed to a wide variety of dialects from which they can choose the one that best suits them. More specifically, in a classroom context the study came out with a finding that teachers employ the instructional tools that are readily accessible to them to teach the novel.

This theory was significant to this study as it helped demonstrate the significance of implementing the vernacular policy in early education in the early years. This formed a springboard in the acquisition of the L2 going onwards. The framework was used as a basis for designing educational programs in accordance with Piaget's learning phases (KICD, 2017).

2.8.3 Paul Sabatier's Advocacy Coalition Framework

The Advocacy Coalition Framework (ADF) was developed by Paul Sabatier and Jenkins-Smith in 2007. The ACF originated in dissatisfaction with the earlier traditional scholars' policy of the 1960s and 70s who adopted a stages heuristic approach policy (Jenkins-Smith & Sabatier, 1994). This method made a distinction between the problem identification and agenda establishing, the creation of policies, their execution, review, and reconstruction phases. The legalistic, upward focus of the stages model, which tends to ignore additional significant parties and limits the view of regulations to a single piece of legislation, is one

of its main drawbacks and may be inapplicable when "policy" is the result of a number of divergent orders and actors (Sabatier, 1986).

The ACF is based on four fundamental tenets: time perspective, policy components, players from all tiers of government, and belief systems are all necessary for comprehending the method of legislative change. Numerous studies have found that ambitious plans that first seemed to be utter failures after a few years were given better reviews when considered over a longer period of time; initial successes, however, may fade over time (Mazmanian & Sabatier, 1989). The development, propagation, and evaluation of policy ideas depend heavily on players at various levels of government as well as new anchors, researchers, and regulations analysts (Rhodes, 1988; Scholz et al., 1991).

The main focus of the ACF is the interaction between these competing advocacy coalitions within a policy subsystem. It seeks to answer the question how Advocacy Coalition A interacts with the Advocacy Coalition B and how this interaction operates within a wider political system and external environment (Sabatier, 1988).

Multiple uses of the ACF model have been made by researchers to comprehend controversial coalitional politics and policy issues, including those in South Korean policy processes (Jang et al., 2016), Swedish policy procedures (Nohrstedt & Olofsson, 2016), and African policy processes (Osei-Kojo et al., 2022).

ACF faces difficulties in that it examines public policy mostly in Europe and the United States, but English-language publications also show its spread to other continents such as Asia and Africa and on a smaller scale. Second, it is mostly used to analyse energy and

environmental policy, while it has lately been applied to research other fields including health and education (Viera et al., 2020).

In spite of the shortcomings, ACF's linear approach to policy formulation that includes all players that advised this study. Specifically, the ACF guided this study in interrogating the roles each actor plays in the preparedness to implement L1 policy in Meru County Kenya (Gustilo & Sabatier, 1992; Schlager, 1994). The ACF exposed the efficiency of coalitions in offering policy suggestions that could have a favourable or negative impact on how policies are developed and implemented (Chikorwe, 2018). It will be instructive to comprehend the link between the dependant variable; the adoption of L1 policy in Meru County; and the independent variable whose key constructs are teachers, instructional materials and institutions (how about teachers' attitude). According to the ACF, these actors, formal and informal participate and inform the policy formulation and implementation. In using the ACF model in the study, Sabatier (date) helps in the understanding that the preparedness of teachers by the trainers where the key actor is the Ministry of Education (TSC), the instructional material preparedness whose responsible actor id the Kenya institute of Curriculum Development (KICD) are essential in the successful implementation of the mother tongue language policy in Meru County, Kenya. In addition is the institutional preparedness that includes the role of CSOs who guide on the preparation of teaching of course outlines based on the MT curriculum designs and other support materials as well as continuous support of the schools (implementing institutions) and classroom teachers as they deliver in class. The QASOs are in charge of ensuring quality materials and quality teaching using mother tongue. While ACF model highlights the importance of actors and their coalition in a successful implementation of

policy, it does not address the issue of why mother tongue is recommended as the preferred language of instruction in lower primary education for best learning outcomes, retention in school and minimal repetition incidences. The Chomsky's Language Theory was used to underpin this aspect in the study.

2.8.4 Chomsky's Language Acquisition Theory

The Linguistic Theory was developed by Naom Chomsky in 1957 mainly to challenge the Behavioural Theory in which Skinner had suggested that children do not learn and reproduce utterances but rather create new ones by internalizing rules of language from other speakers. The theory has three major components namely the language universal, the innateness concept and the syntactic structures argument (Dash, 2023; Chinyere, 2022). The theory has two features of Chomsky theory composed of three key components namely the innateness principle, Universal grammar and the Language Acquisition Device (LAD) (Faraj, 2018; Dash, 2023; Chinyere, 2022)

Innateness suggests children typically ignore adults' corrections and alternatively, embrace the approach of correctly using a variant form of a word, making errors, and then going back to using the term flawlessly. Chomsky say that as a child makes mistakes as they brush or tie their shoes, language is an innate, passive process (Sihombing, 2022). The universal grammar (UG) according to Chinyere (2022), enables the child to process all utterances that invade his/her auditory sense and come out with a grammar of his/her language. As noted by Chomsky, if a child's language acquisition relies solely on linguistic input, they would never learn to speak in complete phrases. The major justification for this idea is that creativity is one of the core components of human nature (Chomsky, 1968). Humans have the ability of creating a limitless number of words that have never been

written before, and we accomplish so with accuracy. This theory has been utilized to advise teachers and parents' perception of use of Chinese and English in China (Wun, 2013). The author describes how Chinese parents just like those in Africa give 'extra' lessons to their children at very tender age and others resort to punishment for non-adherence to English speaking. The study instead advised such parents to simply trust the innate (LAD) ability of the child to acquire a language without injection of external mechanisms through suffering of rote learning of a foreign language vocabulary and skills (Wun, 2013). This theory informs the study in understanding that if children are not fluent in their mother tongue, their vocabulary becomes limited and this restricts their ability to learn a second language and they become illiterate in both their mother tongue and the second language. A strong foundation in mother tongue is needed for learning the second language, and when teachers and pupils understand this they become positive toward the use of mother tongue for teaching and learning. The use of L1 inside the classrooms allows not only the language of the home to find place in school but also the culture accompanying it. This creates a form of empowerment and powerful instrument to be used in determining societal roots which forms part of one's identity and in turn boosts the learner's self-esteem and pride. Chomsky's theory on the innateness nature has been criticized with the detractors claiming that the potential of adult speech and its potential in helping children learn language while others have claim that it is difficult describe the specific characteristics of LAD (Sampson, 2005; Gethin, 1999).

Although Chomsky illuminates our understanding of the nature of a human brain and its contribution to language acquisition as well as the universality nature of language, the policy implementation of mother tongue as the language of instruction has been faced or

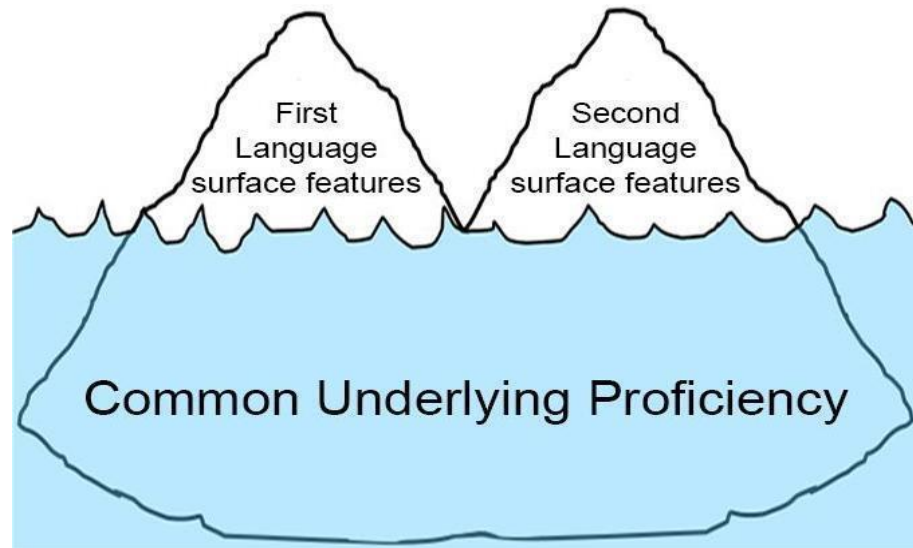
threatened with competing lingua franca like English. Parents, teachers and learners, for various reasons have preferred the use of English immediately children set their feet in schools and have mastered their abcs in an effort to have to learn the language first and fast (Wun, 2013). This has a detrimental effect not only in their acquiring English but their general mastery of their MT language, learning in general but also poor academic performance as a result of what he calls the non-mastery of neither of the languages. Cummins theory will help expound on this matter further as well as underpin this factor in the study.

2.8.5 Cummins's Common Underlying Proficiency Theory

Cummins' (1979, 1981) model of bilingualism proposes that, rather than proficiencies in two languages being stored separately in the brain each proficiency is in fact interdependent on the other. Using the concept of Common Underlying Proficiency illustrated through the image of the dual iceberg, Cummins suggests that although on the surface, the structural elements of two languages might look different, there is a cognitive interdependence that allows for the transfer of linguistic practices as seen below the surface which does not show any boundary between the two languages. Conversely, the surface assumption is that the L1 and the L2 or L3 are separate in structure and elements. In fact, Cummins proposition agrees with Chomsky's theory of universality of grammar in human language.

Figure 2

Cummins's Underlying Proficiency Model



The continued development in the first language would help second language learners in their learning of the second language. It is important that the new language input is connected to the learners' previous knowledge such as the linguistic, conceptual and learned knowledge. Cummins suggests that continued support of the first language whilst learning the second language would be beneficial for cognitive development as well as for other socio-cultural reasons. The Ministry of education direct English development proficiency early in the hope that teachers would teach content in the language as reported in a study in Kisii county (Mose & Kaschula, 2019). According to the study this is pure ignorance and misleading let alone the unfairness it poses to the learner.

The model being used to understand Kenya language of instruction policy implies that the proficiency and understanding of language structures and rules of Kimeru (L1) will quicken the acquisition of Kiswahili and English hence enabling all students to participate

in learning. Cummin's model has been developed from working with immigrant learners in Canada to enhance learning and teaching because the country receives many immigrants (Cummins, 2015). To implement the policy to use the mother tongue education as the language of instruction from the pre-primary level and the Grade 1 to Grade 3 level of primary education it is key that the age and cognitive ability factor is understood. This is a factor that Cummins does not delve into only defining the languages interrelatedness in language learning. This gap has been addressed by infusing the Piaget's Cognitive Development Theory.

2.8.6 Piaget's Cognitive Development Theory

The Cognitive Development Theory was expanded by Jean Piaget in 1936. The theory examines how people develop, acquire, and use knowledge throughout lifetime. In cognitive theory, the main argument is based on child's intellectual development from language acquisition. Secondly the theory indicates that linguistic structures will emerge only if there is an already established cognitive foundation and focusing on exploring the links between the stages of cognitive development and language skills (Sassonian, 2009).

Piaget asserts that psychologically, maturity of children ascertains them to undertake certain tasks enough to do so. According to this theory, the mental processes are progressively reorganized resulting from environmental experience and biological maturation. Mwamwenda (2009) made the argument that children need an education that supports their cognitive growth by teaching logical procedures and concepts using Piaget's theory. The idea was investigated by Rotumoi and Kipkoech (2014) as they examined the wide range of educational and instructional resources accessible and in use in a few secondary educational institutions in the Baringo District. The use of instructional media

in instruction has a solid theoretical foundation since it helps students comprehend ideas and literary concepts. The study discovered that because Kenya is a country with multiple languages, teachers and students are exposed to a wide variety of dialects from which they can choose the one that best suits them more specifically, in a classroom context. The study established that teachers employ the instructional tools that are readily accessible to them to teach the novel.

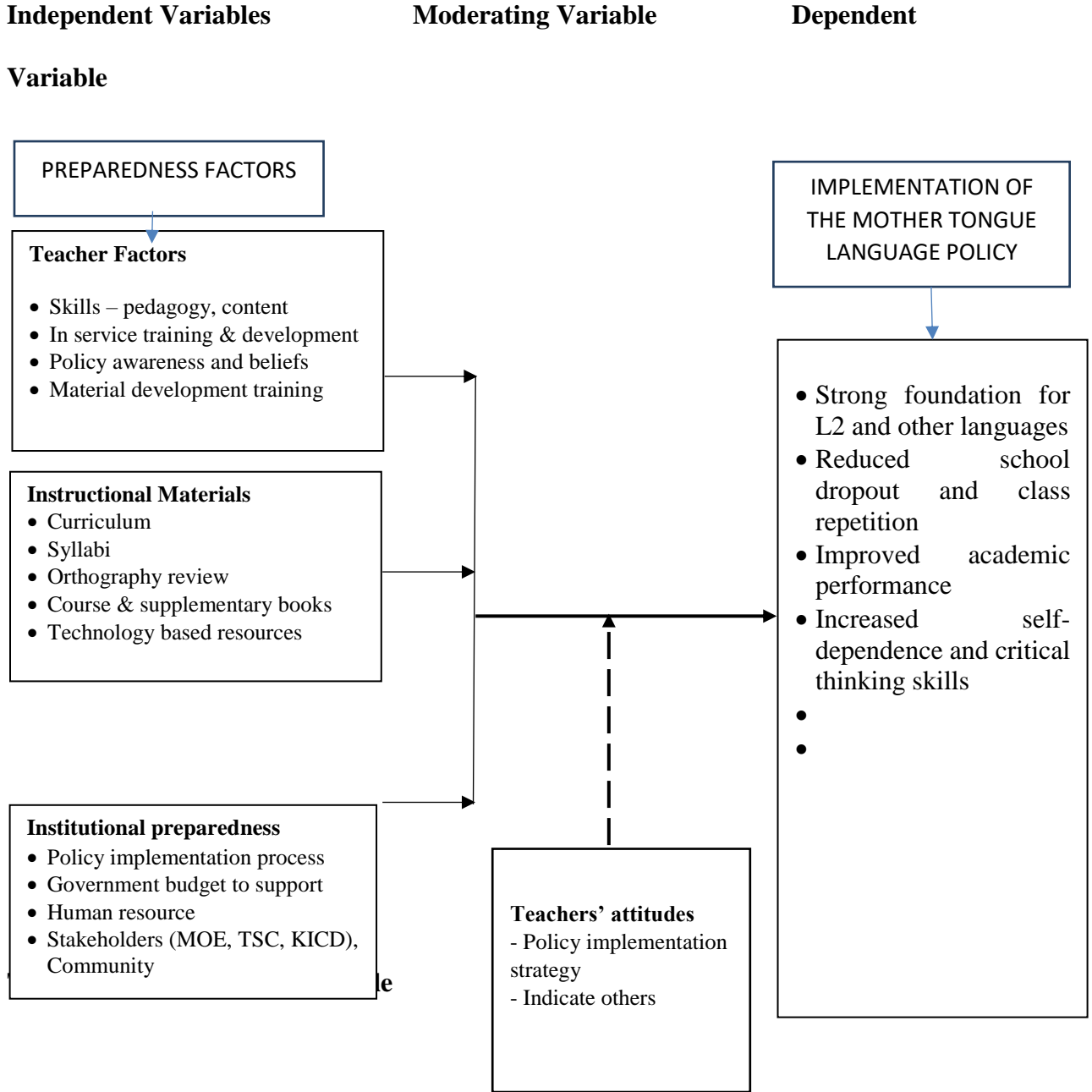
This theory was significant to this study as it helped to demonstrate the significant of implementing the vernacular policy in early education in the early years. This formed a springboard in the acquisition of the L2 going onwards. In fact, the framework was used as a basis for designing educational programs in accordance with Piaget's learning phases (KICD, 2017).

2.9 Conceptual Framework

The conceptual framework hypothesizing the nature of the relationships between independent and dependent variables for this study is presented in Figure 2.1.

Figure 2. 1

Conceptual Framework



2.9.1 Description of Variables in the Conceptual Framework

The link between the dependent variable and its indicators in comparison to the independent variables and each of their individual indicators is depicted in Figure 2.1.

The L1 policy's application in public lower primary education will be the study's dependent variable. Beneficial results are anticipated from a successful implementation of the strategy, including establishing a strong foundation for L2 and other languages, decreasing school dropout and class repetition, improving academic achievement, and developing learners' self-reliance and critical thinking skills.

Preparedness for the successful implementation of the L1 as language of instruction (LOI) in the lower primary public schools in Meru County is conceptualized to be achieved through a seamless collaboration between the formulators of the policy and the county-level officials who carry out the policy. Teacher preparedness is the first most key requirement and will be evidenced by first establishing that the teachers are aware of the policy. Teachers who instruct in L1 are required to have been trained in L1 pedagogy or will have undergone in-service training. Another component of teacher preparedness will be the availability of L1 be established whether there are Kimeru course books and teacher's guides. The workload of the teacher will be of key in order to establish that the teachers implementing the MTL are not overloaded with other lessons in the upper primary or other duties and functions. If the teachers are not skilled in the instruction language, they need in-service training so that they are furnished with the pedagogical skills and content for the new language. Teaching resources are also necessary for a teacher who is expected to be effective.

Instructional materials such as the curriculum designs, syllabi, learners course books, primary and supplementary materials are essential in implementing a L1 policy. The government who is the policy formulator has a responsibility to liaise with KICD to ensure that teachers have primer books, supplementary book, class readers as well as their own guide that is expected to be standard.

Instructional material preparedness is a key variable and is hypothesized to have an effect on the overall implementation of local dialect policy in lower public primary education in Meru County. Instructional materials include the curriculum design, syllabi for preparation of teaching lesson plans and work schemes planning are expected to have been prepared and delivered through the requisite channels and organs in order to get to schools. Kimeru orthography (this refers to the spelling system of a language), learners' course books and supplementary books and possible technology based resources. Digital resources make lessons for interactive exciting and education. In a digitized space, use of technology cannot be over emphasized. These include overhead projectors, lap tops, desktops and the required software. Availability all these resources and their use by the teacher and learner were obtained and analyzed.

Institutional preparedness is crucial to the implementation of the L1 policy in the lower public primary education in Meru County. Policy implementation strategy, Financial support for teacher training, travel of officers, KICD material support, support by the MOE and TSC to support the implementation of the L1 were envisaged to make the process successful. The MOE is hoped to offer policy support by liaising with their officers at the County, Sub-County and school level in ensuring implementation was taking place as planned. Change in budgetary allocations to the policy implementing institutions is

apparent. TSC is hypothesized to provide sufficient human resource as per the need of the new policy. It is noteworthy that a new policy may exert on the existing personnel hence necessitating need for training part provide human resource is very crucial because lack of the people a policy implantation process wold be slow paced or halt altogether. Availability of these structures were obtained and analysed.

The learners' attitude towards the implantation of L1 policy is hypothesized to moderate the relationship between L1 policy implementation and the preparedness to implement the policy. This variable may influence or not influence the extent to which the teacher, instructional material, and institutional preparedness influence the L1 policy implementation in public lower primary schools in Meru County.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the type of research procedure adopted for the study and the sense of its usage. It describes the research design, research philosophy, study's location, core audience, acceptance sampling and the cross-section procedure, apparatus, trial, authenticity and accuracy of the data gathering tools, methods applied in data evaluation and code of ethics of the research.

3.2 Research Philosophy

The study was conducted by practical theoretical standards. Philosophy is the rational inquiry aimed at acquisition of knowledge. A philosopher therefore gives a rational and comprehensive account of the reality's nature in order to reveal truth about it (Payne, 2015). A model is a set of practices and faith that direct researchers and practitioners (Raines, 2013). Study standards is a theoretical stance that outlines the fundamental set of assumptions that underpin and determine which researcher in a given field have an impact on the type of study to be undertaken, how to conduct it, and how to interpret the findings. (Morgan, 2014).

Positivism is rooted on the realist philosophy of Plato who claimed that knowledge had to be universal and immutable. According to the pragmatic paradigm, scientific knowledge is merely one of the many different types of information that are available; there are no knowledge bodies that are generally recognized. Positive statements are factual and descriptive because positivism seeks to pinpoint the factors that affect outcomes while

positivity technique aims to explain the connections. The reality is subjective, according to the interpretive paradigm.

Results from positivism are illustrative, quantitative, allowing for analytical investigation, and subjective, providing extensively understanding. The two data sets are integrated throughout investigation, with the confidence prototype preceding the lead and the declarative framework permitting the use of two (Creswell, 2013).

While qualitative data allows the study to obtain a better knowledge and meaning of the research phenomenon, computable study produces numeric information that is turned towards working figures and generalizes conclusions coming out of a specimen. Because this study is mostly descriptive, it will play a significant role in producing knowledge that will be useful to organizations (Elkjaer & Brandi, 2018). Knowledge should enhance discovery of truth about how practices, policies, decisions that benefit the organization. (Visser, 2019).

The approach was the prime since it allowed the research to accurately spell out, recount, foresee, and offer solutions to the issue. The study sets out to seek the opinions of head teachers, Grade 3 classroom teachers, Quality and Assurance Officers, Curriculum Support officers regarding the preparedness to implement the indigenous language (IL) policy in lower primary education in Meru County. Questionnaires were administered to head teachers and teachers while an interview guide which allowed an in-depth investigation were employed to the QASO, s CSOs that yielded substantial qualitative data to support the quantitative data. Through probing data was obtained data that helped the researcher

to answer the questions and consequently enable to understand the phenomena under research.

3.3 Research Design

A research design is the general approach to investigation that is designed to effectively and logically handle the research challenge. A research design aids in conceptualizing an operational strategy for managing the numerous tasks and procedures needed to complete the study (Creswell, 2013). According to Veal (2017), it is a study blueprint; is a plan of action outlined to convey the research in the interpretation, examination and collection of perceived truth. The study adopted a descriptive survey design.

According to Veal (2017), study plan is a plan of action drafted to convey the research in the interpretation, investigation and collection of noticeable reality. Patten and Newhart (2017) explains that an investigative examination plan extrapolates from a representative to a larger population in order to draw conclusions about specific traits, point of view, or manners of the entire population. A mixed method was used in this investigation. In other words, both quantitative and qualitative methodologies were used in the study. According to Creswell (2014), a combined approach research plan is one that includes logical molds that govern the way of data gathering and examination, as well as the use of a combination of qualitative and measurable methodologies throughout the research process. It's a research method that emphasizes on collection, examining, and combination measurable and qualitative information in a sole or sequence of investigations.

3.4 Location of Study

The research was conducted in Meru County which is found in the upper part of the former Eastern Province of Kenya. The sixteen (16) recognized sub-counties that make up the

county government administrative organization are Imenti South, Meru Central, Imenti North, Imenti South, Buuri East, Buuri West, Tigania East, Tigania West, Tigania Central, Igoji, Mutuati, Kiengu, Abogeta, Igembe Central, Igembe South and Igembe North. In all these sub-counties Kimeru language and its dialects namely Igembe and Tigania, Imenti, Miutini, and Igoji, and its culture are dominantly spoken by an estimated 84% of the population (Gordon, 2017). The county is also considered to be largely rural.

This study location was selected since it has been the topic of earlier studies on native language utilization instruction in schools among them (Muthwii, 2002; Mbaka et al., 2013; Mwaniki, 2014). However, despite the studies and recommendations for the utilization of MT in schools in the county, the use of second languages mainly English and Kiswahili is still the most common instructional language in schools in the county. It was expected that instruction in Kimeru in schools in the county did not experience any substantial linguistic barrier since apart from its dialects, it had a 60% similarity with languages spoken by other ethnic groups in the area namely, Kikuyu, Kiambu, and Kikamba.

The fact that the county was largely rural was also expected to play a part in influencing indigenous language use in instruction in schools.

Further, Mbaabu (1992) noted that “Kenya has not made the entire topic of dialect regulations public for advocacy and execution of comprehensive regulations (p. 182).” The Constitution of Kenya 2010 through Chapter 2, Article 7(3) committed the administration to safeguard the linguistic variety of the country while the BECF (2019) domesticated the use of indigenous languages in instruction in schools in the policy framework. It established how these developments influenced the adoption of indigenous languages for pupil instruction in schools in the county.

3.5 Target Population

A target population is a group of people or items that are the subject of a technical investigation (Creswell, 2014). There are 773 government-sponsored schools in Meru County with a total admission of 263,892 learners and 5,520 teachers. The population of boys is 132,180 while 131,712 are girls. Though not all of the registered students come from the county, there are instances where numerous toddlers enroll in school when they are older and other learners enroll from surrounding counties. As a result, the trainer-trainee proportion is 1:60 which is unreasonable in comparison to the approved proportion of 1:40 (Meru County Government CIDP, 2018 - 2022). This may also bring with it the element of increased language diversity among learners. However, this aspect may be mitigated by Chomsky's innateness theory and Piaget's Cognitive Development Theory.

The target population in the study, therefore, was 773 government primary schools in Meru County, which formed the unit of analysis. From these, the unit of observation was 32,987 Grade 3 learners and their trainers from all the government sponsored schools in the area. 263,892 pupils and 773 class teachers for Grade 3. Class teachers in Grade 3 were chosen in this study since in lower primary school, the class teacher is responsible for nearly all the instruction of the learners. Grade 3 was chosen for this study since the policies on indigenous language in instruction have always required that pupils at the lower primary section of the schools be instructed in mother tongue. Unlike the lower grades, Grade 3 pupils were expected to have higher language proficiencies and competencies to enable them fully take instruction in their mother tongue. Also included in the unit of observation was the head teachers, Meru County Teachers Service Commission (TSC) head, Meru County Education CEC and the Sub-County Quality Assurance Officers (SQASOs) from

the (9) sub-counties in the county. Table 3.1 exhibits the dissemination of the unit of observation.

Table 3.1

Target Population of the Study

Categories	Target Population
Class trainers (teachers)	773
Head trainers (teachers)	773
County Director of Education	1
MOE Curriculum Support Officer	12
Quality Assurance and Standards Officer	12
Total	1571

3.6 Sample Size and Sampling Techniques

Sampling is defined as a process of choosing members of a study collected from the reachable residents (Moser & Kalton, 2017). The total population of public primary schools under consideration for this study was 773. According to Suri (2011) and Nardi (2018), for small populations, that is, not exceeding 1000, a sample size of between 10% and 30% of the target population is ideal. Therefore, the present study used 20% of the unit of schools, that is, the unit of analysis, as the sample size. Therefore, a total of 155 government sponsored schools in the county were selected for the study. The collection size was equally distributed across the 9 sub-counties in the Meru County.

The schools were randomly selected from each sub-county until the required sample size was achieved. Out of the selected centers, deliberate sampling was adopted to sample the

head teachers, while only one class three teacher per school in the sampled schools was randomly selected for the study since there more than one Grade 3 streams per school. The 9 TSC Curriculum Support Officer, County Education Director and 12 SQASOs from the 9 sub-counties in the County were purposively selected and included in the sample.

The use of either purposive or random specimen approaches was appropriate in that it introduced the element of unpredictability, recognized the requirement for key respondent groups included at the policy level, and made the specimen sufficiently representative of the overall population investigated.

Table 3. 2

Sample Size Grid

Categories	Target Population	Sample size (20%)
Class teachers	773	155
Head teachers	773	155
County Director of Education	1	1*
MOE Curriculum Support Officer	12	12*
Quality Assurance and Standards Officers	12	12*
Total	1571	335

*All included (not subjected to proportional sampling)

3.7 Instrumentation

Sekaran and Bougie (2016) defines research instruments as tools that are used to gather data on a certain set of study purposes. In this study they comprised questionnaires for the classroom teachers, an interview guide for head teachers and observation schedules.

3.7.1 Questionnaire for Classroom teachers

A questionnaire, according to Moser and Kalton (2017), is a study tool that consists of a sequence of questions and other stimuli designed to collect data from respondents and frequently arranged examination of the responses. The study used a self-administered survey questionnaire with closed-ended assessment items to acquire data from both class teachers and head teachers. In this study, the questionnaires were the most frequently used method because it was effective at gathering substantial amounts of data, reached a big population, and was simple to use. Given that the study dealt with a large sample of teacher and head teachers in different schools, collecting data using other methods could prove difficult.

The questionnaires were constructed along both the independent and dependent variables of the study. There were parts A, B, C, D, and E on the questionnaire. While sections B, C, D, E, and F, respectively, contained items on the study aims and the dependent variable, section A collected demographic information about interviewees and schools.

The survey's questions were graded using a five-point Likert scale. The weights for the response categories ranged from 1 to 5, depending on how the respondent felt about the item. The questionnaires were administered to all the selected Grade 3 class teachers and head teachers in the primary schools. The questionnaires, however, had inherent limitations among them being a subjective instrument that do not allow the respondent to fully express themselves on a subject matter. Therefore, the questionnaires were supplemented by the interview schedule and the observation schedules.

3.7.2 Interview Schedules for Curriculum Support Officers and Quality Assurance and Standards Officers

In order to assist interviewers, researchers, and investigators in gathering information on a certain topic or issues, a list of open-ended questions known as an interview schedule was created. According to Suri (2011), the type of information to be captured, the amount of time available, and the research's goals all influence the suitability and eventual selection of tools.

The advantages of this instrument include reduced interviewer bias and the ability to access and extract in-depth information from the respondents (Nardi, 2018). According to Brennen (2017), the benefits of employing structured interview strategy where the interview would be precisely conducted by the researcher are; First all the questions are answered, the amount of incomplete questionnaires are typically lower. Second; the researcher typically receives the opportunity to clarify any doubts regarding the highlighted questions. Given that the questionnaires are closed-ended, the interview schedules considerably increased the chances that all relevant topics were covered in detail and that any ambiguous areas were clarified.

In the words of Kothari (2005), interviews provide a goal-absorbed by the examiner to get dependable and valid measures from one or additional applicants in the form of verbal responses. The investigator used structured interview schedules to collect qualitative data from the TSCCSOs and the Ministry of Education QASOs.

The Directorate of Quality Assurance and Standards has been assigned the responsibility of supervising of schools by the Ministry of Education. The Education Act Cap 211 has mandated the directorate to enter and inspect schools. Ensuring curriculum maintenance

and implementation, giving feedback through reports and supervision of schools are some of the major roles undertaken by the Directorate. According to Okumbe (2007), supervision dealt with the improvement of standards and quality of education and therefore, was a vital part in school improvement programme. The improvement ratio of standards was seen once every child had received high-quality education according to their need. According to the Republic of Kenya (2000), the main purpose of the Quality Assurance and Standards as stipulated MOEST handbook is to check whether there is value added in education. To promote quality education, QASOs, carried out school assessments, and gave advice on capacity building and how the resources needed to be organised.

Constant supervision led to an improvement in performance (News Kenya, 2012). Regular visits enabled QASOs to advise on curriculum, provision of adequate physical facilities and fair distribution of teachers. The main mission of the Directorate Quality Assurance and Standards was to exhibit, nurture and upgrade education quality. Checking on the implementation of education policies at different levels of education was another task done by the Directorate.

3.8 Piloting of the Research Instruments

Data collection tools pre-testing was conducted to ensure that they are reliable and valid. The pilot study was undertaken in the neighbouring Maara Sub-county of Tharaka Nithi County. The head teachers, teachers, QASO and CSOs were subjected to the research tools to ascertain their reliability and validity. During the actual final data collection, the pilot participants were not be encompassed.

Walliman (2017) recommends a pilot sample of 10% of the sample population which was deemed ideal for the instrument piloting phase of the study. The 18 schools constitute

10.3% of the 108 sampled schools. Therefore, the pilot sample to be tested comprised of 36 Grade 3 lower public primary school teachers, 12 head teachers and SQASO from Tharaka-Nithi County. The rationale for choosing Tharaka Nithi County is because it was a neighboring county whose population under study has similar characteristics as the ones in Meru county.

The pilot sample was excluded in the actual research sample. With the help of the pilot study, the researcher was able to identify any flaws in the research tools used to the main study. Additionally, allowed to evaluate the items' or questions' clarity and make notes that the researcher use to reconstruct interview guides and questionnaires so that the instruments were modified and improved.

3.8.1 Validity of Instruments

Validity, according to Wildemuth (2016), is the grade to which evidence supports any conclusions or recommendations made by a researcher on the basis of information obtained via the use of a certain instrument. Creswell (2014) indicated validity allow the investigator to make solid deductions about the population from the sample being researched. Construct validity is ensured by constructing questions that are related to the objectives of this study. In this regard, the supervisors in the study examined each instrument's items to make sure they were proper. Wrong wording or unclear ambiguous sentences corrected to ensure the content is valid.

3.8.2 Reliability of the Research Instruments

Consistent results from items in the research instruments are ensured through reliability tests. Additionally, it guarantees that the field respondents comprehend and interpret the

items similarly (Mugenda, 2008). To put it another way, reliability assesses how well a research tool produces reliable data or results across trials. This used the Split-half credibility tests of the questionnaires and Interview schedules. The questions for the head teachers and Grade 3 class teachers were subjected to the split-half reliability test. After getting into the schools, the questionnaires were distributed to the respondents. There was a random division of the test questions into two equal sections. The scores were determined for each divided half and the correlation coefficients. The test enabled the researcher understand how much each of the test's component parts contributes to the construct being measured. The time spent to administer the instrument, its friendliness and clarity was also established.

3.9 Methods of Data Collection

The consent to conduct the research was first sought by acquiring a letter of reference from the School of Post Graduate Studies at Kenya Methodist University and then a research permit from National Commission for Science, Technology, and Innovation (NACOSTI). Extra authorization was sought from the County Director of Education and the study started data gathering only after receiving the necessary letters of approval and licenses. The investigator made pre-visit to the schools that were sampled in order to obtain permission and scheduled appointments with the participants in order to conduct the research and familiarize with them prior to the real study. Each instructor was allowed two hours to complete the questionnaires. At the same time, the researcher interviewed the principals and representatives of the parents. Before the distribution of research instruments advance visits were made to the selected schools to get authorization from the principals and also

make arrangements on data collection within the schools. This helped in identifying the respondents and also their availability for the study.

3.9.1 Data Collection using Questionnaires

During data collection, the questionnaires were administered on a strategy where the questionnaires were distributed to the respondents in a drop-wait-and-collect fashion, who were allowed some time to fill them (about one week) and then collected once they are fully filled. The questionnaires were administered to the Grade 3 trainers and collected on the questionnaires the same day they were issued. This instrument were administered after the observations so as to ensure that the responses were not premeditated or biased.

3.9.2 Data Collection using Interview Schedules

The interview schedules was administered only to respondents who indicated they had time to participate in the process giving the respondents the interview schedules and waiting for them to write their responses while being ready to clarify issues arising from the interviews. The interviews were administered to the CEC Education in Meru County, County TSC Head and the QASOs, and also the head teachers and class teachers who agreed to the interview process. Arrangements were made by the respondents on their availability and the dates and time were be set. During the interviews, the researcher engaged the respondents with questions from the interview schedules and asked the respondent to write responses on the instrument or where not possible, the researchers jotted the answers in a separate interview schedule.

3.10 Data Analysis Procedure and Presentation

Data processing, according to Merriam (2014), entails the editing, coding, classification, and tabulation of gathered data in order for it to conform to the analysis process. The data

analysis procedure in this study was done according to the instrumentation and the objectives of the study and proceeded along two methods; qualitative data analysis and gravimetric analysis.

3.10.1 Qualitative Data Analysis

3.10.1.1 Analysis of Interview Schedules

The data collected from the interview schedules was analyzed using descriptive methods involving thematic content analysis and employed Nvivo 14.0 software to aid with the coding for thematic content analysis. According to Wamukuru et al. (2019), the examination of textual data benefits greatly from content analysis. Text-based information is normally a method analysed using descriptive methods as it enables the decoding of encoded information (Berg, 2001). This enabled the researcher to analyse the textual content that was dormant and displayed through appraisal, classification, and tabulation of its primary themes and symbols in order to determine their meanings and likely impact on the subject under consideration. (Krippendorff, 2004). Software for approximate information examination called NVivo was made by QSR International. NVivo helps approximate examiners to find insights, arrange and analyse qualitative or vague information like open-ended survey answers, interviews, web content journal articles and social media where deep levels of analysis on large or small volumes of data are required (McNiff, 2016). NVivo helps in analysing, organizing and visualizing unstructured information and mixed media by providing tools for sorting, arranging and classifying data in ways that enable the identification of patterns and themes. Nvivo codes adopt the terminology and language used by the participants rather than alternative methods where codes are researcher-derived (Hilal & Alabri, 2013).

As coding was involved in the thematic content analysis, it was also made possible to use quantitative techniques to observe the general trends and criticality of the themes. An auto-generated coding scheme was used to capture and tabulate the respondents' dispositions and group them into themes which then was computed to obtain the relevant scores. In order for conclusions generated from the data that was coded help to compare the importance of the identified codes (Vogelsang et al., 2013). Each code was given a value depending on its relevance. To calculate this index, a standardized procedure that identified the importance based on the given coding of raw data was used.

The qualitative analysis method was used to assess the institutional preparedness in terms of teachers and instructional material as well as the school policies implementation of indigenous language policy in lower public primary education in Meru County, Kenya and policy interventions for encouraging use of native languages for basic instruction in primary schools.

As such, it was used to answer the questions; how prepared were the learning institutions for the execution of the indigenous dialects regulations in lower public primary education in Meru County? What challenges impede the execution the indigenous dialect laws in lower public primary education in Meru County?

3.10.1.2 Analysis of Observation Schedule

The outcomes of the investigation plans was described, examined along several thematic domains, and used to support the study's narratives. The findings of the investigation plan was subjected to content examination, with field notes supplementing the observations to give narratives that explain the volumetric analysis. This was carried out in accordance

with the several frameworks for implementing the indigenous language policy in lower public primary schools in Meru County.

3.10.2 Quantitative Data Analysis

Questionnaires were used in collecting perceptible information and examined by using the Statistical Package for Social Scientists (SPSS) version 24.0. Since the study involved known variables, both independent, dependent, descriptive statistics as well as inferential statistical methods was used to analyze data related to these variables. In order to show the overall trends of the data, descriptive statistics used frequencies expressed as percentages and determination of chi square. Bivariate correlations and multiple regression analysis are used in inferential statistical analysis, on the other hand. Correlation analysis was attuned to explain the type of the association between adjustable at a generally accepted conventional significant level of $P \leq 0.05$ (Vaux, 2012). Additionally many reversion scrutiny was used to test the multivariate association of the variables in a joint model and, as such, that was applied to study the relationship between a experimental variable and explanatory variable. The proposed multivariate regression model used to link both the independent and dependent variables is outlined below.

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 \varepsilon$$

Where:

Y = Implementation of the Indigenous Language Policy

α = Constant

X₁ = Teacher Preparedness

X₂ = Teaching Materials Preparedness

X₃ = Institutional Preparedness

$X_4 = \text{Challenges}$

$\varepsilon = \text{the error term}$

$\beta_1, \beta_2, \beta_3$ and $\beta_4 = \text{Regression coefficients of the independent variables (i.e. for Teacher Preparedness, Teaching Materials Preparedness, Institutional Preparedness and Challenges respectively)}$.

The quantitative analysis was used to answer the questions; what extent does teacher preparedness influence the execution of the indigenous dialect regulations in lower public primary education in Meru County? How does teaching materials preparedness affect the execution the indigenous dialect regulations in lower public primary education in Meru County? How does institutional preparedness influence the execution the indigenous dialect regulations in lower public primary education in Meru County? and some of the shortcomings that impede the execution the indigenous dialect regulations in lower public primary education in Meru County?

3.11 Ethical Considerations

In research, ethical subjects include detailing the research's substance and what the participants were expected to do, as well as how informed consent was gained and confidentially ensured. The research permit to collect the data was sought through an application to NACOSTI. The researcher sought consent to collect data from Meru County Research Board. The researcher identified a problem that was beneficial to the participants of the study and also disclosed the study's purpose. At the data collection stage, the researcher was careful not to put to risk the participants. They were informed of their voluntary participation but to be utilized for academic reasons only. Confidentiality was

guaranteed to all the respondents and promised that the data was not going to be disclosed to parties outside the study. The confidentiality of the data was preserved, and the research was pitched to education program only. This assurance was to allow the respondents to give truthful responses while withholding no information. The research assistant was instructed not to reveal anyone's name because doing so would violate the ethical guidelines for data collecting and result in consequences. The researcher described the goal of the research to the participants. The investigator explained the data collection technique to the respondents so that they gladly participated. A file was created to store the raw data for later use. Computer printouts were stored in files after the material had been reviewed, while softcopies were kept on media like CDs and flash discs.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the results regarding the readiness of lower public primary schools to implement mother tongue education in Meru County, Kenya. The presentation and analysis of these results are structured based on the study's key variables, namely the implementation of the MTE policy in lower public primary school education, teacher preparedness, and preparedness of instructional materials, institutional readiness and teachers' attitude. The discussion begins with background information about the respondents and diagnostic test results, which were used to determine the appropriate statistical analysis for examining the hypothesized relationships among the variables.

Descriptive statistics, including percentages, mean values, and standard deviations, were computed for each objective, and the findings are presented and discussed accordingly. Qualitative results were also presented and integrated. Hypothesis testing results are presented within each variable to facilitate a comprehensive understanding of each phenomenon. An integrated discussion of the results is subsequently provided to enhance the conceptualization of findings related to each variable. These findings are then discussed in the context of the empirical literature, theories, and conceptual framework established in Chapter Two. The initial findings presented pertain to the response rate of the study and data reliability.

4.2 Response Rate

This study involved distributing 260 questionnaires to grade three teachers in public primary schools. Additionally, the researcher conducted focused group discussions with 17/155 head teachers and interviewed 10 MOE Curriculum Support Officer and 9 nine Quality Assurance and Standards Officers. The response rates for each category are presented in Table 4.1.

Table 4. 1

Study's Response Rate

Categories	Tool used	Sample size (20%)	Number that responded	Response rate
Class teachers	Questionnaire	260	211	81.2%
	Focused group discussion (2 groups)		17	94.4%
Head teachers		18		
MOE Curriculum Support Officer	Interview guide	12	10	83.3%
Quality Assurance and Standards Officers	Interview guide	12	9	75%
Total		302	247	81.8%

Out of the 260 questionnaires distributed to grade three teachers, 211 valid ones were received, indicating a response rate of 81.2%. The high response rate of 81.2% from grade three teachers suggests a strong willingness among them to provide valuable input. Regarding head teachers, the research had planned to hold focused group discussions with 18, but one did not participate, resulting in discussions with 17 head teachers. For interviews with MOE Curriculum Support Officers and Quality Assurance and Standards Officers, the original plan was to interview 12 individuals from each group. However, the

actual availability was 10 (83.3%) for Curriculum Support Officers and 9 (75%) for Quality Assurance and Standards Officers. This led to an overall response rate of 81.8%. This demonstrated the commitment of these officials to contribute to the study. The response rate findings presented in the study were in agreement with Mugenda and Mugenda (2003) recommendation on response rate, which stated that, a return rate of 70% and above is an excellent representation. Additionally, similar assertions were also submitted by Kumar (2010) that, a response rate of 60% above is adequate and can be utilized to present the findings of the study as given by the respondents. Morris (2008) further supported this argument that for a social study, the major hindrance is suffering from sufficient responses henceforth, responses bearing over 60% response rate put the research in a position of sufficiently making research conclusions. In connection with the given assertion, the study deduced the commitment shown by the study participants who led to the summation of a 81.8% overall response rate. It also pointed out that the targeted respondents were willing to share out information regarding the phenomena of the study, hence willing to participate in the data collection exercise.

The results represent an overall response rate of 81.8%. It's important to note that this overall response rate was higher than the recommended threshold of 60.0% considered adequate in survey research, as suggested by Morton et al. in 2019. Overall, the response rates indicate a favourable level of engagement and cooperation from the participants, suggesting that the data collected for the study was representative and relevant for use in the analysis.

4.3 Reliability of the Data

The data collected for each variable was assessed to ascertain its fitness and dependability before the same was used in the analysis.

Before using the data in the analysis, its suitability and reliability were assessed. Cronbach's Alpha coefficients were therefore computed for five key variables: teacher preparedness, readiness of instructional materials, institutional preparedness, teachers' attitudes, and the implementation of the Mother Tongue Education (MTE) policy. The resulting Cronbach's Alpha values for each of these variables are presented in Table 4.2.

Table 4. 2

Reliability of data based on the main variables

Main constructs of the study	Cronbach's Alpha
Teacher preparedness (X1)	0.811
Instructional materials preparedness (X2)	0.725
Institutional preparedness (X3)	0.732
Teachers' attitudes (Moderator)	0.961
Implementation of the MTE policy (Y)	0.933

The findings suggest that for each construct, the Cronbach's alpha coefficient exceeded 0.7 which is considered a good reliability measure in the field of social sciences according to Kabir (2018) and Bhattacharjee (2012). This meant that the items within each variable consistently and reliably measured the intended constructs. The researcher was therefore confident that the data collected for teacher preparedness, instructional materials

preparedness, institutional preparedness, teachers' attitudes, and the implementation of the MTE policy was dependable and suitable for subsequent analysis. High Cronbach's Alpha values indicate that the data was internally consistent, which enhanced the overall quality and trustworthiness of the research findings.

4.4 Profile of Respondents

The background information of respondents was key to this study. It helped the researcher to make sense of the data, enhanced objectivity and understanding of the responses gotten on teacher preparedness, instructional materials preparedness, institutional preparedness, teachers' attitudes, and implementation of the MTE policy. The study was interested on background aspects regarding gender, age bracket, highest level of academic qualification, and years of teaching experience. The ethnic groups represented among the learners and the teachers teaching at the lower primary level was ascertained. The results on demographic characteristics of grade three teachers are presented first.

4.4.1 Demographic Characteristics of Grade Three Teachers

The results on demographic characteristics of grade three teachers are shown in Table 4.3.

Table 4. 3*Demographic characteristics of grade three teachers*

Gender		
Characteristic	Frequency	Percent
Male	28	13.3
Female	183	86.7
Total	211	100.0
Age bracket		
26 – 30 years	21	10.0
31 – 35 years	19	9.0
36 – 40 years	20	9.5
41 – 45 years	21	10.0
46 – 50 years	48	22.7
Above 50 years	82	38.9
Highest academic level attained		
Diploma	187	88.6
Bachelors	24	11.4
Years one has been a teacher		
Less than 5 years	5	2.4
5 – 10 years	54	25.6
11 – 15 years	36	17.1
16 – 20 years	31	14.7
Above 20 years	81	38.4

The findings show that there were more female than male teachers handling grade three learners in Meru County. The female teachers here, 183(86.7%) while male were 28(13.3%). The gap was too big, which could be attributed to the grade three levels being perceived as more suitable for women due to social or cultural expectations. Teaching has also been considered a nurturing and caring profession, which may align well with traditional gender stereotypes biased to women. The results are consistent with findings which were presented by Chebet et al. (2018) which indicated that most educators in lower primary schools are dominated by the female gender. The presented results are in line with earlier observations spotted by Chebet et al. (2018) which attributed the cause of female gender dominance in teaching children to the generally women ability to manage children and show them love, care and diverse nursing necessities while in the school environment.

The study also established the age of grade three teachers by asking the respondents to indicate their age brackets. The results show that the majority of teachers, 82(38.9%) were over 50 years of age. Forty-eight (22.7%) were between 46 – 50 years. Two categories had 21(10%), between 26 and 30 and 41 and 45 years. The results show 151(71.6%) teachers were 41 years and above. The finding shows that grade three teachers were comparatively elderly. Notably, learners in grade three require tenderness; hence, any teacher handling them ought to demonstrate a sense of stability, and this may be appealing to older teachers who value a consistent and structured work environment. The newer teachers may not have developed adequate experience in early childhood education compared to the older ones. Additionally, the older teachers had mastered their mother tongue and would use their accumulated experience to pass the knowledge to learners in grade three using it. The other

reason could be due to the limited turnover of older teachers. This was also upheld by Chebet et al. (2018) who noticed that, majority of teachers in Nandi county were aged between 41-50 years. The noted results uphold the recommendations given out by Waweru (2018) who noticed that the age of lower primary school teachers were a key determinant factor to the kind of instructional delivery, instruction delivery methodology and language of instruction. Waweru (2018) has linked the elderly teachers with high acquaintance with the local or mother tongue language. This implies that, the age of grade three teachers is extremely essential since it demonstrates the quality and shortcomings of the use and performance of native languages.

Information gathered from the County Director of Education indicated that while Kimeru language decline is acknowledged, particularly among younger generations, the impact of urbanization is notable. Undoubtedly, the decline in the use of Kimeru language is evident among younger urban dwellers that appear disconnected from rural linguistic communities. However, Kimeru language maintains emotional relevance for older generations due to family and social ties. That notwithstanding, the County Director of Education noted that the local communities were willing to support the use mother tongue languages in schools in the area. The support was largely in the development of reading materials.

The other background aspect investigated was about the highest academic level attained by grade three teachers. The results indicated that an overwhelming number of teachers, 187 (88.6%) had diploma qualification. The rest, 24(11.4%) had bachelor degree. This indicated that all teachers had the required academic qualification to teach grade three learners; hence, could handle mother tongue language effectively. This was contradictory

to the findings of Specia et al. (2022) who noticed that in Busia County, 5(71.4%) of the teachers had trained as certificate holders in Pre-Primary teacher education and the least 10(28.6%) were diploma holders. In Nandi County, Chebet et al. (2018) avowed the education qualification results whose theirs' presented that, majority of the pre-school teachers 74 (50.7%) had diploma in Early Childhood Education, with 24% had bachelor's degree and 20.5% had Diploma education level. The results connect that, education qualifications of grade three teachers impacts the capacity for educators to embrace and utilize the first language in classroom which consequently impacts pupils' abilities to secure the second language.

The study also inquired about teaching experience of a teacher. The findings revealed that a significant majority of the teachers, specifically 81 individuals (38.4%), possessed more than two decades of teaching experience. Additionally, 31 teachers (25.6%) had been teaching for a period ranging from 16 to 20 years, while 36 educators (17.1%) fell within the bracket of 11 to 15 years of teaching experience. Notably, the data indicated that only a small cohort of 5 teachers (2.4%) had less than 5 years of teaching experience. The findings demonstrated a varied distribution of teaching experience among the surveyed teachers. The results also indicated that a substantial portion of the teacher sample had a long history of working in the education field, and this had implications on understanding the expertise and perspectives of teaching mother tongue language in lower primary schools. The results did match with what was discovered by Waweru (2018) in Nyandarua County that pre-educators had lasted in their current professions for more than 20 years. The sentiments of Millinger (2018) have also posited that, accumulated experience in handling young children make educators build kid friendly set of qualities, patience,

humor, tolerance to slow learners and understanding that all children are different and can become better when handled with care.

4.4.2 Ethnic Diversity among Grade Three Learners and Teachers in Meru County

The study was set out to assess the preparedness of public lower primary schools to implement the mother tongue education policy. Therefore, it was important to establish the ethnic groups represented among the learners and the teachers teaching at the public lower primary schools. The number of ethnic group among grade three learners is shown in Table 4.4.

Table 4. 4

Numbers of ethnic diversity among grade three learners in Meru County

Numbers of ethnic diversity	Frequency	Percent
Six	11	5%
One	114	54%
Seven	8	4%
Three	21	10%
Two	57	27%
Total	211	100.0

According to the findings in Table 4.4, the majority of lower public primary schools, specifically 54%, were predominantly composed of a single ethnic group in grade three. This suggests that a significant portion of the schools in the study had a relatively homogenous student population in terms of ethnic background. Results also show that a

substantial but smaller proportion of schools, comprising 27%, had a mix of two ethnic groups. This indicates some degree of diversity compared to schools with only one ethnic group. A smaller number of schools, 10% to be precise, had an even greater level of diversity, with three distinct ethnic groups present. This suggests a more varied cultural and ethnic makeup within these schools. In contrast, a minority of schools, specifically 5% and 4%, demonstrated a remarkably high level of ethnic diversity, with six or seven different ethnic groups present.

The results indicate a range of ethnic diversity among the public primary schools that took part in the survey, with the majority having a single ethnic group as the dominant population. However, some schools exhibited a higher level of diversity by having two or more ethnic groups coexisting within their student populations. The presence of schools with six or seven ethnic groups indicated a considerable diversity in those particular schools. The results suggest that the level of ethnic diversity in schools can impact the teaching of mother tongue languages. The schools with a single ethnic group may have a simpler task in teaching the mother tongue language, as they can focus on a single linguistic community. However, it may be challenging to other schools. These findings emphasize the importance of considering the ethnic composition of schools when developing language education policies and practices. This has also been stressed in the report of Kobia (2017) who reported that, among the hindrances to adopting a mother tongue language policy, the major hurdle was that of ethnical diversity within school systems. Kobia, recommended the harmonization to adopt a common language of instruction for school with diverse ethnic backgrounds through political goodwill and developing a comprehensive mother tongue policy in Kenya.

The study further sought to understand the ethnic composition among grade three teachers in Meru County. This was critical in understanding whether the ethnic composition was an issue of consideration towards implementing the mother tongue language policy. The results are found in Table 4.5.

Table 4. 5

Ethnic composition of grade three teachers in Meru County

Numbers of ethnic diversity	Frequency	Percent
Embu, Ameru	7	3%
Embu, Chuka, Ameru	15	7%
Embu, Kikuyu, Ameru	8	4%
Embu, Ameru	3	1%
Kamba, Ameru	7	3%
Kikuyu Kamba, Ameru	16	8%
Ameru	136	65%
Ameru, Kikuyu	18	9%
Total	210	100%

These findings present the ethnic makeup of grade three teachers in Meru County. Among grade three teachers in 65% of public primary schools in the county, the dominant ethnic group is the Ameru. In 9% of these schools, a combination of Ameru and Kikuyu teachers was observed as the second most common ethnic composition. Following closely at 8% was a combination of Kikuyu, Kamba, and Ameru teachers. An additional ethnic composition, consisting of teachers from the Embu, Chuka, and Ameru backgrounds, accounted for 7% of the observed cases. The lowest ethnic group composition was Embu and Ameru at 1%. The results suggest that the Ameru ethnicity is the most prevalent among

grade three teachers in the majority of public primary schools in Meru County, making up a significant 65% of the teacher population. Additionally, there is some diversity in the ethnic composition of grade three teachers, with smaller percentages of schools reporting a mix of Ameru and Kikuyu teachers (9%), Kikuyu, Kamba, and Ameru teachers (8%), and Embu, Chuka, and Ameru teachers (7%). This data highlights the multi-ethnic nature of the teaching staff in Meru County's public primary schools. Teacher 76 indicated that the diversity in the ethnic composition of teachers in the schools was due to the delocalization policy formulated by the education ministry. This makes it difficult for the implementation of the mother tongue language policy since the teachers are not familiar with the language of the catchment area. Another teacher noted that the school administration prefers teachers from the catchment area to teach in the lower primary classes since they are well-versed in the language. This makes it easier for the teachers to use Kimeru language when teaching lower primary learners and hence the implementation of the MT language policy. These findings concurred with the submission aired out by Ong'uti et al. (2016) that, there are over 70 languages and dialects in Kenya which divide Kenyans into regional sub-groups although, different tribes keep on migrating regionally to other parts of the country for settlement and job purposes. This regular mingling and inter-regional movement has led to having a combination of children and teachers in schools who do not speak the language of the community in the current residential region.

4.4.3 Use of Kimeru Language in Teaching Lower Public Primary Schools

The grade three teachers were asked to indicate the extent to which teachers use the Kimeru language (indigenous language) when teaching pupils in lower primary school classes. Their responses were summarized as shown in Table 4.6.

Table 4. 6

Use of Kimeru language when teaching lower primary school

Never	13	6.2
Rarely	84	39.8
Sometimes	107	50.7
Most of the time	7	3.3
Total	211	100.0

Approximately half of the teachers (50.7%) sometimes use the Kimeru language when teaching learners in lower primary classes. Thirty-nine point eight percent 39.8% use Kimeru rarely; 3.3% use it most of the time while (6.2) never use Kimeru language when teaching learners in lower primary classes. The use of the Kimeru language when teaching in lower primary classes can benefit the learners considering that they are the majority. Teacher 37 noted that they rarely use the Kimeru language when teaching because it is not an examination language. If they use the Kimeru language when teaching it means that the learners will use the Kimeru language to answer examination questions that are asked in English or Kiswahili. To some extent the use of the Kimeru language when teaching makes the learners not understand the examinations that are in English or Kiswahili languages.

This leads to poor performance and degrading of education quality. The teacher noted that if the Kimeru language was added as an examination language it would be a motivation for them to indulge in the use of the Kimeru language when teaching.

However, it can also pose challenges considering the ethnic composition of learners and teachers as shown in Tables 4.4, 4.5, and 4.6. The results concur with a situation presented in Malawi which underscored that teachers sometimes used their mother tongue (Chichewa language) to teach mathematics subjects and rarely combined different languages to bring mathematics concepts home to grade 1-3 children (Umar, 2018).

The above results attest a multi-ethnic composition among learners and teachers which show a diversity of mother tongue background among teaching staff and learners. This diversity can be both an opportunity and a challenge for teaching mother tongue languages. One observation that is clear from the results is the need to promote cultural sensitivity in the classroom. Teachers need to be aware of and respect the cultural gradations associated with different mother tongue languages. Notably, teaching in a multi-ethnic environment may pose challenges in terms of standardizing the curriculum and assessment methods for mother tongue languages. It may require efforts to ensure consistency and fairness in evaluations. Therefore, to effectively teach mother tongue languages, teachers should receive training not only in language instruction but also in cross-cultural communication and understanding. Such training can help them address the needs of students from diverse linguistic backgrounds. It is therefore crucial for the Ministry of Education to develop policies and strategies that promote inclusive, culturally sensitive and effective mother tongue language instruction policy. The underscored results point to a similar situation

which was presented by Umar (2018) in Malawi that, among the major factors that discourage the adoption of mother tongue language in teaching pupils in lower primary schools, the major hindrance was the dominance of children and teachers who come from different ethnic backgrounds and speak different languages. Again, teachers were noted to lack competencies on how to give concepts using the dominant Chichewa language. Umar (2018) cited that, this hindrance can be addressed by coming up with best practices, training educators, developing a mother tongue friendly curriculum and parental engagement. These aspects implicate on the need for implementation of the mother tongue language of instruction policy.

4.5 Diagnostic Tests of the Study Data

Data on main variables; implementation of the MTE policy in lower public primary school education, teacher preparedness, and preparedness of instructional materials, institutional readiness, and teachers' attitudes were checked for non-violation of assumption related to inferential statistical analysis. The assumptions tested were normality, where, P-value, histogram and box plot were used. Linearity condition between dependent and independent variables was then confirmed followed by auto-correlation and heteroscedasticity assumptions. The last assumption tested was multicollinearity.

The constructs of the study were latent with many items as indicators. Therefore, variables were first regrouped and transformed to enable the research to consider many items as a single variable. In that connection, X_1 represented teacher preparedness,; X_2 - preparedness of instructional materials; X_3 - institutional readiness; M =teachers' attitudes and Y is the

dependent variable which was implementation of the MTE policy in public lower primary school education in Meru County.

4.5.1 The Normality Test

In this study, both the Kolmogorov-Smirnov^a and Shapiro-Wilk test statistics values for each variable are shown in Table 4.7.

Table 4.7

Normality Test on preparedness to implement the MTE policy

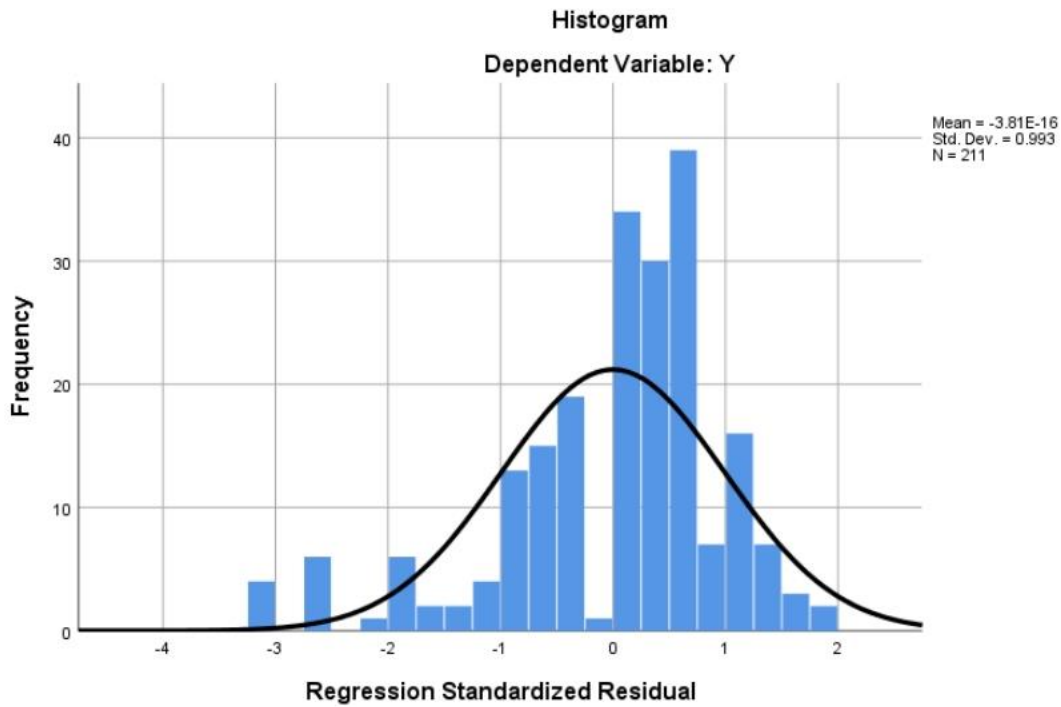
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Y	.215	211	.000	.896	211	.000
X1	.199	211	.007	.906	211	.001
X2	.259	211	.011	.749	211	.030
X3	.300	211	.000	.858	211	.000
M	.202	211	.028	.900	211	.002

a. Lilliefors Significance Correction

The subjects used in this study was 211; hence, Kolmogorov-Smirnov^a was adopted in interpreting the p-value. The Shapiro-Wilk test is designed to work well with small sample sizes (Waithima, 2020). Data in Table 4.4 shows that Kolmogorov-Smirnov^a P-values were significant for each construct ($X_1=.007$, $X_2=.011$, $X_3=.000$, $M=.028$ and $Y=.000$: $P<0.05$). The researcher's endeavour to standardize the study data for each construct using log10 (Gravetter et al., 2020) did not result in successful normalization. The findings indicate that the data violated the normality condition. Histogram for the dependent variable (implementation of the MTE policy in lower public primary school education) was generated to further confirm the normality status of the data as shown in Figures 4.1.

Figure 4. 1

Histograms on preparedness to implement the MTE policy



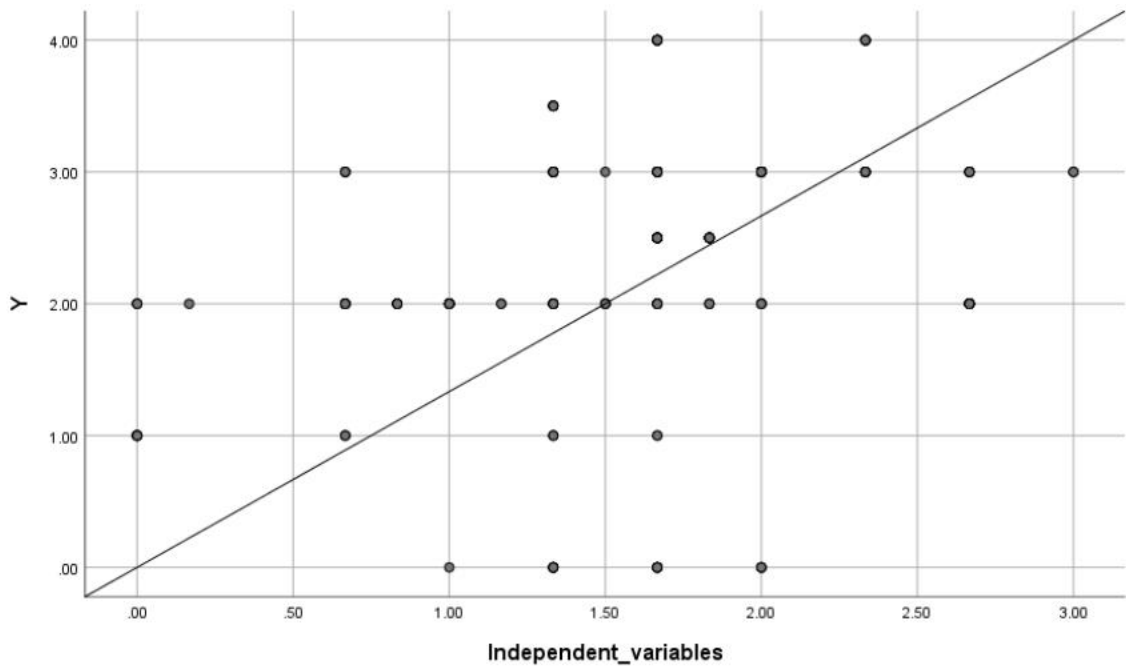
normal distribution. It's worth noting that no significant outliers were observed in the histograms.

4.5.2 The Linearity Test

The linearity condition was ascertained graphically by generating scatter plots and drawing a line of best fit as shown in Figure 4.2.

Figure 4. 2

Scatter plots showing the linearity of predictors and dependent variables



As indicated by the findings shown in Figure 4.2, there is an increasing spread of scatter points when moving from the left to the right along the line of best fit. This illustrates a non-linear relationship between the independent variables (X1, X2, and X3) and the implementation of the MTE policy in public lower primary school education.

4.5.3 The Auto-correlation Test

In this research, the researcher examined the issue of auto correlation in the aspects of the independent variables by employing Durbin-Watson statistics. The outcomes of the auto-correlation tests are presented in Table 4.8.

Table 4. 8

The Autocorrelation test on preparedness to implement the MTE policy

Variables	Durbin-Watson
X1	2.040
X2	1.778
X3	1.894
M	1.953

Table 4.8 displays the Durbin-Watson statistic values corresponding to each predictor variable. In this instance, the values for each predictor variable are approximately 2 or higher and exceed the threshold of 0.8, as reported by Taylor in 2023. Consequently, there is no evidence of a violation of this condition.

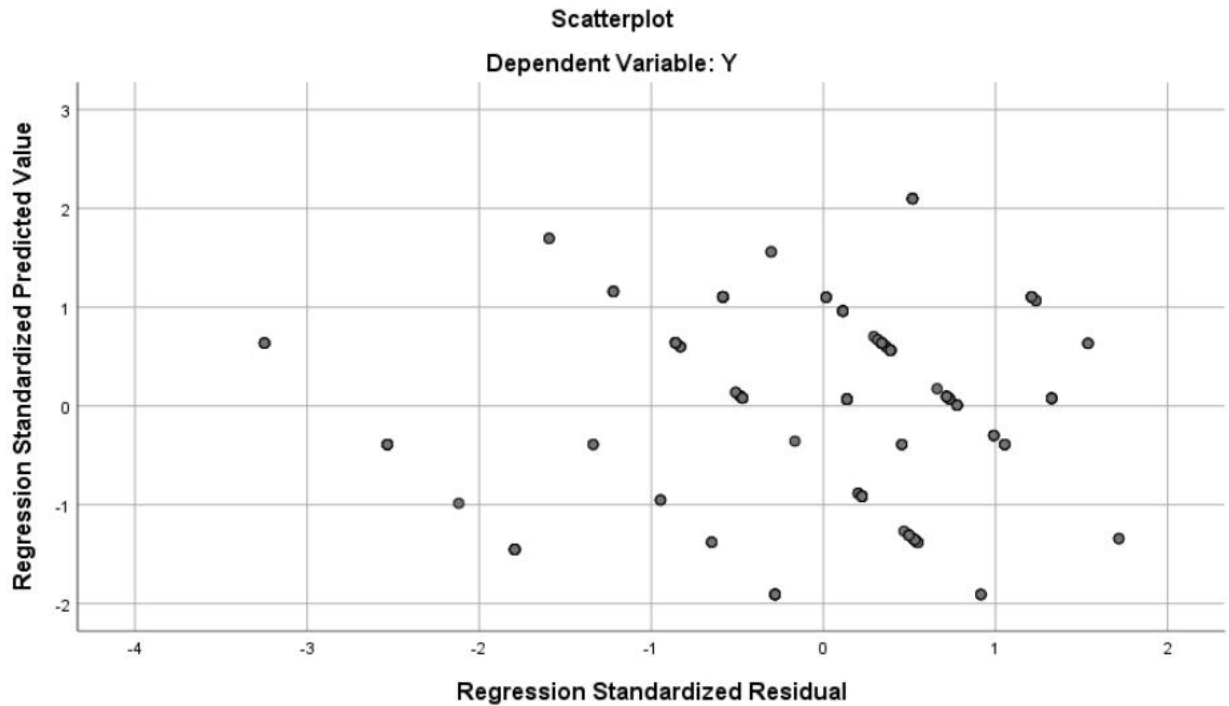
4.5.4 The Heteroscedasticity Test

Heteroscedasticity should not be an issue in the dataset intended for regression analysis. To verify this condition visually, a scatter plot was created using standardized predicted residuals and standardized residuals. The degree of dispersion among the data points was

a valuable indicator for detecting any heteroscedasticity problem. The results of this test are depicted in Figures 4.3.

Figure 4. 3

Heteroscedasticity test on preparedness to implement the MTE policy



The scatter plot depicted in Figure 4.3 reveals widely scattered data points, failing to exhibit any discernible pattern within the rectangular graph. The data points are significantly dispersed and do not display any distinct pattern, indicating the absence of heteroscedasticity in the study's dataset.

4.5.5 The Multicollinearity Test

In this study, the primary aim was to perform a regression analysis, by regressing all the independent variables against the dependent variable to fulfil the study's objective. In a

multivariate regression analysis, it is crucial for the predictor variables to meet the multicollinearity assumption. To evaluate multicollinearity, the Variance Inflation Factor (VIF) was calculated for each of the predictor variable (X1, X2, and X3). The results of this assessment are outlined in Table 4.9.

Table 4. 9

Multicollinearity Test on preparedness to implement the MTE policy

Variable	VIF - Trainees data
X1	1.529
X2	1.054
X3	1.262
M	1.334

As indicated by the results in Table 4.9, each aspect of preparedness to implement mother tongue education displayed a Variance Inflation Factor (VIF) below 5, with values as follows: X1 = 1.529, X2 = 1.054, X3 = 1.262, and X4 = 1.334. Given that the VIF falls within the range of 1 to 5, as suggested by Grande in 2015, the study concluded that there was no issue of multicollinearity in the data.

Based on the scatter plot findings in Figures 4.1, 4.2, and 4.3, there are no significant fluctuations in the point distances when moving from left to right. The scatter points exhibit a slight dispersion, and there is no clear discernible pattern or shape. This indicates the absence of heteroscedasticity in the data.

While the data did not violate autocorrelation, heteroscedasticity and multicollinearity conditions checked in the diagnostic tests, the results in Table 4.7, Figures 4.1 and 4.2 suggest that it was not drawn from a normally distributed target population. As a result, non-parametric inferential statistics were regarded appropriate for the analysis. Consequently, this study opted for Spearman correlation analysis to address the research hypothesis while ordinal logistic regression analysis which utilizes Chi-square was adopted to investigate the purpose of the study, and ascertain the moderation effects of teachers' attitudes.

4.6 Results Based on the Main Variables of the Study

The presentation and discussion of quantitative and qualitative findings of each variable adopted a concurrent embedded research design of mixed methods approach. In this study, the information gathered from the grade 3 teachers through questionnaires was largely descriptive, and was hence significant in forming the basis of the argument in this study. The qualitative data from the open-ended questions in the questionnaires, and the responses from interview questions and focused group discussions were then integrated /embedded to expand the observations and enrich the discussion of each variable. In that connection, the findings from grade 3 teachers are presented first then followed by results from school head teachers, CSOs and QASOs in an embedded manner.

During data analysis stage, data was transformed to aid better understanding of variables. The transforming of data enabled the researcher to come with latent variable whose summation further enabled computation of mean and standard deviation for each transformed variable which were utilized to aid interpretation of the findings. The

summation of responses was also significant during the evaluation process of the results. The process of interpreting frequencies and percentages considered the responses on strongly agree and agree options to imply general agreement level; while, the frequencies and percentages for strongly disagree and disagree was taken to indicate disagreement. However, in some instances, the frequencies were reported as they are to enhance clarity of the findings. The presentation of the findings on the main variables commences with results based on the dependent variables followed by independent variables and then moderating variables in that order.

4.7 Results on Implementation of the Mother Tongue Education Policy

The implementation of the MTE policy in lower public primary school education in Meru County was the dependent variable in this study. Information about the implementation of the MTE policy in lower public primary school education in Meru County was gathered from grade three class teachers, head teachers, the County Director of Education, the MOE Curriculum Support Officer, and the Quality Assurance and Standards Officer.

4.7.1 Descriptive Results on Implementation of the MTE Policy in Lower Public Primary School Education

Meru County has a rich linguistic and cultural heritage, with Kimeru as one of its prominent languages. In the first instance, the researcher wanted to establish the extent to which the Kimeru language was used as the language of instruction in lower primary schools in Meru County. Understanding the extent to which subjects are taught in the Kimeru Language was crucial for assessing the preservation of the local language and its impact on education in the lower classes. The grade three class/teachers were therefore provided in tabular

format, a list of the subjects taught requiring the respondent to indicate in a Likert scale how often was Kimeru language used to teach each of the listed subject. The subjects included: Mathematics, English, Kiswahili, Science, Social studies, and Christian religious studies. The key of the rating scale used was: Never = 0, rarely = 1, sometimes = 2, most of the time = 3, and always = 4; Med = medium, and Mod = mode. The results were summarized as shown in Table 4.10.

Table 4. 10

Descriptive results on implementation of the MTE policy

Subjects taught in Kimeru Language	Rating					Med	Mod
	Never (0)	Rarely (1)	Sometimes (2)	Most of the time (3)	Always (4)	2	2
Mathematics	16(7.6%)	48(22.7%)	114(54%)	33(15.6%)	0	2	2
English	37(17.5%)	101(47.9%)	59(28%)	14(6.6%)	0	1	1
Kiswahili	44(20.9%)	101(47.9%)	50(23.7%)	7(3.3%)	9(4.3%)	1	1
Science	16(7.6%)	27(12.8%)	123(58.3%)	41(19.4%)	4(1.9%)	2	2
Social studies	13(6.2%)	26(12.3%)	136(64.5%)	36(17.1%)	0	2	2
Christian religious studies	13(6.2%)	25(11.8%)	131(62.1%)	42(19.9%)	0	2	2

The results indicate variations in the frequency of subjects taught in Kimeru Language in Meru County. Mathematics is primarily taught "Sometimes" or "Most of the time," with a median and mode rating of 2. English, on the other hand, is mostly taught "Rarely" or "Sometimes," with a median and mode rating of 1. Kiswahili falls in a similar category as English, with a median and mode rating of 1. Science and Social Studies are predominantly taught "Sometimes" or "Most of the time," with a median and mode rating of 2. Christian Religious Studies also show a similar pattern.

Teacher 67 noted that the learners easily understand mathematical concepts when taught using Kimeru because it is the language that they are exposed to at home. The home environment introduces learners first to mathematical concepts such as adding, subtracting, or dividing when the parents are instructing the kids at home or sending them to the shops. Having this kind of background makes it easier for them to understand harder concepts in mathematics when taught using the Kimeru language.

From the results in Table 4.10, the majority of respondents 114 (54.0%) reported that Mathematics is taught in the Kimeru Language most of the time, indicating a relatively high frequency. This suggests that there is a significant emphasis on teaching Mathematics in the Kimeru Language in lower public primary school education in Meru County. The high frequency of Mathematics being taught in the Kimeru Language may indicate a strong commitment to providing education in the local language. This can help students better understand and engage with mathematical concepts, potentially leading to improved learning outcomes. The results compare with the observations of Umar (2018) in the Yola district, that children in lower grades were moderately taught using the local native

language. Umar linked mother tongue engagement to improved academic performance of pupils. However, Hafiz and Farik (2016) contradicted the findings noting that, the utilization of first language to teach mathematics subject to learners brought a lot of difficulties especially translating some concepts and this led to poor academic performance of pupils. Borrowing from the discussed findings, the results in this study implicate that, the implementation of mother tongue language to teach lower-grade pupils may be implemented but its impact on the academic performance depends on the set parameters and preparedness mechanisms needed in place.

The results also show that most respondents 101 (47.9%) reported that English is rarely taught in the Kimeru Language. Additionally, no respondents indicated that English is taught "always." This suggests that English instruction is relatively infrequent in the Kimeru Language. Similarly, a substantial proportion of respondents 101 (47.9%) reported that Kiswahili is rarely taught in the Kimeru Language. However, a smaller percentage (4.3%) indicated that Kiswahili is taught "always." The low frequency of English and Kiswahili instruction in the Kimeru Language may impact students' proficiency in this widely spoken language. Teacher 121 noted that during their training they were instructed not to use another language when teaching a language subject, for example, when teaching an English subject they should stick to the use of English and not add another language like Kiswahili or MT. Another teacher added that the use of the Kimeru language when teaching English or Kiswahili takes a lot of time for the learners to understand the subject leading to delayed completion of the syllabus. Balancing the instruction of English and Kiswahili with the promotion of the local language (Kimeru) is essential to ensure students' linguistic diversity and communication skills. Mwanza

(2009) also shed light that, the utility of mother tongue to teach learners influences performance in language subject especially English. Comparably, Simiyu (2022) also noticed that the adoption of native language in teaching students in senior schools influenced the learning of Kiswahili language among students in Trans- Nzoia County. The remarks given out by Simiyu and Lwangale (2020) and even Mwanza (2009) calls the research to be cautionary when introducing the use of mother tongue language of instruction lest, it affects the acquisition and performance in other languages. This communicates the need for a mother tongue language of instruction policy which gives direction on balancing both sides.

For science subjects, a majority of respondents (58.3%) reported that Science is taught "sometimes" in Kimeru Language, indicating a moderate frequency. However, a small percentage (1.9%) reported that it is taught "always." The moderate frequency of Science instruction in the Kimeru Language suggests a balance between promoting the local language and delivering science education effectively. Teacher 36 explained that science as a subject matter is what the learners are exposed to the most at home, for example, concepts such as health and hygiene, food and nutrition, pests, and diseases. These concepts are taught to the learners first at home by their parents using their MT. This means that already they have a background of the concepts in their MT so it makes it easier for teachers to use the Kimeru language when teaching this subject. The teacher mentioned that when they use English when teaching the class is boring and takes time for the learners to understand, but when they use Kimeru to teach, the learners become very active and participate because it is the language they can relate to. This approach may support students' comprehension of complex scientific concepts while maintaining their connection

to Kimeru culture and language. The presented results agree with the observations submitted by Yaasin and Chaaban (2021) in Lebanon, which opined moderate utilization of both English and Arabic languages in teaching science subjects. Yaasin and Chaaban (2021) clarified that the integration of Arabic in teaching science concepts enabled learners to comprehend, relate, evaluate, and judge classroom concepts hence improving learning. English was found to be an enabler in communication and teacher-student interaction. Therefore, the results underscore the importance of strengthening the utilization of the mother tongue language of instruction to promote learning.

Nearly 2/3 of respondents 136 (64.5%) reported that Social Studies is taught "sometimes" in the Kimeru Language, indicating a relatively high frequency. However, no respondents indicated that it is taught "always." Frequent instruction of Social Studies in Kimeru Language may contribute to a deeper understanding of social and cultural concepts among learners. However, educators should ensure that students also have exposure to broader perspectives and languages to prepare them for diverse environments. When it came to Christian Religious Studies, 131 respondents (62.1%) reported that Christian Religious Studies is taught "sometimes" in the Kimeru Language, indicating a relatively high frequency. None of the respondents indicated that it is taught "always." The study notes that the instruction of Christian Religious Studies in the Kimeru Language may facilitate a strong connection between religion and culture. However, educators should consider the need for religious diversity and tolerance in the curriculum. Wa Mberia (2016) also advocated for the use of mother tongue language to teach all subjects in lower primary. Wa Mberia, supportive argument said that the use of the mother tongue encouraged home-to-school environment transition, child comparisons of cultural perspectives, easy

understanding of history, and relatedness of religious, social, and cultural activities in the society. However, the researcher established poor usage in line with the moderate utilization of the mother tongue to teach social sciences. The above results by wa Mberia, communicate to the current study to encourage the adoption and utility of mother tongue instructing in lower primary schools. This is based on the fact that, mother tongue blends well with social science subjects hence pupils will have ease of comprehending classroom concepts.

The above findings suggest that Mathematics and Social Studies are frequently taught in the Kimeru Language, while English and Kiswahili are less frequently taught in the local language. The implications highlight the need to balance the promotion of the local language with proficiency in languages of broader communication and the importance of considering cultural and linguistic diversity in education. The results contradict the opinions presented in the study of Alimi et al. (2020) in Nigeria which directed that, the utilization of mother tongue in teaching lower grade pupils was most dominance in literacy and numeracy skills. This implicates on substantial contributions of mother tongue language hence, the surmountable shortcomings to adopting mother tongue language may be addressed through the mother tongue instruction policy.

This study held that the use of indigenous language in teaching may affect syllabus completion. This proposition was determined by asking grade three teacher to indicate the extent to which the use of mother tongue language in teaching affected the completion of syllabus in lower primary school classes. Their responses were summarized and presented in Table 4.11.

Table 4. 11*Use of mother tongue in teaching and completion of syllabus*

The extent to which the use of the mother tongue languages
(indigenous language) in teaching affect the completion of
syllabus in lower primary school

	Frequency	Percent
Never	49	23.2
To a very low extent	11	5.2
To a low extent	26	12.3
To a moderate extent	69	32.7
To a high extent	56	26.5
Total	211	100.0

The results in Table 4.11 show a range of perceptions regarding the impact of using mother tongue languages in teaching and syllabus completion in lower primary schools. A significant proportion 69 (32.7%) of respondents reported that using indigenous languages in teaching affects syllabus completion to a "moderate extent." Fifty-six 56, 26.5% of respondents believed that it affects syllabus completion to a "high extent." Those who indicated that it never affects syllabus completion were teachers 49(23.2%), while 26(12.3%) and 5.2% of respondents reported that it affects syllabus completion to a "low extent" and a "very low extent," respectively. Teacher 47 noted that the use of MT in teaching made it easier for learners to comprehend concepts and thus took a shorter time when teaching, meaning there was faster completion of the syllabus. The fact that a

substantial number of respondents indicated a "moderate extent" suggests that using mother tongue languages in teaching has a noticeable effect on syllabus completion. This may be due to factors such as language can influence syllabus completion. An old study conducted in Ireland also attributed the utilization of the mother tongue as a language of instruction to cause learning difficulties in the classroom especially where different ethnic groups were involved (Darmody et al., 2014). As a result, teachers took much time to deliver instructions to pupils in the classroom which was a common attribute of late syllabus coverage. The presented findings in collaboration with the discussed results opine the existence of some challenges when the mother tongue is adopted in teaching and educating grade three pupils in Meru County. However, this hurdle is surmountable through the implementation of a comprehensive policy that offers guidance on how to approach the noted challenge.

The results also show that respondents' perceptions vary, with some indicating a negligible impact ("Never" or "To a very low extent") while others believed it affects syllabus completion to a greater degree. This diversity in perceptions may reflect differences in teaching approaches and local contexts. The findings further emphasize the importance of considering local languages in education policies. While some see a significant impact, others perceive minimal influence. This implies that MTE policymakers should take into account these varying perspectives when making decisions about language use in teaching learners in lower primary schools. The findings reveal diverse perceptions regarding the extent to which the use of mother tongue languages affects syllabus completion in lower primary schools. While a substantial proportion of respondents believe in its impact, there

is variability in opinions, highlighting the need for context-specific language policies in education.

The foregoing findings revealed that the meaning of MT varied from one school and one Sub-County to another. This is because in the rural areas teachers understood Kimeru to be the MT or the language of the catchment area whereas in schools that were considered peri-urban and urban Kiswahili was the language of the catchment area. Additionally, in some sub counties, the situation was unique in that there were various language groups namely Meru, Turkana, Samburu among others. The LOI could not therefore be limited to the Kimeru or Kiswahili. Learners in these schools had to be taught two foreign languages namely Kiswahili and then learn English, the language of schooling after Grade 3. Teacher 023 lamented, *“A grade 3 learner could not respond to a simple question “What is your name or who do you live with.”* This notwithstanding, Njoroge and Gathigia (2017) also noted the entrenched utilization of indigenous language to deliver instructions among lower primary schools in rural areas than urban centers. Njoroge and Gathigia (2017) insisted the adoption of indigenous language to educate young children citing its numerous benefits such as academic performance, better foreign language adoption and effective home school environment transition in Kenya. Therefore, despite the existence of two or more ethnic backgrounds in one catchment area, the researcher recommended the adoption of a language of instruction policy to streamline inconsistencies rather than doing away with the mother tongue language of instruction. In line with the presented findings, the discussion from Njoroge and Gathigia (2017) points out that, the adoption of a mother tongue language of instruction has concerns and challenges which cannot be ignored. However, these can be adequately addressed through implementing the MTE policy.

The findings show that the majority of teachers relied on MT in teaching most subjects like Mathematics, English, Science, Environmental studies, hygiene, and Christian studies. According to head teachers, some scientific concepts were easier for the learners in their mother tongue than Kiswahili or English. Secondly, some concepts were out of reach of the learner's locality. Teacher 09 reported in open ended question that *"in teaching social sciences, terms such as flyovers, and pedestrian walks were so abstract to the learner that the teacher had to use a mother tongue like Kiswahili"*. "If it got harder, Kimeru was used" as noted by head teachers during FGD. Teacher 113 remarked, *"The science subject-related terms such parasites and water masses like oceans and lakes were unlikely to be easily understood in Kimeru for a learner who lives in the rural setting"*. The results tend to agree with the observations made by wa Mberia (2016) who noted the utilization of Kiswahili, English, and mother tongue interchangeably to bring home classroom concepts to enhance learner understanding. Wa Mberia, therefore, demonstrated that, there was no specific language of instruction being utilized to support education. The results implore, that, the implementation of the existing MTE policy is yet to take roots. Moreover, they underscore the contribution of mother tongue language in making learning easy to pupils. Apart from that, the results do not tannish the contribution of Kiswahili and English. Language of instruction. This mix up require readdress through developing a clear policy which guides grade 1-3 education system.

Out of focused group discussion with head teachers, the study noted that code mixing between English as the language in which the books are published to the more familiar language Kiswahili was very common. The header teachers confessed that in

circumstances where the teacher noticed that the learner did not get the concept, Kimeru was used.

The head teachers noted during FGD that the use of a language familiar to the learner was very helpful for the completion of work planned for the term. Teacher 042 reported that it was easier to explain new concepts, words content in a language that the learners understood. This way, teachers reported that they were able to cover each topic at the prescribed time. Additionally, the syllabus was covered in time.

Ethnic Composition among lower primary teachers and learners

The study wanted to establish ethnic groups for learners and teachers in lower public primary schools level in Meru County. This was to understand the complexity and dynamisms for teaching and learning mother tongue languages. The understanding of the ethnic composition among lower primary teachers and learners further helped to inform the educational practices that were needed at preparatory stages especially with regards to mother tongue. The results for teachers and learners ethnic composition are in Table 4.12.

Table 4. 12*Ethnic groups among lower primary teachers and learners*

Ethnic groups for teachers			Ethnic groups		
teaching	lower	primary	Percentages	for learners in	Percentages
level				lower primary	
				level	
			48%	Meru	71%
			16%	Kikuyu	14%
			14%	Embu	10%
			13%	Kamba	5%
			7%	Maasai	1%
			2%(110%)?		101%

The findings reveal that most teachers (35%) and learners (55%) in lower public primary schools in Meru County belong to the Meru ethnic group. Kikuyu teachers and learners constitute the second-largest group, with 26% and 21%, respectively. Embu, Kamba, Somali, and Luhya ethnic groups also contribute to the diversity of teachers and learners, though with varying percentages.

The findings reveal that the majority of both teachers (48%) and learners (71%) belong to the Meru ethnic group. This dominance suggests a significant influence of the Meru community in the educational landscape, emphasizing the importance of considering their cultural and linguistic preferences in teaching practices. While Meru teachers constitute the largest percentage, there is a notable diversity with teachers from Kikuyu, Embu,

Kamba, Somali, and Luhya ethnic groups. This diversity can contribute to a richer educational environment, fostering cross-cultural understanding among both teachers and learners. The results compare with the observations submitted by Ong’uti et al. (2016) underscoring that, in any sub-community dominated by an ethnic group of people in Kenya, few other tribes or ethnic groups also exist. This trend in Kenya is supported by the assertion that, Kenyans keep relocating regionally due to employment and family purposes. This regular mingling and inter-regional movement has led to having a combination of children and teachers in schools who do not speak the language of that community in the current residential region. This implicates on the essence of acknowledging the diversity of indigenous languages and offering training to teachers on how to handle multiculturalism so as to achieve inclusivity of learners.

The learner population is more diverse, with significant representation from various ethnic groups. This diversity should be acknowledged in indigenous language curriculum development to ensure inclusivity and relevance to the cultural backgrounds of all learners. Notably, the distribution of learners across different ethnic groups highlights the challenge of teaching mother tongue languages. The results indicate a need to acknowledge and respect the cultural diversity within the educational setting, with a particular focus on the dominant Meru community. For effective implementation of MTE policy, the findings indicate a great need to provide targeted training for teachers to enhance their ability to teach mother tongue languages in a multilingual environment, considering the various linguistic backgrounds of both teachers and learners. The results further inform education policies at the county level to address the specific needs arising from the ethnic

composition, ensuring that resources and strategies are aligned with the diverse educational landscape.

The study further investigated the extent to which teachers in lower primary schools in Meru County switch between languages, specifically between English and mother tongue languages (Kiswahili and Meru), during instruction. Understanding language switching practices is essential for effective language instruction and cultural relevance in the educational context. The findings indicated that the majority of teachers (55%) reported switching languages sometimes during teaching, indicating a moderate level of language flexibility. A smaller proportion reported rare switching (33%), suggesting a more consistent use of a single language in instruction. A notable minority (12%) indicated a large extent of language switching, signifying a high degree of linguistic adaptability. The findings acknowledge the importance of using multiple languages in instruction. This was also happening during the time wa Mberia (2016) carried out the study based in Kenya. wa Mberia noted the existence of interchanges among Kiswahili, English and indigenous language of instruction at primary schools in Kenya. Wa Mberia, therefore, demonstrated that, there was no specific language of instruction being utilized to support education. The results implicate on the contributions of exchanging language of instruction to make concepts clear and understandable to learners in grade 1-3. This concept also require to be clarified in the implementation of the MTE policy.

The most common language combination for switching is Kiswahili and English (76%), emphasizing the role of these two languages in the instructional process. Additionally, 43% of teachers reported switching between Kiswahili and Meru, highlighting the significance

of incorporating the local mother tongue in the teaching and learning process in lower primary classes. The prevalence of switching between Kiswahili and Meru indicates a recognition of the cultural significance of the mother tongue. This practice can enhance cultural relevance in education, promoting a sense of identity and belonging among students. According to the foregoing results, language switching, when done judiciously, can facilitate effective communication and comprehension. The findings seem to suggest a need to encourage to employ a variety of languages to ensure that learners grasp concepts thoroughly, especially in the early stages of education. This compared with the argument of Mose and Kaschula (2019) that, despite the advocacy to the adoption of indigenous languages to educate lower primary pupils in Kenya, Kiswahili and English can be taught as subjects to eased learner transition to these official languages of instruction after joining grade four. Similarly, Mose and Kaschula (2019) noted the switching from English, Kiswahili to local native language by teachers in the classroom to elaborate concepts. This implicates on not doing away with official and foreign language in the education sector. This can be streamlined by implementing the MTE policy.

A striking phenomenon noted from open ended responses was that when Kimeru was used in learning, the planned topics for the morning were completed and the teacher could introduce a new topic hence fast-tracking the completion of the syllabus. Findings revealed that the use of MT in teaching some subjects was very effective; for example; Christian Religious Education (CRE). Teacher 019 argued that CRE was mainly introduced by use of songs many of which children learnt in Sunday school mainly in mother tongue. The teacher further illustrated she taught the Grade 3 learners the topic “animals we keep at home” and tried very unsuccessfully to teach the children the English “Old Mcdonald had

a farm.” Although she replaced the farmers name with Kimathi, the children struggled very hard to sing it and instead were tickled by how they missed the flow at “with moo moo here and moo moo there, everywhere moo moo...” these findings support the previous argument put by Mberia (2016) which reinstated the implementation of mother tongue language of instruction by adducing scientific evidence to mirror the advantages of implementing indigenous language to educate pre-school to lower grade learner to English or Kiswahili. Mberia noticed that, learning experiences were enhanced, learner academic performance and transmission of more knowledge was achieved when native language was adopted. Mberia argued that for learning to be effective, pupils should be educated from what they know to the unknown through a language that they are familiar. This results appreciate the place of mother tongue hence implicates the study to address the hindrances to its adoption such as training teachers on mother tongue language of instruction, creating awareness to the society, availing teaching and learning materials, establishing political goodwill and adequate communication of the MTE policy.

In teaching kinship relationships in Kiswahili, a teacher 093 tried very hard to tell learners the meaning of *umbu*, *mjomba* and *shangazi*, terms that are absent in the Meru kinship system. On the same vein, teacher 012 used English to teach the benefits of a camel to a family and a learner could be heard mentioning *ngosi* (skin/) and *mbolea* (manure) as they could only relate to the concepts their teacher was putting across in their language.

Head teachers reported that some learners were getting very enthusiastic in participating in the lesson, asking and answering questions when the teacher switched to Kimeru or

Kiswahili. Head teachers explained that in instances where learners were not sure if a question was posed in English, the atmosphere dramatically changed when the same question was stated in mother tongue. Thirty three percent of the teachers noted that although they may not have been keen to teach using MT, the excitement of the learner motivated them to use mother tongue so that the learners could participate in learning.

The study noted that guidelines in majority of public primary schools were not clear regarding the use of mother tongue as a language of instructions in lower primary schools. Majority of teachers in the rural areas were guided by their college training to use MT where necessary. Others understood guidelines to mean the school policy on which languages should be spoken when Kiswahili was given 2 days and English was enforced in three days. All schools had this same directive with some enforcing punitive actions to anyone who faulted of this expectation. The results express mixed reactions when it comes to implementing the MTE policy. They also indicate a low level of consensus on the language of instruction for lower grade schools. Quin (2017) supports these findings in the submission which noted that, educators donated translation in their classes to back to learners up using the native language. Mandilla (2019) also supports these findings by adding that because of frustration in training, teacher used different languages interchangeably in the classroom to make clarity. Regarding the clarity on the language of instruction, Mandilla (2019) noted unclear policy implementation formula. In line with this study, the findings insinuate Meru County to communicate and educate school heads, parents, learners and teachers the importance of implementing a comprehensive MTE policy preferring mother tongue language of instruction.

4.7.2 Effectiveness in the Use of Mother Tongue Language in Teaching Lower Primary Level

The study was interested in establishing the effectiveness in the use of mother tongue language in teaching lower primary level. In that connection, data were collected through questionnaire administered to Grade 3 teachers in lower public primary schools in Meru County. Respondents were asked to rate the effectiveness of using the Kimeru mother tongue language in teaching various subjects and teaching strategies on a scale ranging from "Very Poor" (VP) to "Very Good" (VG). The aspects investigated in a Likert scale were mostly about the use of mother tongue language in teaching other languages like English, Mathematics, science, non-science subjects; multilingual strategies, switching from local language to another one when teaching, and syllabus completion. The data were analyzed to determine the frequency, percentage, median, and mode of each statement which helped to measure the dependent variable as a latent variable. The findings are presented in Table 4.13.

Table 4. 13*Effectiveness of the use of Kimeru mother tongue language in teaching*

No.	Statements on effectiveness of the use of mother tongue language in teaching lower primary level	VP	P	MG	G	VG	Media n	Mode
a)	Use of Mother tongue language in teaching other languages like English	49 (23.2%)	45 (21.3%)	74 (35.1%)	30 (14.2%)	13 (6.2%)	2	2
b)	Use of Mother tongue language in teaching mathematics	17 (8.1%)	46 (21.8%)	61 (28.9%)	55 (26.1%)	32 (15.2%)	2	2
c)	Use of Mother tongue language in teaching science subjects	17 (8.1%)	3 (1.4%)	82 (38.9%)	91 (43.1%)	18 (8.5%)	3	3

d)	Use of Mother tongue language in teaching non-science subjects	17 (8.1%)	11 (5.2%)	59 (28%)	103 (48.8%)	21 (10%)	3	2
e)	Use of Mother tongue language in teaching science subjects	17 (8.1%)	8 (3.8%)	82 (38.9%)	86 (40.8%)	18 (8.5%)	2	3
f)	The teachers successfully teaching using multilingual strategies	24 (11.4%)	8 (3.8%)	42 (19.9%)	60 (28.4%)	77 (36.5%)	3	4
g)	Teachers switching from local language to another one, back and forth when teaching	28 (13.3%)	14 (6.6%)	66 (31.3%)	26 (12.3%)	77 (36.5%)	2	4
h)	Ability to complete the syllabus/subject content	21 (10%)	38 (18%)	55 (26.1%)	45 (21.3%)	52 (24.6%)	3	3

The results indicate diverse perceptions regarding the effectiveness of using the Kimeru mother tongue language in teaching various subjects and teaching strategies. Notably, for statements (c), (e), and (f), “Use of Mother tongue language in teaching science subjects”, “use of mother tongue language in teaching science subjects” and “the teachers successfully teaching using multilingual strategies”, a significant percentage of respondents perceived the use of mother tongue language as "Good" (G) or "Very Good" (VG). Conversely, for statement (a), “use of Mother tongue language in teaching other languages like English,” a significant proportion felt that using mother tongue language in teaching other languages like English was "Poor" (P) or "Very Poor" (VP).

The findings show that the effectiveness of using the Kimeru mother tongue language varied across subjects and teaching strategies. For science subjects and multilingual teaching strategies, a substantial number of respondents found it effective ("Good" or "Very Good"). Despite positive feedback in specific areas, concerns about completing the syllabus persist. This suggests a need for curriculum review and resource allocation to ensure timely completion without compromising quality. The result highlights the need for tailored instructional strategies for different subjects. Teachers would require additional support and training in teaching certain subjects effectively in the mother tongue language. Moreover, educators demonstrating proficiency in multilingual teaching methods play a crucial role. Investment in teacher training programs can enhance their ability to switch between languages effectively, promoting a seamless learning experience. In line, Mose and Kaschula (2019) noted the effectiveness of adopting mother tongue language of instruction to teach lower primary levels learners if the hindrances facing it were resolved.

In conjunction, Mberia also noted that the challenges caused by mother tongue language of instruction outweighed the benefits and hence recommended its adoption following readdress of the challenges facing its implementation. Both researchers argued that, the existence of the MTE policy was nothing wrong and the only challenge was poor implementation of the same. The confronting challenges including inadequacy of teaching and learning materials, inadequate knowledge of teachers, negative perceptions of stakeholders on use of indigenous language and unequipped educators were to be addressed. Some remedies common to the ones suggested in the study included: communicating the MTE policy, educating teachers, provision of teaching and learning materials and educating the public on the motivation of using mother tongue to teach lower grade pupils.

Nevertheless, there is room for improvement in teaching other languages like English using the mother tongue. Notably, the practice of teachers switching between languages during instruction is perceived positively by a significant percentage of respondents, indicating its potential benefits for learners. On syllabus completion, respondents' perceptions of the ability to complete the syllabus/content vary, with a significant percentage perceiving it as moderately effective. The results emphasize the importance of understanding Grade 3 teachers' perspectives on using the Kimeru mother tongue language. The findings underscore the need for context-specific language strategies and the importance of considering indigenous languages in education policies. Addressing the challenges and leveraging the strengths identified in this study can enhance the effectiveness of multilingual education in Meru County. The same advocacy was also emphasized in the conclusions and recommendations of Mashige et al. (2019) who paid attention on the need

to enhancing the teaching experiences of instructors in isiXhosa by addressing the challenges coming with adopting MT language of instruction. Mashige et al. (2019) suggested; training of trainers, purchasing information materials and ensuring adequate professional development to FP teachers for optimal teaching in isiXhosa.

4.7.3 Qualitative Findings on Implementation of the MTE Policy

The qualitative data on the implementation of the MTE policy was obtained through focused group discussions with head teachers, and interviews with MOE Curriculum Support Officer and Quality Assurance and Standards Officers, and open-ended questions from Grade 3 class teachers. During focused group discussions, the head teachers were asked to state the guidelines they had put in place for supporting the implementation of mother tongue language for teaching learners in lower primary level. Based on the responses from the head teachers, five themes emerged regarding the guidelines they have put in place for supporting the implementation of mother tongue language for teaching learners in lower public primary schools in Meru County, Kenya. These themes include: teacher qualifications and training, curriculum and materials resources, Kimeru language as a medium of instruction, parental involvement, and community collaboration. Similar practices for implementing reforms towards adopting mother tongue language of instruction were reported by Mandillah (2019). Mandillah (2019) expressed that in Kenya, the restructuring of pupil's curriculum, professional development of in-service educators and procurement of teaching and learning materials were paramount for effective implementation of MTE policy. This suggest the need to boost put parameters which hinder the implementation of MTE policy, which can effectively been made a reality through fund

allocation. To win the attitudes of parents and teachers towards the indigenous language of instruction, there is a need for collaboration between education stakeholders to communicate and shed light through awareness creation on the application of mother tongue.

Regarding teacher qualifications and training, the head teachers pointed out that they put measures in place to ensure local teachers were assigned class teachers, engaged teacher who had undergone the required teacher-training, and who were fluent in the mother tongue language, and further supported those teachers to regular workshops and professional development to enhance language proficiency and teaching techniques. This was also supported by Simiyu and Lwangale (2020) who noted the potential of having competent, skilled and experienced teaching staff on mother tongue language of instruction on the academic performance of pupils. Teachers need to be trained on mother tongue as part of instructional delivery while in college. Moreover, to maintain relevancy, in-service educators need to be enriched through professional development. The results communicate the need to revamp the teacher training curriculum to include MTE. Moreover, schools should set aside funds to cater for professional development of educators on this matter.

About curriculum and materials resources, the head teachers said that they had provided materials resources and course books to support curriculum design. Other said that they had provided comprehensive guidelines for creating a conducive learning environment, while others had guided the integration of mother tongue into the curriculum through storytelling, reading materials, and interactive activities. This was in line with Mandillah (2019) who noted that, curriculum design in response to mother tongue language of

instruction is a step towards ensuring effective implementation of indigenous language of instruction. This is because it is a curriculum which guides on the teaching and learning information resources required. In this study, the findings implicate on revising the existing lower grade curriculum to fit the demands and requirements of MT education.

The use of Kimeru language as a medium of instruction was reported in some schools. In others, head teachers challenge fellow teachers to use the 'language that learners understand' to teach a not-very-performed class eight and there was improved results. Some head teachers had allowed concerned teachers to use mother tongue as the medium of instructions, and emphasized positive attitudes towards learners. The other step was parental involvement, where several schools parents were engaged in their child's language learning journey. The last step undertaken by head teachers was community collaboration where some mobilized and involved local communities and language experts to enrich the mother tongue curriculum. This was achieved by organizing cultural events and language-focused activities to celebrate language and cultural practices. The practice of seeking stakeholder goodwill through communicating the need to adopt MT language of instruction in lower primary schools was also noted by Oluoch (2017). Having noted the non-usage of the language in many lower primary schools in Kenya, Oluoch recommended seeking of stakeholder engagement in the matter to seek their collaboration. This points out to the current study that successful implementation of MTE policy is a stakeholder engagement endeavor hence communicating the same to parents, pupils, teachers, the body in charge of lower primary and head teachers will earn ownership of the idea.

Even though some head teachers had taken up the aforementioned steps, several others confessed not to have undertaken any measure. When contacted on the same issue, the CSOs indicated that the government had not given outright guidelines and that there were neither instructional materials nor syllabus. The CSO 06 said, “*mother tongue should be taught as indigenous language*”.

The above themes highlight a comprehensive approach to the implementation of mother tongue language education, indicating several but weak measures undertaken by some head teachers which include qualified teachers, appropriate curriculum and learning materials, using the mother tongue as a medium of instruction, involving parents, and collaborating with the community. The results point out absence of government guidelines, syllabus and instructional materials as key drawbacks to the implementation of mother tongue language policy in lower public primary schools in Meru County, Kenya.

All respondents, that is, the teachers, the head teachers MOE Curriculum Support Officer and Quality Assurance and Standards Officers were asked to identify challenges affecting the preparedness to implement the mother tongue language policy for teaching learners in lower primary schools in Meru County, Kenya. Several challenges were identified which were categorized into five themes. These were attitude issues, teacher qualification and proficiency in multilingual teaching and learning pedagogy, funding challenges, and language mismatch. Common challenges were also evident in Anyiendah's (2017) and Mose's (2017) studies, which cited negative attitudes, lack of adequate learning resources, poor implementation of MTE policies, rigid curriculum, and lack of a defined language of

instruction. Mose & Kaschula (2019) emphasize the need for a shift in multilingual classroom practice by the lower grade teachers, multiple uses of language in instruction, incorporating local contexts and translanguaging as appropriate pedagogical resources. The above demonstrates the consistency of the challenges and hence the need to address them through implementing a comprehensive MTE language of instruction policy.

The respondents noted that in some areas of schools, there was ethnic diversity among pupils and teachers; some were from other communities apart from Meru. This complicates the choice of which mother tongue to be used in class. The findings indicate the need for a culturally sensitive approach to language policy implementation. Efforts should be made to ensure that the policy accommodates and respects the various languages present in the school environment. The respondents reported that they lacked textbooks and learning materials in mother tongue language. This was detrimental to teaching and learning mother tongue languages. The findings imply a need for upfront development and provision of appropriate teaching materials. Curriculum developers and education stakeholders should therefore prioritize the creation of high-quality, locally relevant materials to support effective mother tongue instruction. This is supported by the study of Begi (2014) whose study revealed that only a third (33.33%) of the lower primary school teachers had culturally relevant materials while the rest (66.67%). Ngasike (2019) opined that instructional materials for learners in the rural and nomadic learners must relate to their environment. It was noted that related to the teachers lacked culturally relevant instructional materials. Responses gathered also indicated negative attitude from teacher, learners and parents which largely affected the adoption of Kimeru as a language of instructions in lower classes in public primary schools. The negative attitude noted in this study

underscores the importance of community engagement and awareness campaigns. This means that schools and education authorities should work collaboratively with local communities to foster positive attitudes and understanding of the benefits of mother tongue education. Kangira (2016) and Trudell (2015) stress the role of government for the community buy-in of policies. The former notes that in Zimbabwe MTE education policy is more of lip service than action and the latter calling it lack of commitment by Kenyan government.

The results also showed scarcity of qualified teachers proficient in Kimeru. Many teachers pointed out that knowledge of Kimeru does not necessary translate to competence in teaching. Multilingual literacy and pedagogy in teaching linguistically diverse learners require re-tolling of teachers. The aspects of teacher qualification and proficiency was critical in teaching of mother tongue hence this limitation required to be addressed upfront. These findings highlight the necessity for targeted teacher training programs. The study notes that recruitment of teachers who are proficient in the mother tongue and provision of continuous professional development can enhance their ability to effectively implement the MTE language policy. In Kisii County, Chebet (2019) also observed the qualifications and adequacy of educators to be a major hindrance towards the adoption of MT language of instruction. This documents the persistency of the challenge hence need for training and continuous professional development of teachers in mother tongue pedagogies and teaching resources development.

The responses also indicated insufficient funding which affected posed infrastructural and technological constraints. The study notes that insufficient funding, poor infrastructure,

and limited access to technology pose significant challenges. Adequate financial support and investment in school infrastructure are crucial to creating an environment conducive to mother tongue instruction. This includes providing schools with the necessary resources, infrastructure, and technology for effective teaching and learning. Khamroev (2021) in Uzbekistan also agreed that, adequate funding was the major bottom line through which resources, teaching and learning materials, professional development and technology for teaching could be acquisitioned. Additionally, other resources required were: trainer books and visual aids for the success of training in the student's native language. This implicates on fund allocation to the ministry of education to cater for these needs. In Sudan the UNICEF has funded MT recorded lessons, literacy materials, teacher capacity building and digital audio players (UNICEF, 2016) and in Somaliland USAID has funded radio-based learning intervention has aided quality learning and teaching (Ohrsi, 2021).

Grade 3 teachers, while enthusiastic to teach using in mother tongue but it was also discouraging because MT was associated with interference in English language and especially composition writing. Additionally, they claimed that the language of examination was English hence they saw no need to use Kimeru in teaching. This revealed that teachers did not understand the rationale behind use of mother tongue in lower primary school education and the accruing benefits.

The last challenge was linked to language mismatch considering that pupils and teachers have different mother tongues. This posed a serious challenge in adopting mother tongue as a language of instructions in several public primary schools especially the ones nearer town centers. Ong'uti et al. (2016) also presented a challenge of a kind, citing that, there

are over 70 languages which keep on migrating regionally to other parts of the country for settlement and job purposes and for this case there are more than two ethnical languages in many educational institutions. This implies the need for training of re-training of teachers on the skills of handling multilingual class rooms. This is exemplified by Nyaga (2013) who thoroughly explores various key strategies of teaching in a multilingual environment. In addition, (Erling et al., 2016) provides an elaborate procedure on how to engage learners in a multilingual classroom through trans-languageing and code switching would go a long way in ensuring that the linguistic diversity within the schools are addressed and the language policies is upheld. Strategies should be developed to bridge the language gap and facilitate effective communication and learning. Gumbi (2022) in his study on how IsiZulu has been ‘smuggled into KwaZulu-Natal classrooms confirms that mother tongues) should be taught side by side with English for and a language of assessment at basic education level.

The main challenges noted in this study point out to the need for collaboration between education authorities, local communities, and relevant stakeholders for successful MTE policy implementation. Advocacy efforts should focus on garnering support for mother tongue education, both at the community and policy levels.

These above themes categories highlight a range of interconnected challenges that need to be addressed for the effective implementation of the mother tongue language policy. Solution strategies and interventions should consider the unique linguistic and cultural landscape of Meru County, taking into account the diverse backgrounds of both learners

and teachers, the need for appropriate teaching materials, and the importance of fostering positive attitudes towards the mother tongue language. Additionally, addressing infrastructure improvement, funding, and technology constraints curriculum development, teacher training, community engagement, and policy advocacy are crucial in enhancing and creating an enabling environment for successful implementation of the mother tongue language policy in lower public primary schools.

According to the Curriculum Support Officers (CSOs), the challenges affecting school's preparedness to implement MTE included inadequate educational and instructional materials, varied backgrounds in terms of ethnicity and language disruption caused by the teachers' relocation program leading to teachers being transferred from their home regions to different language groups contradictory policies. The relocation policy conflicting with the policy promoting mother tongue languages, and crowded classrooms resulting from the introduction of free primary education has led to a high teacher-to-student ratio. There is also the challenge caused by lack of awareness of the policy regarding the use of mother tongues in instruction.

When asked to suggest solutions to the above challenges, the Quality Assurance and Standards Officer 03 said, "*Kenya Institute of Curriculum Development (KICD) should provide schools with mother tongue books for teachers and learners, and organize to retrain teachers on mother education*". Teacher 112 wrote in an open question, "*Showing learners and parents the importance of learning catchment language*". Other suggestions given were about the consistent use of mother tongue books, encouraging lower classes

teachers and learners to talk mother tongue, while another large majority recommended embracing Kiswahili as the language of the catchment area.

A similar level of preparedness was also suggested in the results of Specia et al. (2022) including need for educator's in-service training alongside provision of adequate instructional resources. The nature of preparedness was further sort from County Director of Education who confessed of little effort that included MOE and KICD coming up with policy. The findings will aid MOE and curriculum developers in making informed adjustments with regard to teacher preparation and information resources requirements. The headteachers too suggested measures that included: need to implement clear and consistent guidelines that support the effective implementation of the mother tongue language policy, foster collaboration and coordination between the Kenya Institute of Curriculum Development (KICD) and the Ministry of Education (MOE) to ensure coherence and consistency in educational policies, curriculum development, and implementation strategies. They further noted the need for government to allocate sufficient resources to ensure that all primary schools have access to adequate teaching and learning materials, including books and resources in various languages. The government should also consider policies such as the de-localization policy which although having been stopped had affected the policy implementation. It was noted that it had posed many challenges to teacher retention and continuity in education, especially in areas with diverse linguistic and cultural backgrounds. The MOE should develop and implement strategies within KICD to provide necessary resources and support for the effective implementation of the mother tongue language policy, including curriculum materials, teacher training, and assessment tools, to enhance its relevance and impact on student learning outcomes.

The suggested solutions underscore the need for a holistic and collaborative approach in providing mother tongue books, and investing in teacher retraining programs to address the scarcity of qualified teachers proficient in Kimeru and re-tooling lower primary schools teachers on multilingual literacy as well as policy rationale for use of MT in early years education. The emphasis on awareness campaigns to highlight the significance of learning the catchment language reflects the importance of changing the negative attitudes. The MOE should promote consistent use of mother tongue books, while head teachers should institute measures that encourage lower classes teachers to use mother tongue as language of instruction in the early years and use of learners to use the mother tongue. The recommendation to embrace Kiswahili as the language of instruction in urban and areas where it is the mother tongue acknowledges the broader linguistic context but requires careful consideration and community consultation to ensure alignment on formulation and implementation of policy.

Overall, the success of these solutions depends on collaborative efforts involving education authorities, teachers, parents, and the community. In a broader sense, Specia et al. (2022) also brought up common issues of concerns. The researchers opined that, for effectiveness in the implementation of MTE, stakeholder collaboration, infrastructure development, information materials acquisition, professional development of educators, seeking goodwill and ownership by school stakeholders will promote the implementation of MTE. This implicates on the need for strengthening stakeholder engagement to seek goodwill, ministry of education official's intervention to create awareness, procurement of mother tongue information materials and curriculum modification. These require the existence of a comprehensive MTE policy.

4.7.4 Convergence of Quantitative and Qualitative Findings Regarding Implementation of the MTE policy

The quantitative and qualitative findings converged on several points. A convergence was observed on effectiveness in the use of mother tongue in teaching for example the science subjects. On the one hand, the quantitative showed that a significant percentage of respondents perceived the use of the Kimeru mother tongue language as "Good" or "Very Good" in teaching science subjects. On the other hand, qualitative findings support this by emphasizing the need for tailored instructional strategies for different subjects. The findings further indicate that some head teachers had allowed teachers to use the mother tongue as a medium of instruction.

The results on challenges in using mother tongue to teach other languages such as English was highlighted by all respondents. A significant proportion of teachers felt that it was "Poor" or "Very Poor." The qualitative data attributed this to the negative attitudes from teachers, learners, and parents, which affected the adoption of Kimeru as a language of instruction in lower classes. This was also maintained in the results carried out by Oluoch (2017) outlining that, the school stakeholders attitudes was among the hurdles which delayed the adoption of mother tongue language of instruction. He recommended the despite the adopting of MTE language of instruction the benefits of mother tongue use to grade one to three teachers, parents and learners also required to be exposed to seek their consensus. The qualitative findings pointed out challenges such as funding constraints and insufficient resources, including textbooks and learning materials, contribute to difficulties in teaching and learning mother tongue languages. According to quantitative findings,

these inadequacies was affecting the completing of the syllabus, indication a great a need for continuous development and re-tooling of lower primary teachers, additional resource allocation to schools, preparation and provision of instructional materials. Consistent challenges were also documented by Piper (2016) who cited drawbacks to the effective implementation of MTE policy as unpopularity amongst stakeholders, uncertainty on the long term outcomes, examination performance for learners and employment prospects. Mandillah (2019) added that, even with the current transformation of the education systems, the sector is yet to address this pertinent area. This affects giving preponderant attention to mother tongue language of instruction.

The results also take the advice of the advocacy coalition framework adopted in the study which appreciates the contributions of fundamental tenets such time, team players, stakeholder perspective, policy components, resources and belief systems as necessary components for comprehending a method of legislation or instruction. In this study, the converging results in line with the discussed findings indicate despite the re-emphasize of adopting MTE, there is need to redesign and address the deviations from the set guidelines on using the language of a catchment area to deliver instruction to grade 1-3. This is in alignment with the cognitive development theoretical framework by Piaget that anchors this study and also advised the current basic education system, the competency based education. The theory posits that cognitive development goes hand in hand with age hence the need to use the home language in teaching children of age 5 to 11 in order for them to cognitively develop and gain the capacity to acquire the second language. The results

implicate on the need to revisit the roles of the policy formulators and implementers and clearly stating the required requirements for teaching and learning to occur uninterrupted.

The results have underscored the importance of teacher training and continuous professional development and re-equipping for successful implementation of the MTE policy. Notably, the quantitative findings suggest that teachers would require additional support and training, particularly in teaching certain subjects effectively in the mother tongue language. A few head teachers confessed to have implemented measures related to teacher qualifications and training, emphasizing the engagement of teachers who had the required training. The qualitative information gathered from CSOs noted a need for continuous professional development to enhance language proficiency and teaching techniques.

The above observation had earlier been detailed by Mandillah (2019) in the reported findings which explained the hindrances to successful adoption of mother tongue language of instruction. It was explained that teacher negative attitudes towards MTE was contributed by their limited expertise and knowledge of the in language of instruction methodologies. The presented results offer a springboard of the arguments presented by the Cummin's Linguistic Proficiency Theory that states that there is a minimum threshold of the first language (L1) also known as mother tongue, cognitive and academic development which is necessary in language acquisition and development. Cummins further states that this minimum threshold is a requirement if a learner it to fully benefit from multilingualism. This framework therefore reveals that effective learning for pupils in English was a result of the influence of their mother tongue that they should continue

using in school when they leave home. Working on the attitudes of teachers through equipping them will make a good ground for acquisition of education to lower grade pupils through the language of their catchment area. These results advocate for change by allocating financial resources which will take care of primary school teacher's professional development in mother tongue pedagogies and language of instructions methodologies.

The attitude of learners, teachers and community was regarded essential in the implementation of mother tongue language policy. Both quantitative and quantitative findings have emphasized the importance of community engagement and awareness campaigns to foster positive attitudes and understanding of the benefits of mother tongue education. The study further noted a convergence on language mismatch. In this study, challenges related to ethnic diversity among pupils and teachers, were highlighted as significant barriers leading to language mismatch issues. The mismatch of mother tongues of learners and learners was mainly as a result of massive movement of teachers from their native home area where spoke the local language as per the MTE policy through the infamous delocalization of teachers across the country. The aim of the exercise was to distribute the teachers to the teachers to the public schools in the republic as provided in the laws of Kenya TSC Act Section 4 (Republic of Kenya, 2018). The result of the policy however caused many teachers to retire early, seek County level employment (Sossion, 2022) This is alluded to by Kipingor and Kipruto (2023) who notes that hat abrupt transfers made by the TSC demoralizes the ability to perform better, job insecurity creates tension and anxiety at work. Delocalization drained the teacher's finances thus caused stress and tension between the teacher and learner. In a particular school, the teacher reported of a dual sadness, her separation from her family and high cost of living on one hand and the

inability to deliver her lessons to her learners in lower primary effectively due to language barrier. This implied a conflict on government policies which must be well thought and aligned for successful achievement of educational objectives. As a solution, the qualitative findings emphasize the need for flexible language policies to address linguistic diversity within public primary schools.

The above discussion is equally noted in the paper presented by Mose (2017) that appreciated the existence of ethnic diversity in lower primary schools in Kenya. Mose says that stakeholder's attitudes and inflexible mother tongue language policy were among the major challenges which hindered the adoption of mother tongue instruction. Mose advised classroom teachers, head teachers, quality assurance, standards officers, parents and learners to be educated on the need and the benefits of mother tongue language of instruction. Apart from this, the policy makers mandated to implement the mother tongue policy, it was advised that, in rural areas, mother tongue be utilized but in urban areas which has high interaction of ethnic diversity, Kiswahili language be made the mother tongue language of instruction. This is in line with the proposition of the Advocacy Coalition Framework (ADF) which appreciates the contributions of stakeholder engagement in owning the process as well as in improving mother tongue language policy. In succinct, the discussed results implicate the current study to take action by introducing flexibility in the mother tongue policy. Also, stakeholder's engagement to own the process of implementing mother tongue language of instruction is key. This implicated on financial allocation to create awareness to stakeholders.

The role of Kiswahili in catchment areas was noted in quantitative data, while the qualitative data noted a need to embrace Kiswahili as the language of the catchment area where, some head teachers recommend consistent use of mother tongue books, and the encouragement on the use of mother tongue by lower classes teachers and learners.

The quantitative findings highlight the importance of understanding Grade 3 teachers' perspectives on using the Kimeru mother tongue language and underscore the importance of considering indigenous languages in education policies. The qualitative findings concur and further pointed out the need for collaboration between education authorities, local communities, and relevant stakeholders for successful policy implementation. Another measure is advocacy efforts to garner support for mother tongue education at both community and policy levels. In line, Mose (2017) also noticed that, flexibility in the language of instruction policy for lower primary schools to include: implementing the mother tongue policy in rural areas but in urban cities with high interaction of ethnic diversity, Kiswahili language be made the mother tongue language of instruction.

In nutshell, the convergence across quantitative and qualitative results emphasizes the importance of teacher training, challenges in teaching other languages, concerns about syllabus completion, community engagement, addressing language mismatch, and the role of Kiswahili in catchment areas. Collaborative and context-specific approaches, including targeted training, community involvement, and policy advocacy, are crucial for the successful implementation of mother tongue language policies in lower public primary schools in Meru County. Additionally, for Mose in 2017, the existence of a disparity between mother tongue use intention, stakeholder attitudes, teacher preparedness limitations and government silence on providing necessities for smooth adoption of the

mother tongue language have bred both contempt and defiance for the policy by implementation. Therefore, there is need to start with advocating to stakeholders on the importance of MT, making the policy flexible for different language catchment areas and fund the processes and its requirements. These results elaborate the observations of Advocacy Coalition Framework (ADF), the Cognitive Development Theory and the Chomsky's Linguistic Theories which appreciates the contributions of stakeholder engagement, environmental influence in shaping language acquisition, adequacy of required resources in place and a flexible policy for implementing mother tongue language of instruction in lower primary schools. The results in the study imply that, there exist challenges towards the implementation of MT, however, they are very healthy and can adequately be addressed through revising the language of instruction policy to clarify on aspects hence promote its flexibility. They also opine a need to seek the engagement of education stakeholders to own up the process, provide required equipment's and materials, do professional empowerment through advocacy and teacher mother tongue pedagogy training for successful implementation of MTE in grade 1-3 in Meru County.

4.8 Teacher Factors in the Preparedness to Implement MTE Policy

The first objective explored the state of teacher preparedness in Meru County to implement mother tongue education in lower public primary schools. Data for this construct was obtained from grade three teachers, head teachers, Curriculum Support Officers and Quality Assurance and Standards Officers through questionnaires, focused group discussions and interviews respectively. The descriptive and inferential findings are first presented followed by the results based on qualitative data. The last section provides an integration where both quantitative and qualitative findings are discussed with a view to

draw conclusions regarding teachers' preparedness to implementing the MTE policy in public lower primary school education in Meru County, Kenya.

4.8.1 Descriptive Results on Teacher Preparedness to Implement MTE

The lower primary teachers are expected to bridge the gap between traditional and formal education by utilizing their proficiency in various indigenous languages, instilling confidence in their teaching approaches, participating in training programs, and collaborating in curriculum development. Undoubtedly, teachers serve as both facilitators and advocates for mother tongue-based education. They create a natural and engaging classroom environment while equipping themselves with essential resources to effectively impart knowledge in indigenous languages. Their role is pivotal in nurturing enthusiastic student engagement and fostering positive interactions in the mother tongue classroom, thereby enhancing the success of this educational approach in Meru County, Kenya.

Assessment of their state of preparedness was therefore critical in this study to understand the pivotal factors that contribute to the successful implementation of mother tongue-based education. The construct was therefore measured through several statements presented in the Likert scale. They covered aspects such as teacher training, language proficiency, the availability of essential resources, curriculum development, and teacher confidence. The study also sought to gauge the extent of pupil engagement and the dynamics between teachers and students in the mother tongue classroom. The descriptive statistics indicate various levels of agreement and disagreement among respondents, along with the frequency and median of each response. The results are summarized in Table 4.14.

Table 4. 14*Teacher Preparedness to Implementing Mother-Tongue Language Policy*

Statements on teacher factors	SD	D	MA	A	SA	Median	Mode
a) During their initial training, teachers were taught how to use mother tongue to teach	33(15.6%)	35(16.6%)	29(13.7%)	107(50.7%)	7(3.3%)	3	3
b) Lower primary school teachers are able to teach using various mother tongue languages	29(13.7%)	37(17.5%)	46(21.8%)	72(34.1%)	27(12.8%)	2	3
c) Use of mother tongue languages (indigenous language) require lower primary school teachers to get additional in-service training	11(5.2%)	59(28%)	28(13.3%)	57(27%)	56(26.5%)	3	1

d) Some lower primary school teachers have been attending in-service training on how to use mother tongue language for teaching Grade 3 learners	63(29%)	74(35.1%)	30(14.2%)	23(10.9%)	21(10%)	1	1
e) Lower primary school teachers are involved as stakeholders in curriculum development to ensure teaching strategies for mother tongue languages are considered	47(22.3%)	67(31.8%)	42(19.9%)	43(20.4%)	12(5.7%)	1	1
f) I find the use of mother tongue languages natural when teaching	16(7.6%)	25(11.8%)	32(15.2%)	86(40.8%)	52(24.6%)	3	3
g) I have been equipped with Mother Tongue Based Multilingual Education (MTB-MLE) resources	57(27%)	74(35.1%)	44(20.9%)	30(14.2%)	6(2.8%)	1	1

h) Teachers in my school do not shy off from teaching and holding conversations in mother tongue languages	13(6.2%)	28(13.3%)	52(24.6%)	94(44.5%)	24(11.4%)	3	3
i) I am proficient in Kimeru language	10(4.7%)	28(13.3%)	31(14.7%)	84(39.8%)	58(27.5%)	3	3
j) I am comfortable teaching the learners in Kimeru language	33(15.6%)	44(20.9%)	55(26.1%)	39(18.5%)	40(19%)	2	2
k) Pupils are enthusiastic when taught in Kimeru language	7(3.3%)	15(7.1%)	30(14.2%)	89(42.2%)	70(33.2%)	2	3
l) The interaction of teachers and pupils while teaching in Kimeru language in the school is good	18(8.5)	40(19%)	37(17.5%)	76(36%)	40(19%)	3	3

From the findings in Table 4.14, about 107 (50.7%) of teachers agreed that they were taught how to use the mother tongue during their initial training (Medium = 3, Mode = 3). This suggests that a significant portion of teachers had received training in using the mother tongue for instruction. Teacher 72 noted that during their training they were told that the language of instruction for lower primary was the language of the catchment area. They had the foundational knowledge to incorporate the mother tongue into their teaching practices. The results show a substantial level of preparedness during the initial training. The findings also indicate that 94 (44.5%) teachers feel that teachers in their school do not shy away from teaching and holding conversations in mother tongue languages (M = 3, Mo = 3). This suggests a positive attitude toward using the mother tongue in the school. Pupils' enthusiasm when taught in Kimeru language was acknowledged by 89 (42.2%) teachers (M = 2, Mo = 3), indicating a positive perception of pupil engagement.

The use of mother tongue languages is considered natural when teaching by 86 (40.8%) of teachers (M = 3, Mo = 3), indicating a substantial comfort level with using the mother tongue in instruction. Conflicting opinions were presented by Nyaga (2015) in the dissertations whose results although agreed on the sensitization of teacher on mother tongue utilization to teach grade 1-3 during their initial training period, but coherently were accompanied by negative attitudes towards the language. Negative attitudes towards teacher children in mother tongue was caused by pressure to complete the syllabus, lack of native language books and instructional guides, high multilingualism and poor teacher preparation. The results infer that, enthusiasm to teach using mother tongue language is

cultivated by the provision of basic requirements. Therefore, teachers should have enough preparedness to determine their positivity towards mother tongue instruction.

The findings also show that 84 (39.8%) grade 3 teachers believed that they were proficient in Kimeru language, (M = 3, Mo = 3) indicating a significant level of self-reported proficiency in the language. Furthermore, the interaction of teachers and pupils while teaching in Kimeru language is perceived as good by 36% of teachers (M = 3, Mo = 3). This suggests a positive perception of the quality of interactions. On teacher preparation, 74 (35.1%) of teachers had been equipped with Mother Tongue Based Multilingual Education (MTB-MLE) resources, indicating that a portion of teachers had access to these resources.

Teachers' comfort level in teaching learners in Kimeru language varies, with 26.1% moderately agreeing and 20.9% agreeing (M = 2, Mo = 2). This suggests a range of comfort levels among teachers. The discomfort could be attributed to training. This is attested by the fact that using mother tongue languages in instruction was seen as requiring additional in-service training by 28% of teachers (M = 1, Mo = 3). This indicates that there is recognition among teachers that further training may be necessary to effectively implement mother tongue-based instruction, highlighting a potential need for professional development. The findings show that a significant portion of teachers see the need for further training. The study however noted that only 44(20.9%) teachers were attending in-service training on how to use mother tongue language for teaching Grade 3 learners. This indicates a relatively low level of participation in such training, suggesting a potential gap in professional development opportunities for teachers in this area. For Nyaga in 2015, the

dissertations also established the prime need to enhance teachers' professional development in mother tongue instruction. Although the results differ with the current findings which indicate that professional development is happening to few teacher, Nyanga only reported the agreement on initial mother tongue education introduction during college training. This implies that, teacher professional training and mother tongue instruction methodologies have not been advocated for and adequately employed. The results insist on the need for teacher preparedness as a key requirement in implementing MTE.

This finding may explain why only 55(26.1%) grade three teachers said that they were involved as stakeholders in curriculum development to ensure teaching strategies for mother tongue languages are considered. This suggests a limited level of teacher involvement in curriculum development which had negative impact on relevance and effectiveness of these strategies. Notably, their involvement could have been limited by lack of purposive training on use indigenous languages in teaching. The results compliment a report presented from Busia County about the level of teacher preparedness in implementing CBC education. Specia et al. (2022) observed that, teachers were hardly involved in curriculum development for mother tongue language from grade 1-3 due to their limitations in proficiencies, mother tongue training and lack of instructional resources in the native language. Teacher professional development alongside provision of adequate teaching/learning materials was recommended to appropriately implement MT language education. This implies in improving and enhancement of teacher preparedness.

The overall findings suggest that a significant portion of teachers in Meru County have received initial training in using the mother tongue for instruction, are comfortable with

using various mother tongue languages, and perceive the use of mother tongue languages positively in the classroom. However, there is also a need for additional in-service training, greater teacher involvement in curriculum development, and increased access to resources for Mother Tongue Based Multilingual Education (MTB-MLE). A teacher indicated the use of realia, that is, teaching aids like charts and pictures to explain in Kimeru language so that the learners can have a visual image of what the teacher is explaining. This shows the enthusiasm of the teachers to ensure that learners understand every concept taught in class. The findings indicate varying levels of teacher comfort and proficiency in the Kimeru language. Additionally, there is a positive perception of pupil enthusiasm and the quality of interactions when teaching in Kimeru language.

Mother tongue education is considered a powerful tool for enhancing the learning experiences of primary school learners, particularly in culturally diverse regions. It allows students to begin their academic journey in a language that is not only familiar but also integral to their cultural identity. Teachers play a critical role in teaching learners the basics of mother tongue. Their preparedness to teach is vital in ensuring effective teaching and learning of mother tongue education. However, the overall findings suggest that a significant portion of teachers in Meru County had received initial training in using the mother tongue for instruction, and perceived the use of mother tongue languages positively in the classroom. Additionally, there is a positive perception of pupil enthusiasm and the quality of interactions when teaching in Kimeru language. However, there is a need for additional in-service training, greater teacher involvement in curriculum development, and increased access to resources for Mother Tongue Based Multilingual Education (MTB-MLE). The findings indicate varying levels of teacher comfort and proficiency in the

Kimeru language among teachers. The presented findings agree with the situation displayed in Specia et al. (2022) study that despite the existence of a mother tongue policy, teachers are less prepared due to lack of continuous professional development, supply of teaching and instructional materials which leads to lack of involvement in CBC curriculum development. Similarly, in Nandi County, agreeing results were presented by Chebet et al. (2018) explained that, teacher preparedness, attitudes, perceptions, proficiency in MT and instructional materials in place accounted for MT classroom instruction. Both Chebet et al. and Special et al. recommend the need to rework teacher preparedness. The results also support the existing Advocacy Coalition theory which appreciates the engagement of stakeholders which in this case are adequately prepared teacher in effecting the implementation of MTE. The theory may be improved to include competencies, skills and expertise of stakeholders who steer the effecting of new changes. The results imply that teacher preparedness is the backbone for effective implementation of MT education. Therefore, this study insists the need for government funding to procure mother tongue instructional materials and educate employed teachers on mother tongue pedagogies.

4.8.2 Testing of Hypothesis One

The First null hypothesis of the study stated that teacher preparedness does not significantly affect the execution the MTE programme in public lower primary school education in Meru County, Kenya. A Spearman correlation was conducted to assess the hypothesized relationship between teacher preparedness does not significantly affect the implementation of the mother tongue language policy. The correlation results are shown in Table 4.15.

Table 4. 15*Correlations analysis between teacher preparedness and MTE policy*

		X1	Y
Spearman's rho	X1	Correlation Coefficient	1.000
		Sig. (2-tailed)	.601**
		N	.000
Y	Y	Correlation Coefficient	.601**
		Sig. (2-tailed)	1.000
		N	.000

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

From the findings in Table 4.15, a statistically significant positive relationship was observed (Spearman's rho = .601, $p < .01$, two-tailed). This indicates that there is a strong and positive association between teacher preparedness and the successful implementation of the mother tongue language policy in public lower primary schools.

The correlation coefficient of .601 suggests that as teacher preparedness increases, the likelihood of successful implementation of the mother tongue language policy also increases. This finding implies that well-prepared teachers may be more effective in executing the policy, which emphasizes the use of the mother tongue as a medium of instruction in lower primary schools. The sample size for this study consisted of 211 participants, providing a robust dataset to support the significance of the correlation. It is important to note that the correlation coefficient was significant at the 0.05 level (two-tailed), indicating a strong relationship beyond random chance. These results suggest that

investing in teacher preparedness, particularly in terms of their ability to effectively implement the mother tongue language policy, may contribute significantly to the success of this policy in public lower primary schools in Meru County. The results agree with the submission made by Nyaga (2015) that, teachers are frontline towards the successful adoption of the MTE. This is because, teachers contribute immensely towards the implementation of the MTE policy by delivering instruction, equipping learners and guiding them as expected. As key stakeholders they also contribute to the development of the curriculum as well recommending instructional materials for adequate learning. In agreement, Nyaga concluded that, teacher preparedness has significant positive effect on the implementation of mother tongue language instruction. Comparably results therefore hind the weighty of enhancing teacher preparedness. Education stakeholders need to heed to this call by funding teacher trainings, upgrading college curriculum to emphasize pedagogy, strategies and need for MTE, engagement of teachers in curriculum and purchasing instructional materials.

4.8.3 Qualitative Findings Regarding Teachers' Preparedness to Implementing MTE Policy

The focused group results with head teachers, and the views gathered from teachers regarding teachers' preparedness to implement the mother tongue policy, revealed three themes on the level of teachers' preparedness. These were low preparedness, geographical influence, and collegial support. The majority of head teachers expressed concern about the low-level preparedness of teachers. The use of the term "low" and the suggestion for "retooling" noted during the discussion indicate a perceived inadequacy in the readiness of teachers to implement the mother tongue policy. Commenting during interview on

prepared of teachers to implement MTE language policy, the County Director of Education indicated that the prepared was below 50%, although there was an indication that teachers in lower primary schools had received training and are aware of the policy allowing instruction in the local language for grades PP1 to grade 3.

This theme points out gap in the current level of preparedness among teachers, which could impact the successful implementation of the mother tongue policy. Similarly, Paul et al. (2021) attested low teacher preparedness in teaching lower grade pupils in Busia County. The levels of preparedness were gauged with respect to instructional materials, initial training, professional development and instructional delivery. This implicates the need to invest in teaching colleges through revision the current curriculum to fit current education requirements and funding teacher in-service training and retooling. This implicates on engagement of the ministry of education and other stakeholders such as quality assurance and MTE policy implementers.

Despite the majority expressing concerns about preparedness, a smaller group of head teachers provided positive feedback, stating that some teachers are "well prepared."

This indicates that there are few instances where teachers are perceived to be adequately ready to implement the mother tongue policy. Geographical influence featured as an outstanding theme, where, comments gathered from head teachers suggest that teachers, particularly those from interior Meru, were well prepared to teach using the Kimeru language as compared to those in urban areas. This implies a potential regional influence on teacher preparedness. Probably, this is because the teachers in urban areas are living together with other ethnic communities hence difficulties in using their mother tongue in classes. CSO 01 noted, "*Meru has interested various investors who are non-Meru in this*

complicated use of mother-tongue in teaching lower classes". With no contradiction, Mose (2017) was also keen to observe and comment on the multiculturalism and high ethnic diversity of educational sectors in Kenya especially in the rural areas. Mose argued that multiculturalism was a basic factor in the implementation of MTE. This led to the recommendation of Kiswahili in urban areas and use of language of the catchment area in rural areas. Turning back to the result of the study, the existence of a substantial number of teachers who were termed prepressed explains the existence of urban and rural geographical distribution of lower primary schools in the county. The results imply need to go back to the basics where the MT policy is made flexible to address complications on the adoption of mother tongue language.

The last theme is collegial support. This highlights the importance of peer support and collaboration among teachers in enhancing their preparedness for implementing the mother tongue policy. The positive influence of colleagues suggests that collaborative efforts within the teaching community contribute to better readiness.

The head teachers, MOE Curriculum Support Officer, and Quality Assurance and Standards Officers were asked to state what they had done to prepare teachers for the implementation of mother tongue language policy for teaching learners in lower primary schools. CSO 03 responded, *"The Ministry of Education does not decide the teachers who teach lower primary. It is the sole responsibility of the head teacher; hence better placed to comment on preparedness"*. This statement indicates a lack of action by the Ministry of Education in preparing teachers to implement the MTE policy. Another MOE Curriculum Support Officer, CSO 05 clarified that Mother tongue languages may be used in nursery up to PP II but not beyond that, mostly in non-urban areas.

Quality Assurance and Standards Officers said that they only assess quality teaching practices and that issue of preparedness was outside their mandate. They however said that a school may employ a local teacher who is competent in Kimeru to teach lower classes. Responses from focused group discussions with head teachers regarding what head teachers had done to support teachers' preparedness to implement the mother tongue policy generated eight themes. These were: community resource persons, provision of instructional materials, benchmarking, workshops and training, localization of teachers, staff meetings and discussions, integration of mother tongue in every class, and no preparation done at all. The results presented very comprehensive measures which when monitored leads to successful implementation of MT. Existing studies just focus on a few aspects with the most predominant ways of ensuring teacher preparedness being need for instructional materials, teacher training, teacher attitudes, staff retooling, curriculum revision and re-venting the mother tongue policy to inculcate flexibility (Specia et al., 2022; Chebet et al., 2018; Chebet, 2018; Nyaga, 2015; Paul et al., 2021). The discussed findings in comparison to the presented findings implicate development of additional knowledge on extra efforts such as benchmarking and localizing teachers on teacher preparedness. This implicates on the need for these practices to be strengthened.

Certainly, some head teachers said that they engaged community resource persons from the local community who possess expertise in the mother tongue. This approach could enhance the authenticity and cultural relevance of mother tongue instruction. Another action taken by some head teachers was buying some required instructional materials. This emphasizes the importance of having appropriate resources to facilitate effective mother tongue teaching and learning. Some head teachers said that they had facilitated

benchmarking activities where, lower classes teachers visited other schools or classrooms where the mother tongue had been adopted in teaching lower classes. This approach allows teachers to observe and learn from successful practices, hence promoting a collaborative learning environment. These results differ with the most common practices put in place to enhance teacher preparedness towards implementing MTE. Existing literature advocate for teacher retooling and professional development, curriculum revision and purchase of mother tongue teaching and learning materials (Specia et al., 2022; Chebet et al., 2018; Chebet, 2018; Nyaga, 2015; Paul et al., 2021). The discussed findings in comparison to the presented findings implicate development of additional knowledge on extra efforts such as benchmarking and localizing teachers on teacher preparedness. This implicates on the need for these practices to be strengthened. The County director of Education suggested a need to enhance teacher capabilities in mother tongue instruction through comprehensive training, recruitment aligned to linguistic communities, professional development for continuous improvement, and tailored instructional supervision.

In some schools, head teachers said that they had sponsored identified teachers to attend workshops. This helps in providing valuable insights, strategies, and skills needed to effectively implement the mother tongue policy, and is a step towards professional development of teaching staff. The study also noted that most teachers assigned to teach lower classes were drawn from local areas. The act of localization of lower classes teachers shows a deliberate effort to leverage the familiarity and proficiency of local teachers in the mother tongue. This approach recognizes the importance of cultural and linguistic context in effective teaching. Other measures taken by head teachers was floating teaching the use of mother tongue as an agenda during staff meeting where it is discussed positively and

exhaustively, indicating a collaborative approach to address challenges and share insights related to the implementation of the mother tongue policy. The study also noted that in some schools, the head teachers confessed to have not taken any action; hence, a ‘no preparation’ theme was developed. Different mechanisms of enhancing teacher preparedness were put across in the results of (Wawire, 2021). Wawire (2021) found that teachers were equipped to teach emergent lower-grade children from multilingual contexts through curriculum revision in the pre-service teaching programs and practicum apprenticeship programs. Some level of preparedness was noted in the findings of Serende and Mwoma (2022) in Hamisi Sub-County, Vihiga County, teachers were employed from the local community and few teachers had a supply of local textbooks for teaching and learning. Noticing the benefits of mother tongue language, Serende and Mwoma recommended continued preparation of teachers through nourishing, nurturing, and improving MTE through teacher training, purchasing more local instructional books and providing a conducive environment which foster mother tongue education. For the adopted theory on, the results support its propositions highlighting the contributions and interrogating the roles teaching staff play in the preparedness to implement L1 policy in Meru County Kenya. This appreciates the role of teacher preparedness. The presented results implicates on the valuable practices, strategies, and requirements needed to effectively implement the mother tongue policy, and is a steps towards preparedness of teaching staff.

The above themes derived from the responses indicate a variety of strategies employed by head teachers to support teachers' preparedness for implementing the mother tongue policy.

These strategies encompass community involvement, resource provision, benchmarking, professional development through workshops, localization of teachers, and staff meetings.

4.8.4 Convergence of Quantitative and Qualitative Findings Regarding Teachers' Preparedness to Implementing MTE Policy

The quantitative and qualitative findings converge in several ways. On teacher training and proficiency, the quantitative findings indicated that about 50.7% of teachers agreed they were taught how to use the mother tongue during their initial training, however, only 39.8% believed they were proficient in Kimeru language. On the same issue qualitative findings from head teachers demonstrated concerns about the low level of preparedness among teachers, pointing a proficient gap.

Results show that 44.5% of teachers do not shy away from teaching in mother tongue languages. Pupils' enthusiasm when taught in Kimeru language was acknowledged by 42.2% of teachers. Moreover, the positive feedback from a smaller group of head teachers stating that some teachers are "well prepared." Geographical influence indicates that teachers, particularly in interior Meru, were well prepared. These results are communicating something about the attitudes and perception of learners and teachers. In agreement, in Philippines, Cahapay (2020) results revealed that learners were proud to excel through use of the MT and that they felt superior to other languages when they were proficient in MT. the results also opined a significant degree of enthusiasm on learners enthusiasm and attitudes. However, the aspects of geographical influence and teacher perceptions was not recorded which may be negotiated to the fact that the study was carried

out in a monolingual set up hence contradicting with the situation reported in the current study which showed existence of other ethnic groups in Meru County.

On the one hand, quantitative findings; that is, 40.8% of teachers considered the use of mother tongue languages natural when teaching, and 36% perceived the interaction between teachers and pupils while teaching in Kimeru language as good. On the other hand, the qualitative, the collegial support emerged as a theme, pointing out the importance of peer support and collaboration among teachers in enhancing their preparedness for implementing the mother tongue policy. This indicate a convergence in the comfort level and interaction quality.

The need for additional training featured prominently in both quantitative and qualitative findings; where, 28% of teachers believed that using mother tongue languages in instruction requires additional in-service training. Only 20.9% had attended in-service training on how to use mother tongue language for teaching Grade 3 learners. These results corroborate with qualitative findings considering that some head teachers admitted to have taken actions like workshops and training to support teachers' preparedness, indicating an awareness of the need for continuous professional development. The need for teacher retooling and in-service professional development and training was also documented in the discussion of Quin (2017). Quin made this submission after obtaining results which noted there were difficulties faced in information distribution found in the language regulations in the native speech. Therefore, teachers required a chance to back to class in order to teach students native language and training in translation too. This implicates on need for both

awareness implementation of continuous professional development for lower primary schools teaching staff. This resonates on the need for funding.

In this study, only 26.1% of grade three teachers reported being involved as stakeholders in curriculum development. The head teachers indicated that the lack of purposive training on the use of indigenous languages in teaching limited teacher involvement in curriculum development, hence, affecting the relevance and effectiveness of teaching strategies. This indicates a convergence on the aspect of involving teachers in MTE curriculum development. These results appreciate the submissions of Nyaga (2015) that teachers are very key stakeholders in the implementation of MTE. Teachers do so by contributing towards the development of the early childhood curriculum as well recommending instructional materials for adequate learning. Nyaga expressed that, such noble tasks required teaching staff who are competent and skilled. In agreement with Nyaga's submissions, limited or no in-service training for teaching staff may retrain them from being involved in curriculum development. The results therefore point blank the essence of teacher preparedness through retooling.

The correlation between teacher preparedness and MTE policy implementation was evident where Spearman's rho of .601 showed a strong and positive association between teacher preparedness and the successful implementation of the mother tongue language policy. Similarly, qualitative findings indicated concerns about low preparedness among head teachers suggesting a potential impact on the successful implementation of the mother tongue policy.

Strategies for teacher preparedness were highlighted where 35.1% of teachers said that they had been equipped with Mother Tongue Based Multilingual Education (MTB-MLE). Converging on this point, some head teachers reported having employed various strategies such as engaging community resource persons, providing instructional materials, benchmarking, workshops, localization of teachers, and staff meetings to support teacher preparedness. This was not prominent in past studies as the common practices put in place to ensure teachers engage their mother tongue in teaching lower grade pupils was the initial college training while they were being taken through the curriculum and during apprenticeship (Wawire, 2021; Serende & Mwoma, 2022). Additional strategies such as engaging community resource persons, providing instructional materials, bench marking, workshops, localization of teachers, and staff meetings to support teacher preparedness therefore need to be enhanced.

The foregoing discussion show that both the quantitative and qualitative results highlight common themes such as the need for continuous training, attitudes toward mother tongue education, variations in teacher preparedness, and the importance of collaborative efforts among teachers. The convergence of findings emphasizes the multifaceted nature of teacher preparedness and the significance of addressing various aspects to ensure successful implementation of mother tongue education policy. This collaborate with what has been recommended as best practices (revising college curriculum to incorporate MTE pedagogies, in-service staff training and retooling, deploying instructional resources, providing a conducive environment and engaging parents, learners and teacher to communicate the need for MTE) towards addressing the changes of implementing MTE (Mose, 2017; Mandillah, 2019; Oluoch, 2017). These results support the propositions of

Advocacy Coalition Framework (ADF), which appreciates the contributions of stakeholder engagement, environmental influence, and adequacy of required resources in place and a flexible policy for implementing mother tongue language of instruction in lower primary schools. Carrying out these roles requires adequately prepared teaching staff. The study call for renovation of teacher preparedness by setting in place avenues to ensure their continued relevance in teaching MT service.

4.9 Instructional Materials Factor in the Preparedness to Implement MTE Policy

The second aspect of preparedness which was investigated in this study was about instructional materials. Instructional materials play a crucial role in the preparedness and successful implementation of mother tongue education policies. Data for this construct was obtained from grade three teachers, head teachers, Curriculum Support Officers, and Quality Assurance and Standards Officers through questionnaires, focused group discussions and interviews respectively. The descriptive and inferential findings are first presented followed by the results based on qualitative data. The last section provides an integration where both quantitative and qualitative findings are discussed with a view to draw conclusions regarding instructional materials preparedness in implementing the MTE policy in public lower primary school education in Meru County, Kenya.

4.9.1 Descriptive Results on Instructional Materials Preparedness

The role of instructional materials in the preparedness to implement the Mother Tongue language policy in lower primary schools in Meru County was assessed through several statements which were measured using Likert scale. The statements covered aspects such as curriculum and syllabus provision, adequacy of textbooks, availability of reference materials, teacher access to instructional materials, and relevance of orthographies mother

tongue education. The descriptive statistics indicate various levels of agreement and disagreement among respondents, along with the frequency and median of each response.

The results are summarized in Table 4.16.

Table 4. 16

Instructional Materials Preparedness

Statement on instructional materials	SD	D	MA	A	SA	Medi an	Mo de
a) Kenya Institute of Curriculum Development has provided schools with Kimeru language curriculum and syllabus to guide teachers in lesson preparation	78(37%)	81(38.4%)	11(5.2%)	25(5.2%)	16(7.6%)	1	1
b) The Kimeru language course text books for teachers and learners are adequate	117(55.5%)	81(38.4%)	4(1.9%)	5(2.4%)	4(1.9%)	0	0
c) There are adequate reference materials for supporting teaching in	98(46.4%)	92(43.6%)	14(6.6%)	3(1.4%)	4(1.9%)	1	0

Kimeru Language in our school								
d) Teachers in our school have access to instructional materials in Kimeru Language at our school	99(46.9%)	98(46.4%)	14(6.6%)	0	0	1	0	
e) The orthographies in the Kimeru language instructional material is relevant	88(41.7%)	95(45%)	8(3.8%)	18(8.5%)	2(9%)	1	1	
f) Learners do not struggle with the orthographies in the Kimeru language instructional materials	73(34.6%)	53(25.1%)	59(28%)	24(11.4%)	2(9%)	1	0	
g) I don't have difficulty teaching using the orthographies in the Kimeru language instructional material	56(26.5%)	43(20.4%)	40(19%)	57(27%)	15(7.1%)	2	3	

Regarding the provision of Kimeru language curriculum and syllabus by the Kenya Institute of Curriculum Development shows that 78(37%) respondents strongly disagree (SA), 81(38.4%) disagree (A), with a median response of 1, indicating general

dissatisfaction with the provided curriculum guidelines. In statement which assesses the adequacy of Kimeru language course textbooks, the findings show that 117(55.5%) respondents strongly disagree (SA), and 81(38.4%) disagree (A). On the same, 5(2.4%) strongly agree (SA), 4(1.9%) agree (A), and the median response is 0, suggesting a minority view that the textbooks are sufficient.

On the availability of reference materials, 98(46.4%) respondents strongly disagree (SA), and 92(43.6%) disagree (A). Only 3(1.4%) agreed (A), 4(1.9%) strongly agreed (SA), and the median response is 1, indicating a very low level of availability. The findings reveal a lack of reference materials with 46.4% strongly disagreeing and 43.6% disagreeing. Having limited access to reference materials not only affects the quality of education but also hinders the effectiveness of teachers in delivering the curriculum.

Additionally, the findings reveal that no respondents agreed (A) or strongly agreed (SA) that teachers have sufficient access to instructional materials in Kimeru Language in their schools, with a median response of 0. The responses clearly indicate a lack of preparedness for teaching in Kimeru Language in lower public primary schools in Meru County. The inaccessibility of reference materials also demonstrates a lack of support for teachers, which can adversely impact the quality of education in Kimeru. The results indicate that there is a pressing need for improvement in the development and delivery of these materials. The results show a serious deficiency in the availability of quality instructional materials, which can hamper the quality of education in the Kimeru language. This clearly indicate a lack of preparedness of reference materials for supporting teaching in Kimeru Language in lower public primary schools. The inaccessibility of reference materials by

teachers also indicate lack of support and also show a high level of unpreparedness. This resonates very well with the continental lamentations presented in a study based in Ghana (Tackie-Ofosu et al., 2015) which found that constraints to teaching in native-tongue were in adequate instructional resources in the native tongue. Accordingly, the findings resonates with a local study based in Nandi County carried out by Chebet et al. (2018) on the teachers' influence preparation on adoption of MT as an instructional medium in local centres for young children's growth. Chebet et al. established that, among its key findings, teachers in Nandi area lacked instructional materials on first language. Borrowing from the discussed findings, the results communicate to the study that, inadequate teaching and learning materials is a common problem affecting the preparedness towards implementing mother tongue language education in grade 1-3 primary schools. Such unpreparedness require serious readdress through ministry of education intervention through the government to fund purchase of local language instructional materials. It also shed light that, the MTE policy require revision, noting that the government is not completely silent in disbursing funds which cater for reference and teaching materials. The policy needs to include the references that are needful.

Regarding the relevance of orthographies in instructional materials, 88(41.7%) respondents strongly disagreed (SA), and 95(45%) disagreed (A). On the same, 18(8.5%) agreed (A), 2(9%) strongly agreed (SA), with a median response of 1, indicating a high level of disagreement to the statement. In a related statement, "learners do not struggle with the orthographies in the Kimeru language instructional materials." 73(34.6%) respondents strongly disagreed (SA), and 53(25.1%) disagreed (A). On the same, 59(28%) moderately agreed, 24(11.4%) agreed (A), 2(9%) strongly agreed (SA), with a median response of 1.

This shows that learners actually struggle with the orthographies in the Kimeru language instructional materials. The results suggest that there are significant challenges with orthographies in Kimeru language instructional materials. These challenges may hinder effective language learning and literacy development among learners. The presented situation as per the respondents insights contravene the recommendations which were stipulated by Khamroev (2021) in Uzbekistan showing that, in order to develop engaging activities for pupils to engage in while learning a native language, a teacher must put out efforts, of utilizing books, projecting pictures, combine visual aids, and orthographies for success training in the pupils native language. Therefore, in this study, the results fail to comply with the basic necessities for facilitating teaching and learning using a native language. There is need for readdress through the policy, stakeholder involvement to fund primary schools with required instructional infrastructure.

Lastly, the findings show that 56(26.5%) respondents strongly disagreed (SA), and 43(20.4%) disagreed (A). On the same, 40(19%) moderately agreed, 57(27%) agree (A), 15(7.1%) strongly agree (SA), and the median response is 3, indicating a general disagreement that they don't have difficulty teaching using the orthographies in the Kimeru language instructional materials. This meant that there were difficulties in teaching using the orthographies in the Kimeru language instructional materials. Furthermore the results, show that a significant proportion of respondents (46.9%) disagree with the ease of teaching using the orthographies in Kimeru language instructional materials. This suggests that teachers encounter difficulties in imparting language skills to learners. A study that focused on language skills to pre-school learners in Vihiga County reported similar results on the existence of difficulties for teachers to impart language skills on little pupils (Serede

et al., 2021). Moreover, it was clarified that the difficulties resulted from school environment which were poorly equipped with visuals, images and information materials. In convergence, the results consistently report of the inadequacy of a variety of instructional materials for pupils in lower grade primary schools. Apparently, this require readiness through allocating funds. Schools also need to come up with creativity strategies for securing own source funds and materials for securing learning materials.

The results indicate a significant disagreement with availability and accessibility of instructional materials for Kimeru language, and inadequate reference materials. The median responses provide additional insights into the central tendency of the data. This indicates a need for urgent attention to improve the provision of Kimeru language curriculum and instructional materials. Addressing the inadequacy of materials, reference materials, and the challenges related to orthographies is essential to enhancing quality of mother tongue education and support both learners and teachers in their language learning and teaching efforts. In agreement, Trujillo (2020) also noted that, lack of translated learning materials, programmed training, reference materials, inadequate teaching resources and audio visuals in the teaching native tongue, and was constraining learning to a great extent in MT. More latter studies such as Khamroev (2021); Trujillo (2020) and Bukoye (2019) also reveal the urgency of deploying a variety of teaching and instructional materials to pre ad lower primary schools in order to implement MT effectively. These findings underscores the importance of taking concrete steps to revise, update, and expand the available instructional resources and materials to better align with the goals of mother tongue education policy in Kenya.

4.9.2 Testing of Hypothesis Two

The second null hypothesis of the study stated resource materials preparedness does not significantly affect the implementation of the MTE policy in public lower primary school education in Meru County, Kenya. A Spearman correlations analysis was conducted to assess the relationship between instructional resources preparedness (X2) and the implementation of the mother tongue education policy (Y). The results are summarized in Table 4.17.

Table 4. 17

Correlations between instructional resources preparedness and MTE policy

		X2	
Spearman's rho	X2	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	211
	Y	Correlation Coefficient	.221
		Sig. (2-tailed)	.001
		N	211

The Spearman's rho correlation coefficient between X2 and Y was found to be 0.001. This suggests that the correlation between X2 and Y is statistically significant. The positive correlation between instructional resources preparedness and the implementation of the mother tongue language policy suggests that as instructional resources preparedness increases, there is a tendency for the implementation of the mother tongue language policy

to also increase. The statistically significant p-value (0.001) strengthens the evidence that this correlation is unlikely to be due to random chance in the sample. However, the moderate correlation coefficient (0.221) indicates that the relationship is not extremely strong. Other factors not considered in this analysis may also influence the preparedness to implement mother tongue education policy. The results agree with some findings posited by Ngasike (2019) in Turkana County who expressed that, images, pictorial books with highways and skyscrapers and culturally relevant teaching and studying resources enabled toddlers to bond to their cultural values and beliefs, accept to go to school and made learning interactive. However, there was very high drop out of pupils due to lack of local and tailor made cultural teaching and learning materials. Ngasike established a correlation between teaching and learning materials and learner retention. This study noticed a correlation between culturally relevant, native language instructional resources and preparedness to implement mother tongue language policy. This confer that, among the factors which require improvement with respect to achieving preparedness, instructional materials are important too hence need to be procured.

4.9.3 Qualitative Findings Regarding Instructional Resources Preparedness

Head teachers were asked to discuss the status of the availability of instructional materials for use in teaching pupils in mother tongue languages at their primary schools. The discussion highlighted scarcity and unavailability of instructional materials in schools where words such ‘not available’ and ‘inadequate’ were predominantly mentioned. The next concern was on relevancy and up-datedness of the available instructional materials for supporting MTE policy implementation. Most head teachers and teachers described the

materials as not up to date, while others described the instructional materials having difficult content for learners. When CSOs, CQASOs and the County Director were contacted for comments, a common response was that the Ministry had stopped supplying vernacular curriculum books. This indicate a conspicuous gap and serious challenge on availability of instructional materials for use in teaching pupils in mother tongue languages at their primary schools.

The study noted that Kiswahili and English were regarded as superior and in other cases, there were few resource people proficient in Kimeru language. The head teachers further complained of inadequate funds to purchase the required books. To overcome these challenges, a few head teachers had taken the initiatives to provide the required text books, a few others had sought support from parents, while others encourage teachers to use resource persons. Surprisingly, majority head teachers said that they had not taken any measures. In agreement, Wawire (2021) also noticed that, predominantly, English and Kiswahili were the dominant languages of instruction in lower primary schools following the novice teacher proficiency in native languages. Wawire encouraged the enforcement of the language policy and addressing the challenges of instruction in multilingual classroom through securing native language information materials through government supply. Concerning the practises put in place to ensure the provision of mother tongue language materials in preparation for implementing MTE, differing measures mean to resolve the problem of lack of mother tongue instructional materials for teaching pre-schools were reported in the findings of Chebet (2018). Chebet et al. expressed that, head-teachers relied on government supply of teaching and learning materials to progress education activities for lower primary school children. Primary schools are overseen by the Ministry of

Education hence, they are responsible for equipping educational premises with adequate teaching and learning materials. Therefore, there is need for increased budgeting in allocating instructional materials.

Giving their comments regarding the status of the availability of instructional materials for use in teaching pupils in mother tongue languages in primary school in Meru County, the County Director of Education limitations of books, instructional guides and reference materials for teaching mother tongue, limited access to previous system's books, mainly found in a few isolated schools; lack of elaborate curriculum designs for CBC teaching of indigenous languages; and few reading materials for learners. The Director further exclaimed, *“Teaching materials for indigenous languages are a real challenge. Unless teachers or other stakeholders prepare/provide instructional materials themselves, they are currently unavailable.”*

When contacted for comments teachers suggested a need to conduct a thorough needs assessment to identify the specific requirements for instructional materials in each mother tongue language. They also stressed on need to collaborate with local communities in the development of instructional materials. Teacher 035 said, *“The school should form committees comprising teachers, curriculum developers, linguists, and community representatives to oversee the development of instructional materials.”* Teachers further urged the Ministry of Education to provide training for educators and material developers on effective strategies for creating instructional materials in mother tongue languages. The results contradict comments outlined by existing studies such as Mose in 2017, Mandillah of 2019, Oluoch done in 2017, Khamroev (2021), Trujillo (2020) and Bukoye (2019) which

considered government intervention to fund the purchase of mother tongue language of instruction instructional materials. Noticing the given suggestions by the teachers, the results implicate their frustrations leave alone their goodwill and willingness associated with the need to boost own source mechanisms for sourcing learning materials through stakeholder engagement specifically from the local community. The government is mandated to facilitate the support to implement MTE through adequate preparedness including securing teaching materials. Also, the discussion from latter findings call upon government budgeting to fund mother tongue language teaching and learning materials.

4.9.4 Convergence of Quantitative and Qualitative Findings Regarding Instructional Resources Preparedness

The quantitative findings consistently highlight dissatisfaction with the provision of Kimeru language curriculum and syllabus, inadequacy of textbooks, and a lack of reference materials. The majority of respondents strongly disagree or disagree with the adequacy of these materials. These converge with qualitative findings considering emphasis on the scarcity, unavailability, and lack of up-to-date and relevant instructional materials. The mention of words like 'not available' and 'inadequate' further confirms the shortage of materials. Another area of convergence is on orthographies. The quantitative results point out significant challenges with orthographies in Kimeru language instructional materials, affecting both teachers and learners. The qualitative findings echo these challenges, with descriptions of instructional materials having difficult content for learners. The need for collaboration with local communities and linguists suggests a recognition of the complexity of language materials. In agreement, Serede and Mwoma (2022) also noticed that, pre-

schools in Vihiga County had inadequate teaching and learning materials and those that were in place were from the nearby local community. This painted a picture that, despite the inadequacy of instructional materials, the local community collaborated with nearby schools to aid them with local teaching and educating materials. The government of Kenya need to heed to the call and urgently intervene through the ministry of education to sourt this disparity out.

The quantitative results indicate that no respondents agreed or strongly agreed that teachers have sufficient access to instructional materials in Kimeru Language, highlighting a minimal support. The qualitative findings reinforce this by mentioning that the Ministry's discontinuation of supplying vernacular curriculum books, and the complaints of inadequate funds for purchasing required books. Some head teachers had taken some initiatives, but the majority had not, indicating a gap in the support.

Importance of collaboration and training was also noted across all results. On the one hand quantitative findings stress on the need for urgent attention to improve the provision of Kimeru language curriculum and instructional materials. On the second hand, the qualitative findings further emphasize the importance of collaboration with local communities, the formation of committees, and training for educators, and a need for material developers to enhance instructional materials in mother tongue languages. Differing measures mean to resolve the problem of lack of mother tongue instructional materials for teaching pre-schools were reported in the findings of Chebet (2018). Chebet et al. expressed that, head-teachers relied on government supply of teaching and learning materials to progress education activities for lower primary school children. Primary

schools are overseen by the ministry of education hence, they are responsible for equipping educational premises with adequate teaching and learning materials. Therefore, there is need for increased budgeting in allocating instructional materials.

4.10 Institutional Factor in the Preparedness to Implement MTE Policy

The institutional preparedness was the third objective whose aspects were measured to determine lower public primary schools readiness to implement MTE policy. Data for this construct was obtained from grade three teachers, head teachers, Curriculum Support Officers and Quality Assurance and Standards Officers through questionnaires, focused group discussions and interviews respectively. The descriptive and inferential findings are first presented followed by the results based on qualitative data. The last section provides an integration where both quantitative and qualitative findings are discussed with a view to draw conclusions regarding institutional preparedness in implementing the MTE policy in public lower primary school education in Meru County, Kenya.

4.10.1 Descriptive Results on Institutional Preparedness

Institutional preparedness to implement the mother tongue language policy in lower primary schools in Meru County was assessed through several statements which were measured using Likert scale. The statements covered aspects such as curriculum and syllabus provision, adequacy of textbooks, availability of reference materials, teacher access to instructional materials, and relevance of orthographies mother tongue education. The descriptive statistics indicate various levels of agreement and disagreement among respondents, along with the frequency and median of each response. The results are summarized in Table 4.18.

Table 4. 18*Institutional Materials Preparedness*

Statement	SD	D	MA	A	SA	Median	Mode
a) Primary schools in our region have a policy for using non-mother tongue languages in teaching and conversations	7(3.3%)	41(19.4%)	29(13.7%)	107(50.7%)	27(12.8%)	3	3
b) Instructional materials are written in English or Kiswahili	0	21(10%)	1(0.5%)	104(49.3%)	85(40.3%)	3	3
c) I am aware of the language policy in the basic education framework	4(1.9%)	37(17.5%)	52(24.6%)	89(42.2%)	29(13.7%)	3	3
d) There is adequate ICT resources to enable our teachers teach in Kimeru language	52(24.6%)	40(19%)	72(19%)	45(21.3%)	2(0.9%)	2	2

e) The available infrastructure in our school at the moment can adequately support the use of mother tongue languages in teaching lower primary	24(11.4%)	54(25.6%)	95(45%)	29(13.7%)	9(4.3%)	2	2
f) Our school avails the requisite support for curriculum requirements in using mother tongue languages in teaching	27(12.8%)	67(31.8%)	89(42.2%)	18(8.5%)	10(4.7%)	2	2
g) Some aspects of the curriculum can be well covered using mother tongue	11(195.2)	53(25.1%)	27(12.8%)	103(48.8%)	17(8.1%)	3	3
h) Our school has a budget that supports the use of mother tongue	61(28.9%)	120(56.9%)	19(9%)	7(3.3%)	4(1.9%)	1	1
i) Our school support pupils to visit cultural sites to learn more about the Kimeru language	37(17.5%)	78(37%)	54(25.6%)	40(19%)	2(0.9%)	1	1

The results in Table 4.18 are discussed here below having aggregated results of "Agree" (A/SA) and "Disagree" (D/SD) for each statement. The results have also indicated the frequencies and medium values for each statement. The findings indicate that a total of 107 respondents (63.5%) agreed (A/SA) that primary schools in their region have a policy for using non-mother tongue languages in teaching and conversations, while 48 respondents (28.7%) disagreed (D/SD). The medium of this response was 3. This suggests that there is substantial support for the use of non-mother tongue languages in educational settings, reflecting the prevalence of English and Kiswahili as languages of instruction. The results also show that most respondents, 141 (66.4%), indicated agreement (A/SA) that they were aware of the language policy in the basic education framework, while 41 respondents (19.4%) disagreed (D/SD). The medium of this response was 3. This suggests a moderate level of awareness among the participants regarding the language policy. This suggests that while a substantial number of participants are aware of the policy, there is room for improvement in raising awareness among educators and stakeholders. The presented situation resonates well with the observations aired out by Mose and Kaschula (2019) in a study in Western Kenya on MT policy who observed that, government Quality assurance officers, curriculum support officers, head-teachers, teachers, key players and actors in a policy implementation process were moderately aware of the existence of language policy although they did not know whether it provides for MT to be taught as a subject or whether it was to be used as an instructional language. Advocacy Coalition Framework which underpins this study confirms these findings for it emphasizes the collaborative role of policy formulators and implementers. Noting the above situation and the consistency of the

discussed findings, the study advises the need to establish stakeholder awareness and educational campaigns to expose them to the provision of the language policy.

The weakness in the MTE policy noted above also have implications on instructional materials. An overwhelming majority of 189 respondents (89.3%) agreed (A/SA) that instructional materials in their schools are written in English or Kiswahili, thus supporting the use of these two languages alone during teaching. Only 21 respondents (10%) disagreed (D/SD), and the medium of this response was 3. This indicates a strong institutional support for using English and Kiswahili as primary languages for instruction in public lower primary schools. This finding underscores the strong institutional support for using English and Kiswahili as primary languages for instruction, potentially overshadowing the use of local languages. The findings further show a total of 45 respondents (21.3%) agreed (A/SA) that there were adequate ICT resources to enable teachers to teach in Kimeru language, whereas 92 respondents (43.5%) disagreed (D/SD). The medium of this response was 2. This indicates a notable deficiency in ICT resources for teaching in Kimeru language, hence a significant gap in technological infrastructure and digital resources for supporting local language instruction. These findings underscore the significance of instructional materials, technological infrastructure and digital resources towards effective implementation of MTE in primary schools in Kenya. Notably, similar results were put across by Mandillah (2019) elaborating that, even though the language policy exists, stakeholders have lacked preparedness strategies to implement the same. Faced by the challenge of poor awareness in the provisions of the language policy for primary schools, lower primary schools are facing challenges related to limited MT teachers, poor training on MTE, limited teaching and learning materials, overemphasize on English language,

dominance of English literature and Kiswahili as well. Noting that the findings underscore the significance of instructional materials and infrastructural preparedness, primary school stakeholders ought to take up the challenge and develop funding mechanisms for securing MT teaching and learning materials and ICT infrastructure. This require both community engagement and government support though funding.

Approximately 63 respondents (29.9%) disagreed (D/SD) that the current infrastructure can adequately support the use of mother tongue languages in teaching lower primary, while 84 respondents (39.9%) agreed (A/SA). The medium of this response was 2. The results show inadequacy of current infrastructure to support the use of mother tongue languages in teaching lower primary schools. This implies that there might be limitations in the current infrastructure to fully support mother tongue language implementation. Gumbi, 2021 retaliates that government should get more involved in enforcing policies that call for integration of native languages as the official language of not only teaching, learning but assessment too in all subjects in schools.

Teachers had mixed feelings that their school provided the requisite support for curriculum requirements in using mother tongue languages. This is because, 96 respondents (45.5%) agreed (A/SA) while an equal number of 95 respondents (45%) disagreed (D/SD). However, the medium of this response was 2. Although the median indicate higher disagreement level on this statement, the situation reflect an ongoing debate regarding the adequacy of support for curriculum requirements in mother tongue language use. Notably, most respondents, 120 (56.9%) agreed (A/SA) that there are aspects of the curriculum that may not be well covered using mother tongue languages, while 64 respondents (30.3%)

disagreed (D/SD). The medium of this response was 3. This reflects serious concerns about the comprehensive coverage of certain curriculum areas using mother tongue languages. The findings indicate apprehensions about the policy's ability to address all curriculum requirements effectively. In support, Specia et al. (2022) also noted common deficiency relating to curriculum preparedness towards MTE. Apart from noting the deficiencies existing in the CBC curriculum, other noted shortfalls included poor support of the current curriculum due to limited training offered to teachers, limitations in professional development activities and limitations in instructional resources. In a nut shell, the results still elucidate the existence of potential drawbacks towards successful implementation of MTE curriculums. Therefore, the results imply a need for reforms in the curriculum through restructuring language policy and making informed adjustments to meet material, technology, resources and curriculum preparedness.

The results also show an overwhelming majority 181 (85.8%) disagreed (D/SD) that their school had a budget supporting the use of mother tongue languages in teaching, while 26 respondents (12.3%) agreed (A/SA). The medium of this response was 1. This highlights a significant shortfall in budget allocation for mother tongue language use, which may hinder the effective implementation of the policy to a great extent. Moreover, a substantial number of respondents 115 (54.6%) disagreed that their school supports pupils' visits to cultural sites for learning about the Kimeru language, while 42 (19.9%) agreed. This indicates a need for more support in facilitating cultural learning experiences for students to enhance their understanding of the local language and culture. The noted shortfall regarding the budgetary and poor cultural support of pupils is against the assertion given out by the UNESCO (2016) which stressed that regular access to culturally and inclusive

relevant curriculum and instructional materials by pupils in a familiar language enhances their learning and cultural experience UNESCO (2016) report also found that, confidence is also gained by learners when instruction materials use familiar content (activities, places and people) when introducing new concepts. Therefore, the limited budget allocation and limited support for cultural learning experiences require to be strengthened through revising pre-school budget and also the language policy in place.

The above findings demonstrate a complex landscape of support and challenges in the implementation of mother tongue language education. While there is substantial backing for the policy, serious preparedness concerns were noted regarding ICT resources, infrastructure, curriculum support, budget allocation, and support for cultural site visits to promote mother tongue language use in lower primary schools in Meru County. As noted by Akala (2021), Mandillah (2019), Specia et al. (2022), UNESCO (2016) and Kaviti (2018) there is a high level of consensus on the challenges which hinder the implementation of MTE. In support to the presented findings, Kenyan primary schools are confronted with poor instructional, teacher expertise, infrastructure, multilingual issues, rigid language policy, budgetary constraint, poor curriculum support, poor integration of cultural learning in the curriculum and technology preparedness These results underscore the need for targeted interventions and policy adjustments to ensure the effective implementation of mother tongue language education in Meru County.

4.10.2 Testing of Hypothesis Three

The third null hypothesis of the study stated, institutional preparedness does not significantly affect the implementation of the MTE policy in Meru County, Kenya. A

Spearman correlations analysis was conducted to assess the relationship between institutional preparedness (X3) and the implementation of the mother tongue language policy (Y). The results are summarized in Table 4.19.

Table 4. 19*Correlations between institutional preparedness and MTE policy*

		X3	
Spearman's rho	X3	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	211
Y		Correlation Coefficient	.245**
		Sig. (2-tailed)	.000
		N	211

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

The correlation coefficient (ρ) between institutional preparedness and policy implementation was found to be 0.245, and this correlation was statistically significant at the 0.05 level (2-tailed), as indicated by a p-value of 0.000. The positive correlation coefficient (0.245) suggests that as institutional preparedness increases, there is a corresponding increase in the implementation of the mother tongue language policy. In other words, schools that are better prepared in terms of resources, infrastructure, teacher training, and other factors are more likely to effectively implement the policy of using local languages in lower primary education.

The findings imply that investing in institutional preparedness, including providing adequate resources, infrastructure, and support for teachers, can positively influence the successful implementation of the mother tongue language policy. Schools that enhance their preparedness are more likely to create an environment conducive to teaching and

learning in local languages, which aligns with the policy's objectives. As a result, these schools may experience improved educational outcomes, cultural enrichment, and linguistic diversity in the classroom. This indicates need to prioritize efforts to enhance institutional preparedness as a means to effectively implement mother tongue language education in Meru County's lower primary schools. These results align well with the findings of Specia et al. (2022) which concur on the importance of preparedness towards the implementation of language activity curriculum among pre-primary schools in western Kenya. Specia et al. found out that, teacher preparedness, instructional resources preparedness and infrastructure preparedness influenced the implementation of language curriculum. In support was also Mandillah (2019) who observed that, training in mother tongue education, teaching and learning, materials in MT, placement of MTE teachers, budgeting for instructional materials and strategic communication and direction facilitated successful implementation of MTE in Kenya. Furthermore, the results support the argument presented by the advocacy coalition theory which was instructive in enhancing comprehension on the implementation of MT policy in Meru County through achieving the required preparedness (independent variables) such as teacher' preparedness, instructional materials preparedness and institutional preparedness. This implies the need to strengthen teacher', instructional materials and institutional constructs.

4.10.3 Qualitative Findings Regarding Institutional Preparedness

Head teachers were asked to discuss the institutional preparedness measures put in place to support implementation of mother tongue language policy in lower public primary schools in Meru County. Their responses highlight a varied landscape of preparedness

among public primary schools for the implementation of the mother tongue policy. A significant number of head teachers reported that there has been no tangible progress or measures related to the mother tongue policy in their schools. Some head teachers indicated that there is an effort to use the mother tongue as a medium of instruction for the subject "PPI" (Preschool, Primary, and Informal Education).

There was a mention of learning materials and resource personnel which indicates a proactive approach by some head teachers. The study also learnt that some schools had a "one-day Kimeru policy." when teachers taught in the Kimeru language (mother tongue). The results shows that some schools had taken steps to integrate mother tongue teaching, while others had not made any progress. This may explain why the status of institutional preparedness of the majority of primary schools were described as "not well prepared" towards implementing mother tongue languages for teaching learners in lower primary schools. These results shows weak institutional preparedness towards implementing MTE policy. They also reveal a lack of coordinated effort on the same considering the diverse initiatives noted across public primary schools. Trudell (2015) also observed unpreparedness among primary schools which was indicated by: lack of evidence of any support initiated for training of teachers, lack of development of vernacular-language resource and poor advocacy with community leaders and educators in the place of regulations. The results point out that, the lack of adequate preparedness not only make the resistance to the official language policy normal but also making it seem to the local that the ministry of education lacks clear criteria in place for successful policy implementation. Therefore, strategies aimed at boosting school/institutional preparedness need to be

strengthened. There include: budget allocation, instructional resources acquisition, revising the language policy, curriculum reforms and teacher preparedness.

When asked to describe challenges hindering institutional preparedness the head teachers identified teacher competency, lack of examination policies for MTE, resource constraints, language diversity, and socio-cultural factors. Head teachers expressed concerns that most teachers were not proficient in teaching Kimeru language. This suggests that teacher training and language competency need improvement for effective implementation of mother tongue education. CSO 04 offered solution where local teachers are allocated to teach lower classes. It was further clear that mother tongue language was not examinable hence, the neglect. This may overshadow the importance of mother tongue education in lower primary schools. Moreover, the absence of clear guidelines from the Ministry of Education on MTE and examination contributes to uncertainty and may hinder effective planning and implementation of the same. In support, the study findings by Ritha et al. (2022) also revealed that the implementation of MTE will be possible if the government hired qualified teachers and for those who are not qualified, they should be given training through seminars and workshops on how to usage vernacular as an instructional medium in the classroom. Moreover, examining learners through the language of instruction was found to be a parameter for fostering its use. This shed on the need to restructure the available policy to capture these aspects. Most importantly, stakeholders need to be informed on the provisions and requirements of the MTE policy, hence implementing it. The results therefore, support the argument presented by the Advocacy Coalition Theory which recommends the contributions of stakeholder engagement, preparedness in material, human, technology, policy and infrastructural resources. This implies the need to

strengthen teacher', instructional materials and institutional constructs. During interview, the County Director of Education also noted challenges including insufficient learning materials in local languages, inadequate staff, and teachers from outside language communities, and highlighted a need for expanding teaching resources, aligning teacher assignments to home languages, strengthening supervision, and ongoing professional development for teachers.

The lack of sufficient materials for mother tongue education also featured. This includes both instructional materials for teachers and learning materials for pupils. CSO01 Noted, *“Schools were willing to implement MTE policy but were crippled due to lack teachers proficient in mother tongue and inadequate instructional and learning resources written in local languages”*. A head teacher lamented on inadequacy of teaching and learning resources saying, *“Writers in of mother tongue books are few.”* CSO 01 opined, *“KICD should engage experts in local dialect to write mother tongue books.”* Similarly, the inadequate financial resources also posed a significant barrier to the development and implementation of mother tongue language. The presence of diverse mother tongue languages spoken adds complexity, as finding qualified teachers proficient in these languages can be challenging. Negative attitudes toward mother tongue languages and limited infrastructure were as also described as substantial drawback to the implementation of MTE policy. CSO 04 submitted, *“Many schools impose heavy penalty and punishment to learners for using mother tongue in school”*. This contribute to negative attitude towards mother tongue. CSO 02 concurred and advised education stakeholders to “stop demonizing mother tongue language. The presented results were contrary to the situation presented by Sullivan and Sjolander (2019) in Sweden which revealed their strong support to mother

tongue education and multicultural problems were fought through offering mother tongue tuition. Moreover, strong government support through teacher training, provision of instructional resources, tuitioning few children who do not speak the Swedish dialect and learners training using MT impacted positive attitudes towards MTE. According to County Director of Education, there was notable state of institutional unpreparedness in most schools, insufficient teacher training resources, and inadequate staffing, which pose challenges to effective language policy implementation, and also the reliance on existing overstretched personnel in new sub-counties.

Actions needed to address the institutional preparedness towards implementing mother tongue language policy for teaching learners in lower primary school were sought. All categories of respondents provided various suggestions which culminated into few themes. These were: stakeholder engagement, clear policy development, continuous teacher training, resource allocation, teacher preparation, infrastructure support, and community involvement. The county director of Education(CSOs) suggested solutions that included *“realigning policies, increasing teacher deployment and training, allocating adequate institutional resources and personnel, adjusting quality assurance staff, and strengthening collaboration between key stakeholders”*.

Certainly, involving teachers, school administrators, parents, and local community leaders in the planning and implementation process was emphasized. Respondents also highlighted the need for well-defined policies that articulate the importance of mother tongue language instruction. The need for continuous training and professional development programs for teachers was also emphasized. The Director of Education pointed out *“in-service training*

of mother tongue teachers and re-orientation on mother tongue policy” Another aspect was adequate resource allocation for the development and procurement of instructional materials in mother tongue languages. Ensuring teachers are prepared in advance also featured in the responses provided by head teachers. Ritha et al. (2022) also emphasized the need to put remedial practices in support for MTE. Ritha et al. revealed that the implementation of MTE will be possible if the government hired qualified teachers and for those who are not qualified, they should be given training through seminars and workshops on how to usage vernacular as an instructional medium in the classroom. In similar accord, Nyamai (2022) also reported the essence of MTE policy re-orientation to school team players in order to create awareness and implement required suggested changes about it. The results therefore, support the argument presented by the Advocacy Coalition Theory by underscoring the support to achieve teacher training, policy restructuring and teaching and MT learning information materials preparedness This implicates on the need to reform the existing language policy and budget allocation for strengthening teacher’, instructional materials and institutional preparedness.

Respondents further suggested a need for the Ministry of Education to ensure that necessary infrastructure were installed in primary schools, including spaces for cultural activities. They also noted a need to involve parents, guardians, and community leaders in decision-making processes. This theme emphasizes the importance of community engagement in supporting mother tongue education. CSO 03 suggested a need to make indigenous language compulsory in order to preserve culture. This show that policy makers and administrators acknowledge the role on mother tongue in culture preservation, hence its adoption in teaching lower primary learners requires rejuvenation. These findings rhyme

well with the provisions stated by Paul Sabatier and Jenkins-Smith in 2007 in the developed Advocacy Coalition Framework (ADF) which acknowledges the importance of stakeholder engagement, defining their roles, working collaboratively with policy reforms in order to achieve their goals. Alike in this study, there is need for education stakeholders including: MT policy makers, head-teachers, parents, teachers, community and earners to push for the reformation of the MTE policy so as to achieve its implementation.

4.10.4 Convergence of Quantitative and Qualitative Findings Regarding Institutional Preparedness

The study noted a convergence in both quantitative and qualitative findings regarding the need for increased awareness, challenges affecting language of instruction, inadequacy in ICT resources and infrastructure, budgetary constraints, and the importance of community engagement; clear policy development, and teacher re-training for effective implementation of mother tongue language education in lower public primary schools in Meru County.

The quantitative findings show that 66.4% of teachers agreed that they were aware of the language policy in the basic education framework. Despite this moderate level of awareness, the qualitative findings indicate that some head teachers had not made any tangible progress related to the mother tongue policy at their schools. This suggests a varied landscape of awareness and preparedness. A convergence was observed on inconsistency in the language of instruction where, 89.3% of teachers agreed that instructional materials in their schools were written in English or Kiswahili. This may justify why officials from the Ministry of Education urged on the need to adopt mother tongue as a language of

instruction in PPI. The converging results on the aspect of awareness and partly implementation of the MTE policy concur with the scenario presented by Specia et al. (2022) in western Kenya which termed schools unprepared to implement MTE owing to the fact that, some school stakeholders were not aware, dominance of English and Kiswahili materials in the school, lack of local language information materials and multiculturalism. The results point to education stakeholders to embark in advocacy and also primarily create a conducive environment which foster the teaching in mother tongue. This requires institutional preparedness in terms of technology, teaching resources, infrastructure and competent MTE teachers.

Another convergence was noted on adequacy of resources where more than half of teachers indicated that there were inadequate ICT resources and instructional resources to enable teachers to teach in Kimeru language. The qualitative gathered during interview and FGD indicated a lack of sufficient teaching and learning materials for mother tongue education as a significant challenge. Infrastructure challenge also featured across all categories of respondents with 29.9% of teachers disagreeing that the current infrastructure can adequately support the use of mother tongue languages, while challenges related to infrastructure were identified during interview and FGD, including the lack of spaces for cultural activities in primary schools. Chebet et al. (2018) also noticed similar issues of concern on infrastructural preparedness. It was revealed that in Nandi County, teachers in the area lacked instruction materials on native dialects. Chebet et al. (2018) significantly found that, lack of teaching materials affect the indigenous language instruction policy implementation. Therefore, the results point out the need not to overlook infrastructure preparedness and the development of indigenous language resources.

The issue of budgetary allocation was identified as a key enabler to the implementation of MTE policy in public primary schools. In this study, 85.8% of teachers disagreed that their school had an outright budget supporting the use of mother tongue languages. This corroborate with the qualitative findings which highlighted inadequate financial resources as a significant barrier to the development and implementation of mother tongue language. Bukoye (2019) in Nigeria also complained of budgetary allocation issues such as limited budget, delay in funds disbursement and lack of a budget for native tongue resources. Consequently, a comparison between public and private schools research findings noted that the learners in private schools established adequate accessibility of training materials in schools as compared to government owned schools. Even though the current study was not purposed to carry out a comparison, the aspects of budget constraints and lack of a financial plan for the support was mother tongue education was articulated with clarity. The consistence of the converging findings with the preceded discussion point the existence of disparities and limited financial preparedness for MTE. Therefore, the study calls upon stakeholders to go back to the basics and do a financial pan in support of MTE.

4.11 Teachers' Attitudes towards the Implementation of MTE Policy

The teachers' attitudes towards the implementation of MTE Policy was the fourth objective of this study. The study had hypothesized that teachers' attitudes moderated the relationship between preparedness and the implementation of MTE policy in public lower primary school education in Meru County, Kenya. Data for this construct was obtained from grade three teachers, head teachers, Curriculum Support Officers and Quality Assurance and Standards Officers through questionnaires, focused group discussions and interviews respectively. The descriptive and qualitative findings are first presented, and

then integration of both quantitative and qualitative findings is done with a view to draw conclusions regarding teachers' attitudes towards the implementation of MTE Policy in Meru County, Kenya. At the end, the study provides findings on moderation effect of teachers' attitudes, which allow testing of hypothesis four.

4.10.1 Descriptive Results on teachers' attitudes on implementation of MTE Policy

This study argued that the attitudes of teachers have a significant impact on the successful implementation of Mother Tongue Education (MTE) policies in lower primary schools. Indeed, the teachers who embrace MTE policies with a positive attitude can enhance language development, cultural relevance, and student engagement. Their support can also foster parental involvement, encourage teacher training, promote policy adherence, and contribute to the preservation of native languages.

The teachers' attitudes towards implementing mother tongue language policy in lower primary schools in Meru County was assessed through several statements which were measured using Likert scale. The aspects covered were: attitudes and emotions (enjoyment, high regard, motivation, special interest, pride, passion); teaching methods and innovation (going the extra mile, embracing new methods, effective communication, dialectology, self-education); and professional identity and commitment (self-identification, desire to teach, and recommendation). The descriptive statistics indicate various levels of agreement and disagreement among respondents, along with the frequency and median of each response. The results are summarized in Table 4.20.

Table 4. 20*Teachers' attitudes towards Implementing MTE policy*

Statement on teachers' attitudes	SD	D	MA	A	SA	Med	Mod
a) I enjoy teaching using the Kimeru language	31(14.7%)	41(19.4%)	81(38.4%)	41(19.4%)	17(8.1%)	2	2
b) I have high regard for Kimeru language	17(8.1%)	25(11.8%)	53(25.1%)	79(37.4%)	37(17.5%)	3	3
c) I usually feel motivated when teaching using the Kimeru language	28(13.3%)	63(29.9%)	43(20.4%)	61(28.9%)	16(7.6%)	2	1
d) I have special interest in the Kimeru language as an indigenous language / subject	20(9.5%)	41(19.4%)	60(28.4%)	53(25.1%)	37(17.5%)	2	2

e) I usually introduce myself as the Kimeru language teacher / indigenous language / subject	36(17.1%)	95(45%)	36(17.1%)	36(17.1%)	8(3.8%)	1	1
f) I usually go extra mile guiding learners in Kimeru language	33(15.6%)	23(10.9%)	65(30.8%)	80(37.9%)	10(4.7%)	2	3
g) My love for the Kimeru language has caused me to embrace new methods of instructing learners	26(12.3%)	43(20.4%)	60(28.4%)	65(30.8%)	17(8.1%)	2	3
h) I miss to be in school to teach using the Kimeru language	37(17.5%)	86(40.8%)	42(19.9%)	35(16.6%)	11(5.2%)	1	1
i) I find it easier to explain aspects to learners using the Kimeru language	30(14.2%)	19(9%)	61(28.9%)	64(30.3%)	37(17.5%)	2	3
j) I am proud to be associated with the Kimeru language	16(7.6%)	37(17.5%)	26(12.3%)	91(43.1%)	41(19.4%)	3	3

k) I find Kimeru dialectology pleasant while teaching	31(14.7%)	55(26.1%)	48(22.7%)	64(30.3%)	13(6.2%)	2	3
l) I enjoy the Kimeru dialectology while teaching	34(16.1%)	48(22.7%)	49(23.2%)	64(30.3%)	16(7.6%)	2	3
m) I highly recommend the use of Kimeru language in teaching lower primary school learners	31(14.7%)	25(11.8%)	52(24.6%)	53(25.1%)	50(23.7%)	2	3
n) I read more to understand how to use Kimeru language in teaching lower primary school learners	25(11.8%)	95(45%)	35(16.6%)	46(21.8%)	10(4.7%)	1	1
o) I am passionate using Kimeru language in teaching lower primary school learners	24(11.4%)	56(26.5%)	64(30.3%)	42(19.9%)	25(11.8%)	2	2

Results in Table 4.20 show that teachers generally have positive attitudes towards teaching using the Kimeru language, as 57.8% (A+SA) agree with statement 'I enjoy teaching using the Kimeru language', and 31.2% (D+SD) disagree. The findings indicate that the majority of teachers exhibit a favorable disposition toward using Kimeru language for instruction in lower primary schools. This positive attitude is a valuable resource for the successful implementation of the MTE policy. To capitalize on this positive sentiment, it is essential to provide support, training, and resources to help teachers effectively implement the policy. Further, this finding highlights the importance of ensuring that teaching materials and curriculum are engaging and appropriate for teaching in Kimeru.

The majority of teachers hold a high regard for Kimeru language, with 54.9% (A+SA) agreeing with statement, and 20% (D+SD) disagreeing. The median score for statement (b) is 3, indicating agreement. This means that teachers highly respect and value the Kimeru language. The high regard for Kimeru language is a positive foundation for implementing the MTE policy effectively. It suggests that teachers are likely to prioritize the language's preservation and transmission. To harness this respect, it is important to encourage teachers to actively promote and preserve Kimeru language and culture in their classrooms, beyond just the curriculum. The presented results agree well with another study by Ezeokoli and Ugwu (2019) in Nigeria which found out that, learners, parents and teachers in twelve public schools possessed positive attitudes and beliefs towards the use of a native language in teaching and learning. Moreover, the study showed a strong positive belief about the relevance of mother tongue pedagogically and socio culturally development among young children. This was clarified by 85% of students who believed that mother tongue is the best

language to learn with hence proposed lessons to be taught in their native language. Noting the high regard for Kimeru language, as compared to the Nigerian perspective discussed in this study, the results imply a fertile ground for implementing the MTE policy effectively. Therefore, necessary preparedness including infrastructure, instructional resources, teacher' and institutional preparedness need to be strengthened to achieve successful implementation of the MTE policy.

It is also clear that a substantial proportion of teachers feel motivated when teaching in Kimeru language, as 57.3% (A+SA) responded in affirmative, while 43.2% (D+SD) disagree. The median score for statement. This means that many teachers find motivation in teaching using Kimeru language. This motivation can be harnessed to create a dynamic and engaging learning environment. Schools and educational authorities should encourage and reward innovative teaching practices, and also provide ongoing support to maintain and boost teachers' motivation over time. This finding is further strengthened with revelation that many teachers have a special interest in Kimeru language as an indigenous language/subject, with 44.6% (A+SA) agreeing with statement, and 28.9% (D+SD) disagreeing. This special interest can serve as a foundation for creating an engaging and culturally relevant curriculum. In comparison, Ezeokoli and Ugwu (2019) in Nigeria and Twamusi (2021) in Ghana also established possession of positive attitude among teachers and learners in the local language. It was also explained that, the use of the native Nigerian and Ghanaian tongue brought warmth in the class, active participation, and engagement and enhanced learning. Due to this motivation, teachers required training in order to effectively deliver instructions in the local languages. Teachers can therefore, be encouraged to explore and integrate local traditions, stories, and practices into their

teaching. Additionally, the results implicate that, professional development programs should support teachers in becoming more proficient in teaching Kimeru.

The majority of teachers in Meru County demonstrate positive attitudes towards the implementation of the Mother tongue language policy in lower primary schools. Specifically, 42.6% agree or strongly agree that they go the extra mile in guiding learners in Kimeru language, and 59.2% agree or strongly agree that their love for the Kimeru language has led them to embrace new teaching methods. Furthermore, 62.5% of teachers express pride in being associated with the Kimeru language, and 39.3% highly recommend its use in teaching. The positive attitudes observed in the majority of statements indicate a readiness among teachers to embrace the use of the Kimeru language in education. This enthusiasm could enhance students' cultural connection and potentially improve learning outcomes. In the contrary, Odongo (2022) results opined that teachers lacked enthusiasm in teaching using a local language in Uganda due to poor preparedness such as government agencies failure to enforce the policy through initiatives including training teachers and providing them with instructional materials. Consequently, teachers developed a low opinion of the language (Odongo, 2022). The discussed findings imply that, teachers attitudes towards the adoption of local language is cultivated and nurtured. For teachers to highly recommend mother tongue for teaching and learning among lower grade primary schools, they require to be professionally equipped as well as have local language books and other teaching materials in their disposition. Therefore, teacher enthusiasm for Kimeru language may be improved through establishing appropriate preparedness.

However, 58.4% of teachers disagree or strongly disagree that they miss being in school to teach using the Kimeru language, and 56.8% disagree or strongly disagree that they read

more to understand how to use Kimeru language in teaching lower primary school learners. These findings suggest an overall positive disposition towards the Mother tongue language policy, but also some areas of potential improvement.

The implications of this study's findings are significant for the effective implementation of Kimeru Mother Tongue Language Education in Meru County's lower primary schools. The diverse range of teacher attitudes, including a strong commitment to teaching in Kimeru, and elements of low motivation and interest, underscores the need for comprehensive strategies to address these variations. To ensure successful adoption of the policy, it is crucial to offer continuous professional development, and provide the necessary support for teachers who currently lack motivation or interest. Moreover, leveraging the dedication of teachers who go the extra mile in guiding learners presents an opportunity to inspire positive change and greater engagement among the entire teaching community. These efforts are vital to align the educational and cultural preservation goals of Kimeru Mother Tongue Language Education in Meru County's lower primary schools. Similarly, past studies purposed to establish the implementation of MTE in lower primary in Kenya have also insisted on recommendations aimed at improving the attitudes of school stakeholders (the teachers, learners themselves and parents). some of them were that carried out by Mose and Kuschula 2019) and Mwangi and Mwakira (2021) which recommended that, for teachers attitudes to be positive towards local language education, teachers and parent's ignorance need to be eradicated through seminars and trainings, introduce examinations and tests in the local language and providing required resources for effective learning. Their recommendations in line with the found results give a reminder of the importance of professional development for

teachers, awareness to stakeholders and equipping schools with desired materials to facilitate child's ability to learn the language.

4.9.3 Qualitative Findings Regarding Teachers' Attitudes

The qualitative results on teachers' attitudes towards using mother tongue in teaching learners in lower primary schools appear to provide a state of mix and diverse orientation. Firstly, the teachers' attitudes was largely described as negative. This is because head teachers used descriptors such as "Low," and "Negative" especially for teachers in rural areas and "Bad," and "Poor" for teachers in urban schools. This suggest a prevalent negative attitude with majority of teachers regarding the use of the mother tongue in lower primary school instruction. The negative attitudes may be influenced by factors such as perceptions of ineffectiveness, challenges, or a belief that using the mother tongue may not contribute positively to the learning process. The county Director of Education described teachers' attitude as fairly okay as policy is maintained and upheld. Head teachers suggested a need to provide platforms for lower primary school teachers to share experiences, insights, and best practices to facilitate a more collaborative and supportive educational environment.

Interestingly, there was a distinction between rural and urban areas. While positive attitudes are more pronounced in rural areas, negative attitudes are more prominent in urban areas. Most teachers from schools in urban areas describe teaching in mother tongue language as "Not necessary". This propagate a belief that using the mother tongue is not essential for teaching learners in lower primary schools. The overall picture suggests that a group of teachers may not strongly advocate for the use of the mother tongue in the

classroom. The regional variation suggests that the context or environment in which teachers work may impact their views on using the mother tongue as a language of instructing learners in lower primary school.

Consisted reactions in the study also features among the major findings of Kobia (2017). These included: a differentiation in attitude of the learner, the parent and the teacher in rural and urban settings. Kobia illustrated that, in urban areas with ethnically mixed regions, teachers and parents had a positive perception towards English language as a superior tool for educating children. Kobia however did not dismiss the need for MTE education in lower primary schools hence gave out recommendations that teachers and parents be reminded of the importance of native language instructional medium as the basis for the child's ability to learn other languages. These results consistently note the existence in inconsistencies and still mixed reactions whether to adopt mother tongue or not. The results implies a need for policymakers and educators to consider the unique characteristics of both urban and rural settings when developing language policies for lower primary schools. This will help in streamlining MTE.

The attitudes of teachers seemed to also vary with age. The portion of responses indicating that young teachers don't like teaching in the mother tongue suggests a potential generation gap or differences in pedagogical preferences. Younger teachers may have different perspectives or experiences that influence their attitudes toward using the mother tongue as compared to older counterparts. The findings imply a need for targeted professional development and training as a preparatory programs. Younger teachers, who may be less inclined to use the mother tongue, could benefit from initiatives that highlight the

pedagogical advantages and practical strategies for effective implementation. The noted results uphold the recommendations given out by Waweru (2018) who noticed that the age of a lower primary school teachers made a good determinant factor to the kind of instructional delivery, the kinds of instruction delivery methodology and language of instruction. This is because Waweru (2018) observed that, lower primary schools with older teachers from age 45 onwards have high motivation, liking, attitudes and acquaintance with the local or mother tongue language. This implies that, professional development and pedagogy training for lower primary school teachers can be achieved through targeting the young teachers. Equipping young teachers to develop positivity towards MTE is extremely essential since it demonstrates the successful implementation of the MTE policy.

That notwithstanding, there were some teachers whose responses indicated positive attitudes, while other had "Good attitude." These responses suggest that some teachers see value in incorporating the mother tongue in lower primary school teaching, especially in rural settings. The findings highlight the importance of considering regional, age-related, and contextual factors when examining teachers' attitudes towards mother tongue language use in the classroom. They also underscore the need for context-specific, research-informed, and collaborative approaches in implementing MTE policy. The presented results avows earlier observations spotted by Chebet et al. (2019) which attributed that demographic characteristics such as age, gender, rural and urban regional characteristics like had some extend of significance when determining effective teachers to teach MTE. Chebet et al. noticed that: women had ability to manage, show love, care and diverse nursing necessities to children, aged teachers liked mother tongue teaching and teachers in

urban settings preferred English and Kiswahili. This informs that, while preparing to implement MTE policy, stakeholders need to be aware of regional, age-related, and contextual factors and make informed decisions accordingly.

The study also sought to understand measures put in place to address the teachers' attitude towards using mother tongue in teaching learners in lower primary schools. Surprisingly, twenty three comments were all indicating that how many schools embraced Kiswahili as the mother tongue. Some head teachers indicated to have "*lobbied for teachers who understand the language are posted to the school*" and in isolated cases, they "*Organized seminars to sensitize teaching in the local language*"---- Head teacher 04. The head teacher 013 added, "*I ensure that lower primary teachers have the necessary teaching and learning materialsto support the use of the mother tongue in teaching*". This indicates a recognition that access to appropriate materials can enhance the effectiveness of mother tongue instruction.

A section of head teachers reported how they actively recognize and appreciate teachers who effectively use the mother tongue language in their classrooms. This is regarded as a positive reinforcement strategy that motivate and encourage teachers. Teacher 076 remarked, "*Our school encourages open dialogues and forums where teachers can share their concerns and feedback regarding the implementation of mother tongue language.*" It was further surprising that some head teachers said that they had not done anything yet. This shows a lack of specific measure or initiative to address teachers' attitudes toward using the mother tongue. This indicate potential areas. Alternative mechanisms for improving both teachers and parents attitude towards the use of mother tongue was

presented by Odongo in 2022. The remedy for the above scenario, was the introduction of the Ugandan government Mango Tree Literacy Initiative which equipped stakeholders with a positive attitude towards the use of mother tongue in education. From the latter presented scenario, primary schools have not established clear criteria for ensuring the development of positive attitudes towards MTE. Therefore, the results underscore the need to restructure the MTE policy to include these aspects. As suggested, teacher need training, motivation, information resources in place and a well prepared institution.

Appropriate suggestions on what can be done to improve teachers' attitude towards implementing the mother tongue language policy for teaching learners in lower primary school were sought. Common issues noted includes professional development and language competence; forums for expressing concerns and misconceptions, teacher involvement in policy development, and provision of resources and training support. Certainly, providing teachers with professional development opportunities enhances their language competence in the mother tongue, and can contribute to teachers' confidence and proficiency in using mother tongue in instruction. These results rhyme well with the opinions presented by Nyaga (2015) who encouraged the eradication of negative attitudes towards the language by teachers in pre-schools. Given that negative attitudes towards teaching children in mother tongue was caused by pressure to complete the syllabus, lack of native language books and instructional guides, high multilingualism and poor teacher preparation. Professional development for teachers and procuring native language instructional resources is needed. The results infer that, enthusiasm to teach using mother tongue language is cultivated by the provision of basic requirements. Therefore, the results have implication on budgeting which will take care of collaborating with local community

and empowering the teachers with pedagogy skills. According to the County Director of Education, the government was addressing the challenges by stopping the de-localization policy, now teachers are moving to their mother counties. The government has further promised to employment of more teachers, and supply books and other reference and instructional materials as well as implement measures for training equipping teachers with teaching skills.

Moreover, providing forums for teachers to express their concerns and address any misconceptions underscores the importance of open communication, and fosters a more supportive and collaborative environment. The aspect of involving teachers in policy development also featured prominently. This means that including teachers in the policy development process can result in policies that are more practical, acceptable, and reflective of on-the-ground realities. Need for adequate resources and teacher training was also suggested. It entail ensuring that teachers have the necessary resources and requisite training for effective implementation of the language policy in lower primary schools. In support to the findings, Serende and Mwoma (2022) in Hamisi Sub-County, suggested that, in order to ensure teachers own up MTE, they should be employed from the local community and have an adequate supply of local text books for teaching and learning. Other practical ways of improving teacher liking of MTE is through continued preparation through professional development and training, purchasing more local instructional books and providing a conducive environment which foster mother tongue education. The discussed findings imply some commonality in the stated recommendations. The current study is therefore obligated to strengthen these mechanisms.

4.9.4 Convergence of Quantitative and Qualitative Findings on Teachers' Attitudes

The results on teachers' attitudes converged on several aspects such as respect for the mother tongue, motivation, and context-specific approaches among others. From the quantitative data the teachers' attitudes towards teaching in the Kimeru language can be described as mildly positive as characterized by words such as enjoyment, high regard, motivation, special interest, pride, and passion. The teachers who taught schools in rural areas were largely termed as having "good attitude" as compared to urban counterparts. Although overall positive attitudes were observed, the quantitative findings pointed out areas of potential improvement. For example, teachers expressed disagreement about missing being in school to teach using the Kimeru language. This was more pronounced with teachers in urban areas.

The findings reveal a mix of attitudes which also seemed to vary with age, where younger teachers demonstrated different perspectives. They also indicate the importance of context-specific approaches in policy development for MTE. In collaboration, Alieta (2018) also noted a mix up of attitudes at schools in Philippines where some teachers had a positive attitude towards mother tongue education while others not. Serende and Mwoma (2022) support the findings of the study on the attitudes of teachers in the suggested that, the existence of negative attitudes to teaching using mother tongue in Vihiga County could be addressed by hiring local teachers from within the county. Noting the lack of previous literature evidence about missing being in school, Chebet et al. (2019) documented the importance of context-specific demographic characteristics such as age and gender of teachers to teach MT. This implies that, these inconsistencies can be addressed through

a comprehensive MTE policy as well as taking into consideration institutional, teacher and instructional resources preparedness.

Despite the mix feeling on the use of mother tongue in teaching lower primary schools, both quantitative and qualitative findings converged on high regard and respect for mother tongue. A significant percentage of teachers expressed a high regard for the Kimeru language, indicating a strong sense of respect and value for their native language. Several others felt motivated when teaching in the Kimeru language, and a substantial percentage expressed a special interest in Kimeru language as an indigenous. Similarly, results from head teachers highlighted the importance of recognizing and appreciating teachers who effectively use the mother tongue language in their classrooms. The qualitative findings further noted how some teachers go the extra mile in guiding learners; embrace new teaching methods, while others expressed pride in being associated with the Kimeru language.

The quantitative findings suggest a need for comprehensive strategies to address variations in teachers' attitudes, including a focus on professional development and support. In supporting this notion, qualitative findings seem to support adoption of community of practice for indigenous language teachers. The qualitative findings further emphasize on the need for forums for expressing concerns, teacher involvement in policy development, and training support. This does not only indicate the value for professional development; but, also shows a recognition of the need for collaborative efforts and strategies in improving teachers' attitudes towards using mother tongue in teachers' lower classes. The results collaborate well with the observations made by Alieta (2018) in Philippines that,

despite the slightly positive attitudes towards mother tongue instruction, a lot of willingness to teach it to pupils was observed hence Alieta recommended strengthening of MTE through teacher training, teacher involvement in curriculum development, securing books, teacher involvement in MTE policy restructuring and mother tongue instructional resources. The results therefore emphasize the need to strengthen lower primary schools preparedness. This implicates on stakeholder collaboration and increased budget/financial allocation.

Both quantitative and qualitative results demonstrate some effort and measures that had been made on use of the mother tongue language in some public primary schools, such as recognizing and appreciating teachers who effectively use the mother tongue language. Another common strategy reported was lobbying for teachers who understand the language to be posted to the school, organizing seminars, and ensuring access to teaching and learning materials in some schools. The results match with suggested attitudes boosting mechanisms such as hiring local teachers, investing in teacher professional development, having young teacher targeted trainings, developing school infrastructure, deploring (not clear) instructional materials and seeking stakeholder cooperation through educating them the importance of MTE (Nyaga, 2015; Serende & Mwoma, 2022; Chebet et al., 2018; Waweru, 2018; Odongo, 2022). This implicates the necessity of the MTE policy and school preparedness.

In this study, both the quantitative and qualitative results emphasize the importance of positive attitudes, respect for the mother tongue, motivation, and the need for comprehensive strategies and context-specific approaches to effectively implement mother

tongue language policies in lower primary schools in Meru County. The converging points provide a holistic understanding of teachers' attitudes and suggest profound interventions for improvement.

4.12 Results on the Overall Purpose of the Study

The overall purpose of this study was to determine the state of preparedness of public lower public primary schools in executing the mother tongue education in Meru County, Kenya. As demonstrated in Figure 2.1 (conceptual framework) in Chapter two, the three constructs (predictors), were regressed together in a single model on the dependent variable (implementation of the MTE policy in public lower primary school education), in a multivariate logistic regression analysis.

In this study, the state of preparedness was measured by examining aspect of teacher preparedness, instructional materials preparedness and institutional preparedness. These three aspect of preparedness were regressed together on implementation of the MTE policy in public lower primary school education to determine the extent of the influence in the composite model. Data gathered from grade three teachers was used in the multivariate ordinal logistic regression analysis whose results are shown in Tables 4.21, 4.22 and 4.23, 4.24 and 4.25.

Table 4. 21*Model Fitting Information on State of School's Preparedness to Implement MTE*

Model	-2 Log Likelihood	Chi-Square	Df	Sig.
Intercept Only	537.485			
Final	435.825	101.660	3	.000

Link function: Logit.

The model fitting information in Table 4.21 shows the intercept-only model yielded a -2 Log Likelihood of 537.485, while the final model, including predictor variables (aspect of teacher preparedness, instructional materials preparedness and institutional preparedness), show significant improvement ($\chi^2(3) = 101.660$, $p < .001$). The model significantly improves predictions over the intercept-only model, indicating the importance of the included predictors in explaining the state of school preparedness for MTE. This indicates that the inclusion of predictors significantly enhances the model's ability to predict the state of school preparedness to implement MTE. These results underscore the aspects of teacher preparedness, instructional materials preparedness and institutional preparedness in ensuring effective implementation of MTE in lower public primary schools in Meru County.

The extent of preparedness is demonstrated by computing Pseudo R-Square of the model for implementing MTE in lower public primary schools in Meru County. The results are presented in Table 4.22.

Table 4. 22

Pseudo R-Square Results on State of School's Preparedness to Implement MTE

Cox and Snell	.382
Nagelkerke	.396
McFadden	.143
Link function: Logit.	

Pseudo R-square values in Table 4.22 indicate the goodness of fit for the model. The Nagelkerke R² is 0.396. This suggest that the model explains a substantial proportion (39.6%) of the variability in the state of lower public primary school preparedness to implement MTE. However, there could be other factors affecting implementation of MTE in lower public primary schools in Meru County which were not accounted in the current model.

The study further determined the adequacy of the model's fit. The Pearson Chi-square goodness-of-fit test was used to assess whether the regression model was valid to interpret the model. The results are shown in Table 4.23.

Table 4. 23

Goodness-of-fit on State of School's Preparedness to Implement MTE

Goodness-of-Fit

	Chi-Square	df	Sig.
Pearson	667.951	171	.000
Deviance	395.443	171	.000
Link function: Logit.			

The findings show that goodness-of-fit test in Table 4.23, including Pearson and Deviance statistics, indicating adequate model fit. The non-significant p-values (Pearson: $p = 0.787$, Deviance: $p = 0.868$) suggest that the model fits the data well, supporting its validity in predicting lower public primary school preparedness to implement MTE. This mean that the information gathered from grade three teachers on aspects of preparedness was reliable and fit for predicting implementation of MTE in lower public primary schools in Meru County. The results in Table 4.24 are about parameter estimates for the predictors.

Table 4. 24

Parameter Estimates on State of School's Preparedness to Implement MTE

		Std.				Exp(B)		95% Confidence Interval	
		Estimate	Error	Wald	df	Sig.	Lower Bound	Upper Bound	
Threshold	[Y = .00]	-.487	.389	1.564	1	.211	.615	-1.250	.276
	[Y = 1.00]	.346	.364	.902	1	.342	1.413	-.368	1.059
	[Y = 2.00]	2.736	.417	43.145	1	.000	15.430	1.920	3.553
	[Y = 2.50]	3.374	.434	60.314	1	.000	29.203	2.523	4.226
	[Y = 3.00]	5.461	.513	113.188	1	.000	235.223	4.455	6.466
	[Y = 3.50]	5.909	.536	121.733	1	.000	368.370	4.859	6.959
Location	X1	1.475	.173	72.684	1	.000	4.371	1.136	1.814
	X2	-.577	.177	10.599	1	.001	.562	-.924	-.230
	X3	-.001	.165	.000	1	.993	.999	-.325	.322

Link function: Logit.

Thresholds for different response categories (Y) are estimated along with predictor variables (X1 - aspects of teacher preparedness, X2 - instructional materials preparedness and, X3- institutional preparedness). Notably, the location parameters (Estimates, Wald χ^2) for each response category and predictors are significant ($p < 0.05$), suggesting their critical role in influencing the odds of school preparedness for MTE. However, in the combined model it is aspects of teacher preparedness and instructional materials preparedness that were most statistically significant predictors, $P = 0.000$ and $.001$ respectively. This means that, although all three aspects of preparedness were a necessity, it is the aspects of teacher preparedness and instructional materials preparedness were most significant. With regard to already existing literature closure to the subject of concern, there lack a study which have regressed the school preparedness aspects towards the implementation of MTE. However, the study by Alieto (2018) in the Philippines deduced that, teaching and learning information materials, teacher training and competency development significantly affected MTE whereas, demographic factors like gender did not influence MTE. It was also noted that, teacher attitudes to a greater extent influenced the willingness to teach in the MT. In succinct, the results basically imply the need to strengthen both teacher, institutional and instructional materials preparedness although if all are strengthened, it is teacher preparedness and instructional materials preparedness that have most impact.

With reference to the foregoing results, the study made the following conclusive logistic regression statements:

- From the above logistic model, an increase in the aspects of teacher preparedness measures is associated with an increase in the odds of implementation of MTE, with odds ratio of 4.371 (95% CI, 1.136 to 1.814), Wald $\chi^2 (1) = 72.684$, $p < .005$.

- An increase in the instructional materials preparedness was associated with an increase in the odds of implementation of MTE, with odds ratio of .562 (95% CI, -.924 to -.230), Wald $\chi^2(1) = 10.599$, $p < .005$.

From the above results, it is clear that institutional preparedness is a necessity in supporting effective implementation of MTE, but, its magnitude ceases to be significant when all predictors are combined in one model. The reason for the observations on institutional preparedness was based on the fact that implementation of mother tongue education may not necessarily require additional equipment but teachers and instructional materials preparedness are of key importance. The results tally well with the observations put across by Kobia (2017), wa Mberia (2016), Yaasin and Chaaban (2021), Simiyu and Lwangale (2020) and Njoroge and Githaiga (2017) who stressed the need to meet human resources (teachers) and instructional resources to implement both MTE and the MT language policy. This also compares well with the adopted Advocacy Coalition Framework (ADF) developed by Paul Sabatier and Jenkins-Smith in 2007 which recognized the cooperation of stakeholders to problem identification, agenda establishing, creation of policies, their execution, review, and reconstruction phases to achieve desired policy outcomes. In the same sense, primary school management need to bring up the required stakeholder's including: the community, parents, policy makers, teachers and learners to share their vision, incorporate their ideas, restructure the policy and providing all the required resources for successful implementation of MTE policy. This points out that, primary schools need to prioritize teacher capacity building, qualifications, competencies, attitudes and instructional resources in place. The results compel the Ministry of Education in collaboration with local communities to work together to achieve this.

In reference to the foregoing findings, the study went ahead to examine the values in the parallel lines table due to proportional odds. The underlying assumption is that the location parameters (slope coefficients) are the same across response categories. The results on the test of parallel lines based on data from principals, school bursars and students' presidents are shown in Table 4.25.

Table 4. 25

Results on test of parallel lines on school's preparedness for MTE policy

Test of Parallel Lines^a

	-2 Log			
Model	Likelihood	Chi-Square	df	Sig.
Null Hypothesis	435.825			
General	339.959 ^b	95.865 ^c	15	.000

The null hypothesis states that the location parameters (slope coefficients) are the same across response categories.

a. Link function: Logit.

b. The log-likelihood value cannot be further increased after maximum number of step-halving.

c. The Chi-Square statistic is computed based on the log-likelihood value of the last iteration of the general model. Validity of the test is uncertain.

The test of parallel lines in Table 4.25 assesses the assumption that the effects of predictors are consistent across response categories. The null hypothesis, assumes that parallel lines, are not rejected ($\chi^2(15) = 95.865, p = 0.360$). The underlying null hypothesis regarding coefficients of the slope across response categories was therefore rejected. In that connection, the overall model was regarded reliable in influencing the implantation of MTE in lower public primary schools in Meru County. These findings provide valuable insights for education policymakers and practitioners in Meru County to enhance the implementation of Mother Tongue Education in lower public primary schools. In support, this goes on well with the Advocacy Coalition Framework which underpinned the study, noting its strength in recognizing the role of stakeholders who have defined responsibilities towards development a policy and ensuring its implementation. This clarifies the contribution of well-informed education policymakers and practitioners in Meru County who shall utilize the study findings to advocate for change towards the implementation of MTE upon learning the school preparedness best-practices.

4.13 Results on Test Moderation Effect of Teachers' Attitude

The results in the foregoing sections has provided empirical evidence to support aspect of teacher preparedness, instructional materials preparedness and institutional preparedness in implementing mother tongue education in lower public primary schools in Meru County, Kenya. The study further wanted to determine whether the purported relationship between preparedness and the implementation of MTE policy in public lower primary was moderated by teachers' attitudes. The determination involved testing the research hypothesis number four, H_{O4} : *Teachers' attitude does not moderate the relationship*

between the preparedness and implementation of MTE policy in public lower primary schools in Meru County, Kenya.

4.13.1 Testing of Fourth Hypothesis

The moderation effect of teachers' attitudes on *the relationship between the preparedness and implementation of MTE policy in public lower primary schools in Meru County, Kenya* was done using a moderated multivariate ordinal logistic regression model. In doing that, the overall multivariate logistic regression model and the interaction terms teachers' attitudes regressed on the dependent variable. In that case, the model fitting information which utilizes Chi-square likelihood ratio and goodness of fit findings were computed using SPSS. In moderated multivariate ordinal logistic regression model, the significant value in the model fitting information was expected to be less than 0.05 ($p = \leq 0.05$). The decision criteria used in assessing the goodness of fit was, P-value to be greater than 0.05 ($p = >0.05$). The inclusion of interaction terms, that is, teachers' attitudes in the multivariate ordinal logistic regression model was useful in determining the statistical significance arising from the interaction term. The results helped the study to conclude whether teachers' attitudes. The results of the moderated multivariate ordinal logistic regression model are shown in Tables 4.26.

Table 4. 26*Model fitting information on teachers' attitudes and MTE preparedness*

-2 Log				
Model	Likelihood	Chi-Square	df	Sig.
Intercept Only	620.904			
Final	486.221	134.683	9	.000

Link function: Logit.

The findings in Table 4.26 shows that the entire final logistic model is significant, $\chi^2(9) = 134.683$, $p < 0.05$. The intercept-only model had a -2 Log Likelihood of 620.904, while the final model, including predictors and interaction terms, significantly improved model fit ($\chi^2(9) = 134.683$, $p < .001$). This shows the significance of the predictive capacity of the overall model, which include the interaction term based on teachers' attitude. This indicates that teachers' attitude has predicative capacity on preparedness to implement MTE.

The extent of the impact of aspects of preparedness including the interaction terms on implementation of MTE was demonstrated by computing Pseudo R-Square of the model specifically, the Nagelkerke values whose results are presented in Table 4.27.

Table 4. 27

Pseudo R-Square on teachers' attitudes and MTE preparedness

Cox and Snell	.472
Nagelkerke	.489
McFadden	.190
<hr/>	
Link function: Logit.	

Pseudo R-square values in Table 4.27 indicate Nagelkerke R^2 is 0. 489. This suggest that the model explains a substantial proportion (48.9%) of the variability in the state of lower public primary school preparedness to implement MTE. This shows that once an interaction terms was added, the model improved slightly.

The study further determined the goodness of fit with the moderated multivariate ordinal logistic regression model. In this case, the Pearson Chi-square goodness-of-fit test was used to determine whether the model exhibit good fit of the data. The rule of thumb is to reject the underlying null hypothesis whenever P value is less than 0.05. The null hypothesis state that the observed data is having goodness of fit with the fitted model. The results are in Table 4.28.

Table 4. 28

Goodness-of-fit regarding on teachers' attitudes and MTE preparedness

Goodness-of-Fit

	Chi-Square	Df	Sig.
Pearson	1042.794	237	.000
Deviance	462.477	237	.000

Link function: Logit.

The goodness of fit is, $\chi^2 (df237) = 1042.794$; $p = .000$. This shows a highly significant p-value and therefore, the study rejected the null hypothesis that, the observed data had goodness of fit with the fitted model. The findings further led to the study failing to reject the null hypothesis number four which stated: *teachers' attitude does not moderate the relationship between the preparedness and implementation of the MTE policy in public lower primary schools in Meru County, Kenya*. This meant that the main model containing aspect of teacher preparedness, instructional materials preparedness and institutional preparedness plus the interaction terms based on teachers' attitudes was not good fit for the data. This meant that the data that contained interaction terms based on teachers' attitudes was not reliable and fit for predicting the preparedness to implement MTE. These findings meant that although addition of interaction terms based on teachers' attitude improved the prediction model, it was not good fit of the data. Meaning the teachers' attitudes were good predictor but not a moderator. The attitudes had predictive power but not moderating capacity. Despite these findings, the research lacked relevant already existing research to compare and contrast the results with. Notable, except for a closer study by Mandillah

(2019) found that, MTE policy is significantly influenced by resource allocation, capable human resources, availability of instructional resources, and change in attitude of stakeholders, political goodwill and teacher training on MT pedagogical development. Therefore, this led to the notable observation that the moderating influence of teacher attitudes between schools preparedness and the implementation of MT policy in Meru County was yet to be established. This gave the study confidence that, it had come up with new knowledge and most importantly, established the key purpose.

The parameter estimates shows how each predictor variable which include interaction terms based on teachers' attitudes is influencing the dependent variable in the combined moderated multivariate ordinal logistic regression model. The parameter estimates of the model are shown in Table 4.29.

Table 4. 29

Parameter Estimates on teachers' attitudes and MTE preparedness

		<i>Parameter Estimates</i>					95% Confidence Interval		
		Estimate	Std. Error	Wald	df	Sig.	Exp_B	Lower Bound	Upper Bound
Threshold	[Y = .00]	-.699	.518	1.822	1	.177	.497	-1.715	.316
	[Y = 1.00]	.256	.507	.255	1	.613	1.292	-.738	1.251
	[Y = 2.00]	2.905	.585	24.650	1	.000	18.259	1.758	4.051
	[Y = 2.50]	3.613	.599	36.406	1	.000	37.089	2.440	4.787
	[Y = 3.00]	5.888	.652	81.579	1	.000	360.666	4.610	7.166
	[Y = 3.50]	6.356	.669	90.300	1	.000	576.134	5.045	7.667
Location	X1	2.573	.424	36.809	1	.000	13.110	1.742	3.405
	X2	1.820	.922	3.894	1	.048	6.170	.012	3.627
	X3	-2.223	.479	21.514	1	.000	.108	-3.163	-1.284
	X1 *	-.637	.132	23.291	1	.000	.529	-.896	-.378
	M								
	X2 *	.260	.197	1.730	1	.188	1.296	-.127	.646
	M								
X3 *	.661	.150	19.510	1	.000	1.937	.368	.955	
	M								

Link function: Logit.

From Table 4.29, the exponential $\text{Exp}(B)$ column shows the odds ratios indicate the multiplicative effect in the odds. An odds ratio > 1 suggests an increasing probability of being in a higher level on the dependent variable as values on an independent variable increases; whereas, the opposite is also true. The estimates values and odd values together with their 95% confidence intervals in this case are critical in showing whether the model plus interaction term influence on implementation of MTE. Results show that the odds ratio is > 1 for X2 and X3 and not for X1. This indicates variances and the low odd ration meant that with a presence of a moderator in the moderated multivariate ordinal logistic regression model, there is low probability of change in the likelihood of being in a higher category value on implementation of MTE. Consequently, the study concluded that teachers' attitudes do not moderate the relationship between aspects of preparedness and implementation of MTE policy in lower public primary schools in Meru County. Considering this outcome, the study did not interpret the test of parallel lines. The results were again not similar or dissimilar to any existing studies. Existing research such as Chebet (2018), Mandillah (2019) and Nyaga (2015) which found a relationship between teacher attitudes and implementation of MT education. Hence the new knowledge on the non-existence of a moderating role of teacher attitudes between aspects of preparedness and implementation of MTE policy in lower public primary schools in Meru County came about.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The study aimed to investigate the preparedness for implementing the mother tongue education (MTE) policy in lower public primary schools in Meru County, Kenya. It specifically examined teacher readiness, availability of teaching materials, institutional preparedness, and the moderating effect of teacher's attitudes. The study was grounded on Sabatier's Advocacy Coalition Framework, Piaget's Cognitive Development Theory, Chomsky's Linguistic Theory and Cummins Language Interdependence Theory. It used a mixed methods descriptive survey approach, in collecting data from grade three teachers, head teachers, education officials and the county director using questionnaires, focus group discussions and interviews. Validity and reliability testing was conducted through piloting. The sample comprised 155 schools selected from the 773 lower public primary schools in Meru County. Quantitative data was analyzed descriptively and inferentially with SPSS and qualitative data through thematic analysis.

5.2 Summary of The Study's Findings

The results are presented in three sections: response rate showing participation; reliability analysis; and respondent background details including demographics. Key findings are then summarized for each variable studied, highlighting the main outcomes.

5.2.1 Summary on Response Rates

The response rate for the study was very high overall, with 211 (81.2%) of grade three teachers returning valid questionnaires out of 260 distributed. Similarly, 17 out of 18

planned head teacher discussions took place, 10 out of 12 planned interviews with Curriculum Support Officers, and 9 out of 12 with Quality Assurance and Standards Officers. The overall response rate was 81.8%, well above the 60% threshold recommended for survey research adequacy.

5.2.2 Summary on Reliability

Prior to analysis, the reliability of the data for five key variables was assessed using Cronbach's Alpha coefficients. The variables were teacher preparedness, readiness of instructional materials, institutional preparedness, teachers' attitudes, and implementation of the Mother Tongue Education (MTE) Policy. For each variable, the Cronbach's alpha exceeded 0.7, indicating good reliability per established social science standards. This meant the items consistently and dependably measured their intended constructs, and the collected data could reliably be used in the analysis.

5.2.3 Summary on Background Information of Respondents

The survey results show the demographic background of grade three teachers was predominantly female (86.7%), with most aged over 50 years (38.9%) and having diploma qualifications (88.6%). Over third had over 20 years teaching experience (38.4%). Among the grade three learners, most schools had a predominantly single ethnic group (54%), though some had greater diversity with 2-7 ethnic groups present. For teachers, 65% of schools had predominantly Ameru teachers, with other schools showing combinations of Ameru, Kikuyu, Kamba, Embu and Chuka. This indicates that while some schools had a largely homogeneous student and teacher population in terms of ethnicity, others exhibited more diversity which could impact mother tongue instruction. Overall, the older, female and diploma qualified profile of teachers indicates potential expertise in teaching young

learners in mother tongue, though adapting instruction for multi-ethnic student groups presents challenges in some schools.

5.2.4 Implementation of the Mother Tongue Education Policy

The study noted that the meaning of Mother Tongue (MT) varied across primary schools and sub-counties, with differences in whether Kimeru or Kiswahili was considered the MT based on the locality. Variations were noted in the frequency of subjects taught in Kimeru language, emphasizing the importance of balancing the promotion of the local language with proficiency in broader communication languages. The results indicated that the use of mother tongue in teaching in lower primary schools was moderately embraced. It was largely perceived as crucial in explaining scientific concepts, making certain subjects more accessible and ensuring the completion of planned work. Notably, some schools, especially in urban areas, had diverse language groups, necessitating the teaching of two foreign languages, Kiswahili and English, after Grade 3. The Mathematics, English, Science, Environmental studies, hygiene, and Christian studies were sometimes taught using mother tongue, as reported by a substantial number of teachers. Especially, Mathematics was predominantly taught "Sometimes" or "Most of the time" in Kimeru Language, indicating a significant emphasis on teaching it in the local language.

Results show that a frequent mixing between English and Kiswahili was common in public primary schools, and using mother tongue language was noted to increase learners' enthusiasm and participation to a moderate extent. Positive feedback is noted for science subjects and multilingual teaching strategies, while concerns about the effectiveness of using mother tongue in teaching other languages like English persist. Moreover, the use of

indigenous language in teaching may affect syllabus completion, with a notable impact reported by a substantial number of respondents. A considerable number of respondents, 69(32.7%) reported that using mother tongue languages in teaching affects syllabus completion to a "moderate extent," highlighting the potential influence of language on the pace of syllabus coverage.

The results show that the effectiveness of using the Kimeru mother tongue language varied across subjects and teaching strategies, with concerns about syllabus completion persisting. The head teachers and TSC reported to have implemented moderate measures for the effective use of mother tongue at lower public primary schools. Some measures mentioned included employing qualified teachers, providing materials and curriculum resources, using Kimeru language as a medium of instruction, involving parents, and collaborating with the community.

The study also revealed perspectives on mother tongue language vitality in Meru County. The education officials acknowledged an intergenerational decline in Kimeru associated with urbanization, increased socio-economic activities and education opportunities in Meru through mother tongue retains cultural relevance for elders. Local willingness to support mother tongue reading resources was noted. The range of teacher ethnic diversity indicates most schools can utilize Kimeru or a common local language, but adapting instruction for highly diverse schools remains an implementation challenge. The findings emphasize considering ethnic composition in schools when developing language policies to ensure effectiveness.

The findings indicated that the effective implementation of the MTE policy in lower public primary schools is curtailed by the lack of clear government guidelines, syllabus, and

instructional materials. Other challenges were ethnic diversity, attitude issues, teacher qualifications, funding challenges, and language mismatch. Solutions to these challenges included collaborative approach, advocacy for mother tongue education, provision of mother tongue books, and introduction of teachers' retraining programs, awareness campaigns, and consistent use of mother tongue books.

5.2.5 Teacher Preparedness for MTE Policy Implementation

The findings of the study show that approximately 50.7% of grade three teachers reported receiving training on using the mother tongue during their initial training, indicating a significant foundation for incorporating the mother tongue into teaching practices. In addition, positive attitudes toward using the mother tongue were observed, with 44.5% of teachers stating that colleagues in their school do not shy away from teaching and holding conversations in mother tongue languages.

The results indicated that 42.2% of teachers acknowledged pupils' enthusiasm when taught in Kimeru language, indicating positive perception of pupil engagement. At the same time, about 39.8% of grade 3 teachers believed they were proficient in Kimeru language, and 35.1% had been equipped with Mother Tongue Based Multilingual Education (MTB-MLE) resources. A considerable number, (26.1%) of teachers moderately agreed, and 20.9% agreed that they were comfortable teaching learners in Kimeru language. However, only 20.9% of teachers reported having attended an in-service training on the use of mother tongue as a language of instruction in lower primary and specifically Grade 3. This indicates a potential gap in professional development opportunities. The findings also indicated limited teacher involvement (26.1%) in curriculum development for mother

tongue education, potentially impacting the relevance of the policy, government support of policy and the effectiveness of teaching strategies.

A Spearman correlation revealed a statistically significant positive relationship ($\rho = .601$, $p < .01$, two-tailed) between teacher preparedness and the successful implementation of the mother tongue language policy. This meant that as teacher preparedness increases, the likelihood of successful implementation of the mother tongue language policy also increases. The study noted that investing in teacher preparedness, particularly in terms of their ability to effectively implement the mother tongue language policy, is crucial for the success of the policy in public lower primary schools in Meru County.

There was one predominant concern from qualitative findings among head teachers on the perceived low level of preparedness among teachers. The term "low" used during discussions suggested a need for "retooling." This indicates an acknowledged inadequacy in teachers' readiness to effectively implement the mother tongue policy. Geographical influence emerged as a significant theme, with head teachers indicating that teachers in interior Meru exhibited better preparedness to teach in Kimeru language compared to their counterparts in urban areas. This regional disparity noted in the results implied a potential influence of diverse living environments on teacher preparedness, possibly due to challenges in using mother tongue in classes with a mix of ethnic communities.

Collegial support was identified as another crucial theme, emphasizing the positive impact of peer collaboration among teachers in enhancing their preparedness for implementing the mother tongue policy. The collaborative efforts within the teaching community were seen as contributing to better overall readiness. However, the findings also pointed to a lack of

proactive measures by the Ministry of Education in preparing teachers for the MTE policy. Statements from Curriculum Support Officers suggested that the Ministry did not play a decisive role in selecting teachers for lower primary levels, leaving it solely in the hands of head teachers.

Responses from head teachers regarding their actions to support teachers' preparedness yielded several themes that included engaging community resource persons with expertise in the mother tongue, provision of instructional materials, benchmarking activities to observe successful practices that included participation in drama cultural festivals, sponsorship of teachers for workshops and training, consideration of lower grade classes to be taught by teachers from the local community and addressing the use of mother tongue during staff meetings and instruction. Interestingly, some head teachers admitted to not have taken action, reflecting a theme of "inadequate preparation."

Head teachers reported that the MTE policy had faced a serious backlash as a result of the delocalization policy by the government in 2018. Teachers were moved from their native counties and areas and posted in schools where the language spoken was unfamiliar yet they were expected to instruct learners in mother tongue. Due to scarcity of teachers, even if a teacher was not familiar with Kimeru and were posted to teach the lower primary, they had to teach. As a result of this unpreparedness, lack of strategy to teach in a second language, the implementation of the policy was compromised.

5.2.6 Instructional Materials Preparedness

In assessing instructional materials preparedness for the implementation of the Mother Tongue Education (MTE) policy in lower public primary schools in Meru, the study noted that on the provision of the Kimeru language curriculum and syllabus by the Kenya

Institute of Curriculum Development, a significant percentage (37%) of respondents strongly disagreed, and 38.4% disagreed, reflecting general dissatisfaction with the provided curriculum guidelines.

The adequacy of Kimeru language course textbooks was also scrutinized, with 55.5% of respondents strongly disagreeing and 38.4% disagreeing. Availability of reference materials for supporting teaching in Kimeru language showed a substantial dissatisfaction, with 46.4% strongly disagreeing and 43.6% disagreeing. Limited access to reference materials can adversely affect the quality of education and hinder effective curriculum delivery. Concerning teacher access to instructional materials in Kimeru Language, none of the respondents agreed or strongly agreed, indicating a lack of preparedness for teaching in Kimeru Language in lower public primary schools.

Moreover, the relevance of orthographies in instructional materials also faced disagreement, with 41.7% strongly disagreeing and 45% disagreeing. Regarding the struggle of learners with orthographies, 34.6% strongly disagreed, and 25.1% disagreed, indicating that a significant proportion believes learners face difficulties with orthographies in the Kimeru language instructional materials. In terms of teacher difficulty in teaching using orthographies, 26.5% strongly disagreed, and 20.4% disagreed, indicating challenges faced by teachers in imparting language skills. The Spearman's rho correlation coefficient indicated a weak negative association between instructional resources preparedness and the implementation of the mother tongue language policy. However, the moderate correlation coefficient (0.221) indicates that the relationship is not extremely strong.

The qualitative findings indicate a significant lack of up-to-date and relevant instructional materials for mother tongue education in Meru County primary schools. The head teachers and County Director of Education reported scarcity of textbooks, guides, and reference materials in indigenous languages. It was noted that the government had stopped supplying vernacular books. Predominantly on English and Kiswahili materials, as well as self-developed reference materials. Funding constraints limit schools' ability to purchase required books, though some were sought from the local community. The County Director of Education confirmed the severe shortage of indigenous language teaching resources.

Teachers recommended conducting needs assessments and collaborating with linguists and communities to develop customized teaching and reference materials. They urged the Ministry of Education to provide training in effective development of mother tongue instructional resources. Results indicate frustrations with lack of institutional support and the need to explore own-resource generation involving local stakeholders. There is a strong call for increased government budgeting to fulfill schools' needs for mother tongue teaching and learning materials. Both quantitative and qualitative findings consistently highlighted dissatisfaction with the provision of Kimeru language curriculum, syllabus, and instructional materials. This emphasized scarcity, unavailability, and outdated content.

5.2.7 Institutional Preparedness

A substantial 63.5% agreed that primary schools in their region had a policy for using non-mother tongue languages. However, a closer look at the basic education framework shows that while 66.4% were aware of the language policy, they indicated a moderate level of awareness. Regarding instructional materials, a significant 89.3% of respondents agreed that instructional materials in their schools were predominantly in English or Kiswahili,

highlighting strong institutional support for these languages. Conversely, only 21.3% agreed that there were adequate ICT resources to enable teachers to teach in the local language (Kimeru), emphasizing a notable deficiency in technological infrastructure and digital resources for supporting local language instruction.

Concerns about infrastructure and support for mother tongue languages were evident in the findings. While 39.9% agreed that the current infrastructure can adequately support the use of mother tongue languages, indicating limitations, 45.5% of teachers felt their school provided the requisite support for curriculum requirements in using mother tongue languages. These results reflected a mixed landscape of preparedness and an ongoing debate regarding the adequacy of support for curriculum requirements in mother tongue language use.

Budget allocation and funding emerged as a significant barrier to institutional preparedness, with 85.8% of respondents disagreeing that their school had a budget supporting the use of mother tongue languages. This highlights a substantial shortfall in financial resources that may hinder the effective implementation of the policy. Cultural learning support was another notable aspect, with 54.6% of respondents disagreeing that their school supports pupils' visits to cultural sites for learning about the local language. This indicated a need for more support in facilitating cultural learning experiences to enhance students' understanding of the local language and culture.

Correlation analysis revealed a positive correlation coefficient of 0.245 between institutional preparedness and policy implementation. This suggested that as institutional preparedness increased, there was a corresponding increase in the implementation of the

mother tongue language policy. The result underscores the need for targeted interventions and policy adjustments, particularly in the areas of ICT resources, infrastructure, curriculum support, budget allocation, and cultural learning support to ensure effective implementation of mother tongue education in Meru County's lower primary schools. They emphasize the importance of investing in institutional preparedness to create an environment conducive to teaching and learning in local languages.

The qualitative findings reveal a complex landscape regarding preparedness for mother tongue education (MTE) policy implementation across public primary schools in Meru County. While some schools demonstrated progress through initiatives like “one-day Kimeru” policies and procuring language learning materials, others had made little headway. Major challenges hindering preparedness included teacher competency gaps in instructing in local languages, lack of clear examination policies for MTE, severe resource constraints, language diversity, and ingrained socio-cultural attitudes.

Insufficient instructional and learning materials posed a substantial barrier, alongside shortages of qualified writers for mother tongue textbooks and inadequate financial resources. Negative mindsets toward indigenous languages – including past penalties against using them in schools – significantly impeded robust adoption. Limited infrastructure and engrained cultural biases were also highlighted as drawbacks.

Suggested actions centered on extensive stakeholder engagement, well-defined policy development, continuous teacher training, increased budgetary allocation, teacher preparation, infrastructure upgrades, and community involvement. In particular, participants emphasized including teachers, administrators, parents and local leaders in

planning and implementation. Comprehensive policies, ongoing professional development, and dedicated resources were seen as critical for success. The Ministry of Education was urged to ensure necessary infrastructure in schools while actively involving parents and communities in decision-making.

The convergence of quantitative and qualitative findings emphasizes the consistency across issues such as increased awareness, challenges in language of instruction, inadequacy in ICT resources and infrastructure, budget constraints, and the importance of community engagement. Both sets of findings underscore the complex landscape of support and challenges in implementing mother tongue education, emphasizing the necessity for targeted interventions, clear policies, improved teacher training, and increased resource allocation to ensure effective MTE implementation in Meru County's lower primary schools.

5.2.8 Teachers Attitude

A majority of teachers (57.8%) expressed enjoyment in teaching using the Kimeru language, with only 31.2% disagreeing. This favorable disposition indicates a valuable resource for successful implementation of the Mother Tongue Education (MTE) policy, emphasizing the importance of support, training, and engaging instructional materials. Most teachers (54.9%) demonstrated high respect for the Kimeru language, with only 20% expressing disagreement. This positive regard suggests a strong foundation for effective MTE policy implementation, potentially prioritizing the language's preservation and transmission.

A substantial proportion of teachers (57.3%) felt motivated when teaching in Kimeru language, and many (44.6%) expressed a special interest in it as an indigenous subject. These findings indicate potential for creating engaging and culturally relevant curriculum, while also highlighting the need for ongoing support and training. The majority of teachers (62.5%) expressed pride in being associated with the Kimeru language, and a significant proportion (39.3%) highly recommended its use in teaching. These positive attitudes suggest readiness among teachers to embrace the MTE policy, potentially enhancing cultural connection and learning outcomes. However, a notable portion of teachers expressed low motivation in certain aspects, such as missing being in school to teach using Kimeru language (58.4%) and not reading more to understand how to use it in teaching (56.8%). These findings highlight areas for potential improvement in implementing the MTE policy effectively.

The qualitative findings reveal a diverse range of attitudes among teachers regarding the use of mother tongue in lower primary school instruction. While some teachers exhibited positive attitudes, others held negative views, especially in urban areas. The negative attitudes might stem from perceptions of ineffectiveness or challenges associated with using the mother tongue. However, head teachers expressed a need for platforms to share experiences and best practices, suggesting a desire for a more supportive educational environment.

Regional disparities were evident, with positive attitudes more prevalent in rural areas and negative attitudes more pronounced in urban settings. Additionally, attitudes appeared to vary with age, with younger teachers demonstrating less inclination towards using the mother tongue. These variations underscore the importance of context-specific strategies

and targeted professional development programs to address diverse teacher attitudes effectively.

While some schools have taken proactive measures to promote the use of mother tongue, such as lobbying for language-proficient teachers and organizing sensitization seminars, others have not implemented specific initiatives. The lack of clear criteria for addressing teachers' attitudes highlights potential areas for improvement in policy restructuring and resource provision. Recommendations provided by respondents included professional development opportunities, open forums for expressing concerns, teacher involvement in policy development, and adequate resource provision to enhance language competence and confidence among teachers.

5.2.9 Overall Summary

The model fitting information from regression analysis revealed significant improvement with the inclusion of predictor variables, indicating the importance of these factors in explaining school preparedness for MTE. Pseudo R-Square values indicated that the model explained a substantial proportion of variability in school preparedness, particularly with the Nagelkerke value reaching 0.396, highlighting the significance of the predictors. Additionally, the goodness-of-fit test affirmed the model's validity in predicting lower public primary school preparedness for MTE implementation.

Parameter estimates further elucidated the influence of each predictor variable on school preparedness for MTE. While institutional preparedness was deemed essential, aspects of teacher preparedness and instructional materials preparedness emerged as the most statistically significant predictors. This underscored the crucial role of teacher training and availability of instructional resources in implementing MTE. Notably, the study's findings

aligned with existing literature emphasizing the importance of human and instructional resources in MTE policy implementation. Moreover, the study emphasized the need for stakeholder collaboration and resource allocation to support effective MTE implementation.

The study further explored the moderation effect of teachers' attitudes on the relationship between preparedness and MTE implementation. The moderated multivariate ordinal logistic regression model revealed significant predictive capacity overall, with teachers' attitudes influencing preparedness for MTE implementation. However, the goodness-of-fit test indicated that the model containing interaction terms based on teachers' attitudes was not a good fit for the data, suggesting that, while teachers' attitudes are predictive, they do not act as moderators between preparedness aspects and MTE implementation. This novel finding highlights the need for further research to explore the dynamics between teacher attitudes and MTE policy implementation.

5.3 Conclusions

Based on the results, the study arrived at several key conclusions as described below and organized according to variables of the study.

5.3.1 Implementation of the Mother Tongue Education Policy

The use and effectiveness of mother tongue instruction varies across lower public primary schools and subjects taught. While mother tongue shows promise for enhancing enthusiasm and comprehension in science and mathematics, concerns exist about impacts on teaching other languages like English and completing the syllabus. Moderate measures had been taken by schools to promote mother tongue use, but ethnic diversity poses challenges in

some regions. The lack of clear guidelines, materials, and teacher training hamper effective implementation, alongside other issues like attitudes and funding. A collaborative, approach is needed to address the challenges, including provision of books, retraining programs, advocacy, and awareness campaigns. Overall, while mother tongue instruction shows benefits in some areas, systemic and organizational challenges persist exists in its consistent adoption and requires concerted efforts by education stakeholders to fully realize the aims of the policy.

5.3.2 Teacher Preparedness Factor in implementing the MTE Policy in Public Lower Public Primary School Education

The study reveals that teachers in Meru County public primary schools generally have positive perspectives regarding the use of mother tongue instruction, recognizing its ability to boost engagement and enthusiasm among pupils. However, teachers demonstrate varying levels of comfort and proficiency in utilizing the Kimeru language specifically for teaching purposes. This points to diversity in teaching abilities with the indigenous language that must be acknowledged. The results make evident the need for more in-service training opportunities that are accessible and catered to developing language instruction skills, as current participation in such professional development is low.

Enabling greater teacher involvement in shaping curriculum decisions related to mother tongue teaching plays a key role in promoting the emergence of effective, culturally relevant pedagogies. Moreover, access to instructional resources in Kimeru is limited and addressing this gap is critical for equipping teachers properly. The study further noted that peer influence in schools provides a favorable environment, as many teachers actively converse and teach in mother tongue languages, setting a positive example. A considerable

percentage of teachers also self-report proficiency in Kimeru, which establishes a foundation for its use.

The findings further indicate deficiencies in teacher preparedness that require urgent efforts to enhance skills through training and development. Geographical differences exist, with rural teachers seen as more prepared than urban ones, showing contextual challenges. Peer support contributes positively, so collegial efforts should be leveraged. Head teachers use varied strategies like community partnerships, resource provision, benchmarking, localized staffing, workshops and meetings to promote readiness. However, Ministry of Education support is viewed as limited, requiring greater leadership. Comprehensive recommendations are provided, including needs-based training, recruitment based on language proficiency, continuous professional development and tailored instructional supervision. The strategies indicate commitment, but systematic efforts are needed to further build teacher capacity through collaboration.

5.3.3 Instructional Materials Preparedness

The findings reveal dissatisfaction with Kimeru curriculum support and severe shortages of textbooks, references and instructional materials. Learners struggle with existing orthographies, while teachers encounter difficulties in utilizing available Kimeru materials to build language skills. The median responses confirm the inadequacies, indicating urgent needs. Parallels exist globally, showing systemic constraints. Concrete policy revisions, funding allocation, multi-stakeholder efforts and teacher creativity are imperative to address deficiencies. The study also noted a significant correlation exists between instructional resources preparedness and mother tongue policy implementation.

The study reveals significant challenges in providing instructional materials for teaching mother tongue languages in primary schools in Meru County. Head teachers and teachers highlighted a scarcity of relevant and up-to-date materials, exacerbated by the Ministry's cessation of supplying vernacular curriculum books. Kiswahili and English were prioritized, leaving native languages like Kimeru with few proficient resource people. Financial constraints further hindered schools' ability to purchase necessary materials, with many head teachers admitting to not taking proactive measures to address the shortage.

Teachers emphasized the need for thorough needs assessments and collaboration with local communities to develop instructional materials. They also called for training of educators and material developers to improve the situation. These findings contrast with previous studies suggesting government intervention in funding instructional materials, indicating a gap between expectations and reality. Ultimately, there's a clear call for increased government support and collaborative efforts to ensure the availability and adequacy of instructional materials for teaching mother tongue languages in primary schools, crucial for enhancing the quality of education in Meru County.

5.3.4 Institutional Preparedness in Implementing MTE Policy

There exists a moderate institutional support for the mother tongue language policy, indicating a commitment to its implementation within the educational system. However, this support contrasts with the dominance of English and Kiswahili in instructional materials and teaching practices, suggesting a discrepancy between policy intentions and practical implementation. In addition, there are significant challenges related to ICT resources and infrastructure, which hinder effective teaching in local languages such as

Kimeru. This gap in technological and infrastructural support need to be addressed to facilitate the successful implementation of the language policy.

The study noted that budgetary constraints pose a major obstacle to the implementation of the language policy, with respondents expressing overwhelming disagreement about the availability of budgetary support. Increased budget allocation is essential to address this issue and ensure the effective execution of the language policy. The results highlights the importance of enhancing cultural experiences as part of language education, with a notable number of respondents expressing disagreement regarding support for pupils' visits to cultural sites. This underscores the need to integrate cultural learning opportunities into language education initiatives.

The results reveals a mixed landscape of institutional readiness across schools. While some schools have taken proactive measures, such as using the mother tongue as a medium of instruction for certain subjects or implementing a "one-day Kimeru policy," a significant number of schools reported a lack of tangible progress towards implementing the policy. This indicates a widespread lack of preparedness, with the majority of schools described as "not well prepared" for mother tongue education.

Challenges identified by head teachers include teacher competency, lack of examination policies for mother tongue education, resource constraints, language diversity, socio-cultural factors, and negative attitudes towards mother tongue languages. These barriers highlight the need for comprehensive strategies to address teacher training, policy development, resource allocation, and community involvement in order to effectively implement mother tongue education. Suggestions for improvement encompass stakeholder

engagement, clear policy development, continuous teacher training, resource allocation, teacher preparation, infrastructure support, and community involvement. Emphasizing community engagement, involving parents, guardians, and community leaders, and making indigenous languages compulsory are among the proposed solutions.

5.3.5 Teachers Attitudes

The study underscores the positive and promising outlook for the policy's success. Teachers in the region predominantly exhibit a strong and affirmative attitude toward teaching in the Kimeru language, the native tongue. The majority of teachers enjoy teaching in Kimeru, hold the language in high regard, and feel motivated when instructing in it. This positive disposition lays a solid foundation for the effective implementation of the MTE Policy, aligning with its goals of preserving and promoting native languages.

Furthermore, the study reveals a profound commitment among teachers to the Kimeru language and culture. They actively introduce themselves as Kimeru language teachers, go the extra mile to guide learners in Kimeru, and are willing to embrace innovative teaching methods to enhance students' learning experiences. This commitment not only supports language preservation but also fosters a culturally enriching educational environment.

However, the study also highlights areas for improvement, such as addressing challenges that might hinder teachers' enthusiasm, providing professional development to enhance language proficiency, and promoting further reading and self-improvement in Kimeru language instruction. By addressing these challenges and capitalizing on teachers' positive attitudes, Meru County is well-positioned to successfully implement the MTE Policy,

contributing to the preservation of Kimeru language and culture in the region's educational landscape.

Regional differences suggest more positive attitudes in rural settings, while age-related disparities imply a potential generation gap in pedagogical preferences, necessitating targeted professional development for younger teachers. Challenges influencing attitudes include perceptions of ineffectiveness, resource constraints, and negative socio-cultural factors, yet positive reinforcement strategies, such as recognizing teachers who effectively use the mother tongue, offer potential avenues for improvement. Suggestions for enhancing attitudes include professional development, language competence, open communication forums, teacher involvement in policy development, and provision of resources and training support, underscoring the importance of collaborative efforts and contextual considerations in restructuring language policy for effective implementation.

The study points out the need for comprehensive measures to address teachers' attitudes and improve institutional readiness for implementing mother tongue education, encompassing targeted professional development, resource allocation, stakeholder involvement in policy development, and creation of conducive learning environments. These findings highlight the importance of acknowledging regional, age-related, and contextual factors in policy implementation, emphasizing ongoing collaboration and support to foster positive attitudes towards mother tongue education. Ultimately, the study offers valuable insights for policymakers and educators seeking to promote effective mother tongue instruction in lower primary schools by addressing teachers' attitudes.

5.3.6 Conclusion on Overall Purpose of the Study

The overall results indicate significance of all the predictor variables, emphasizing the importance of preparedness factors in understanding readiness for MTE implementation. Pseudo R-Square values demonstrate that the model accounts for a substantial proportion of variability in school preparedness, particularly with the Nagelkerke value reaching 0.396, highlighting the significance of the predictors. Notably, teacher preparedness and availability of instructional materials emerged as the most statistically significant predictors, underscoring the crucial role of teacher training and resources in facilitating MTE implementation.

Moreover, while teachers' attitudes were found to be important aspects of preparedness for MTE policy implementation in Meru County, the moderation effect analysis revealed that they do not act as moderators between preparedness aspects and MTE implementation. Instead, the teachers' attitudes play a predictive role. Overall, the findings underscore the importance of institutional, teacher, and instructional resource preparedness, as well as the need for stakeholder collaboration and resource allocation to support effective MTE implementation in lower public primary schools in Meru County.

5.4 Recommendations

Based on the results and foregoing conclusions, the study came up with several recommendations on the findings which are organized according to the variables of the study.

5.4.1 Implementation of the Mother Tongue Education Policy

To enhance the effective implementation of mother tongue education (MTE) policy in lower public primary schools, the study recommend a need for MOE to standardize definitions of mother tongue and establish clear guidelines to ensure consistency across all schools whether urban or rural. The findings uphold the need for teacher to balance the promotion of the local language with proficiency in broader communication languages like Kiswahili and English to meet diverse linguistic needs of learners. Indigenous language teachers should emphasize effective teaching strategies, such as using mother tongue to explain scientific concepts and ensure syllabus completion, and implementing multilingual teaching approaches to enhance learners' enthusiasm and learners' participation.

The head teachers should develop strategies to provide additional support and resources, adapting teaching methods, and aligning curriculum frameworks with language policies. The schools should collaborate with education stakeholders in advocating for mother tongue education, providing instructional materials, and offering continuous professional development for teachers. The MOE should recognize the cultural relevance of mother tongue languages and implement initiatives to preserve and promote indigenous languages, and address teacher qualification and attitude issues through retraining programs, to support effective implementation of MTE policy.

5.4.2 Aspects of Teacher Factor and implementation of the MTE Policy in Lower Public Primary School Education

The study recommends TSC to provide comprehensive and accessible in-service training programs for teachers teaching mother tongue. These programs should be tailored to

address the varying levels of proficiency among teachers in using the Kimeru language for instruction. The KICD should develop mechanism for involving indigenous teachers in curriculum development processes with a view to creating culturally relevant teaching strategies. This fosters opportunities for teachers to contribute their expertise and insights which are critical in enriching the development of instructional materials and approaches. The MOE should ensure that teachers have access to a sufficient and up-to-date supply of Mother Tongue Based Multilingual Education (MTB-MLE) resources. It should further establish a systematic distribution mechanism for materials and resources that support mother tongue instructions.

Implementing a monitoring and evaluation system and data-driven insights would enable the MOE to assess the impact of mother tongue-based instruction on student outcomes. The MOE should in addition advocate for policies that prioritize and support mother tongue-based instructions in all lower public primary schools. Head teachers should hence, collaborate with educational authorities to ensure alignment with best practices in language education to lobby support for effective policy implementation. Additionally, they should promote multilingualism and engage parents and the local community in discussions and initiatives related to mother tongue instruction can foster a supportive environment. To ensure seamless continuity, the MOE should establish a system of continuous professional development for teachers and encouraging research on the effectiveness of mother tongue-based instruction to enhance educational outcomes.

5.4.3 Instructional preparedness

To successfully execute the mother tongue language policy, education authorities must recognize the critical role of teacher preparedness and provide adequate support. Efforts

should focus on enhancing teacher training programs related to the use of native languages for instruction in lower primary schools. TSC should ensure that training help teachers to build language proficiency, pedagogical skills, and cultural sensitivity for effective teaching in indigenous languages. Schools also need sufficient resources like textbooks and learning materials in native languages to facilitate implementation.

Continuous monitoring and evaluation of teacher readiness and policy impact is necessary, along with collaboration with local communities to build support. Well-prepared teachers are key to unlocking the long-term potential of mother tongue instruction, including improved student achievement, cultural preservation, and educational equity. Therefore MOE and TSC should prioritize teacher support and resources, policymakers to strengthen implementation and sustain the positive correlation between instructional preparedness and successful execution of the language policy.

5.4.4 Aspect of Institutional Preparedness

The study findings underscore the need for a comprehensive approach to address challenges and optimize opportunities for the successful implementation of the mother tongue language policy in Meru County's lower primary schools. TSC should develop initiatives that focus on increasing awareness and providing tailored training programs for teachers, and liaise with schools to involve parents, and the community to ensure a clear understanding and support for the policy objectives. It is also critical for MOE to align curriculum development with the language policy, emphasizing the incorporation of local languages and cultural content to enhance teaching materials and strategies.

The MOE and schools heads should work together in supporting investment in ICT resources to facilitate teaching in local languages and improve the overall learning experience of learners. This includes providing digital learning materials and platforms, as well as ensuring access to computers and internet connectivity. Infrastructure improvements are also imperative to accommodate the implementation of mother tongue instruction effectively, requiring MOE to allocate sufficient resources to address physical and logistical challenges within schools, and provide guidelines for budget use to support language education initiatives.

The lower primary schools should seek to collaborate with local communities and cultural experts who can aid in developing cultural enrichment programs, while involving parents in school activities with a view to building a sense of ownership and commitment to the MTE policy's success. Furthermore, TSC should fathom continuous professional development and mentorship programs for teachers to strengthen their competence in using indigenous languages for instruction. Moreover, MOE should implement a robust monitoring and evaluation system that allows for ongoing assessment of the MTE policy's impact and informs necessary adjustments to enhance effectiveness. It should as well encourage continuous research on best practices and flexibility in MTE policy implementation to accommodate local variations. This is critical in ensuring the successful integration of mother tongue instruction in lower primary schools.

5.4.5 Recommendations on Teachers Attitudes

Regarding teachers' attitudes toward the Mother-Tongue Education (MTE) Policy the study noted a need for teachers to display a generally positive attitude toward teaching in the Kimeru language to foster a promising foundation for the policy's execution. The teachers'

willingness to embrace the language and culture is a powerful resource for reinforcing the importance of preserving and promoting Kimeru within the educational context.

To capitalize on this enthusiasm, TSC should establish and strengthen language courses, pedagogical training, and the provision of necessary resources for effective Kimeru language instruction. Additionally, the development of a culturally relevant curriculum by KICD in collaboration with teachers and community stakeholders, is essential to create engaging and context-appropriate learning materials. In doing so, MOE should on its part establish community engagement initiatives to foster partnerships with parents and community members to collectively support Kimeru language education.

The stakeholder in lower primary education to collaborate in supporting implementation of mentorship programs, professional development, and in creating knowledge-sharing platforms to further enhance teachers' skills and create a vibrant and innovative teaching environment. Addressing specific challenges, such as those hindering passion and motivation, is also crucial for sustaining positive attitudes in schools; hence, head teachers and education authorities to work together in achieving his ambition. Finally, ongoing research and monitoring should be incorporated into the policy by education authorities to adapt and refine strategies based on the evolving needs and challenges, and ensure the long-term success of the MTE Policy and the preservation of Kimeru language and culture in the educational landscape.

5.4.6 Recommendations on Overall Purpose of the Study

The lower primary school education stakeholders should prioritize institutional preparedness, including ensuring adequate resources and infrastructure to support MTE.

This includes allocating funds for teacher training programs and providing sufficient instructional materials to facilitate effective teaching in the mother tongue. Furthermore, efforts should be directed towards enhancing teacher preparedness, owing to its significant influence on MTE implementation. This involves providing comprehensive training programs tailored to improve teachers' proficiency in using the mother tongue as a medium of instruction. Additionally, continuous support and professional development opportunities should be offered to teachers to ensure ongoing readiness in implementing MTE policy.

Moreover, while teachers' attitudes were found to be predictive of preparedness for MTE implementation, they do not act as moderators between preparedness factors and implementation outcomes. Therefore, MOE should consider strategies to foster positive attitudes towards MTE among teachers and incorporate broader initiatives aimed at enhancing preparedness. This may involve awareness campaigns, collaborative forums, and incentives to promote the value and effectiveness of MTE policy.

5.5 Implications of the Findings on Theories, Policies and Practices

The findings of this study had outright implications on theories, policies and practices as stipulated below.

5.5.1 Implications of the Findings on Theories

This study was informed by the Linguistic Theory developed by Naom Chomsky in 1957; the Cognitive Development Theory which was expanded by Jean Piaget in 1936, and the Advocacy Coalition Framework (ADF) which was developed by Paul Sabatier and

Jenkins-Smith in 2007. The relationship of these theories and the results of the study is briefly described below.

Piaget's cognitive development theory resonates with the positive response of pupils to instruction in Kimeru language, indicating active engagement and effective learning, while teachers' adaptation of teaching practices reflects Piaget's concept of scaffolding. In the context of the Advocacy Coalition Framework (ACF) by Sabatier and Weible (date). The data suggests the presence of advocacy coalitions or interest groups influencing language instruction policies, highlighting the importance of understanding stakeholder dynamics for policy decision-making. While not directly linked, these theories provide valuable frameworks for interpreting the implications of the data, emphasizing cognitive aspects of language acquisition, the role of cognitive development in learning, and the influence of stakeholders on policy decisions regarding mother tongue-based instruction in Meru County's lower primary schools.

The study's findings resonate with Chomsky's theory by acknowledging the significance of the linguistic environment in language acquisition, particularly in the context of mother tongue education. The emphasis on providing adequate training for teachers and appropriate instructional materials aligns with Chomsky's notion of a universal grammar and underscores the importance of supportive linguistic environments in facilitating effective language learning. Additionally, the study's relevance to Piaget's Cognitive Development Theory is evident in its recognition of the need to consider students' cognitive readiness and adapt instructional strategies to match their cognitive abilities at different developmental stages. Understanding students' cognitive development is crucial for implementing mother tongue education effectively and ensuring that instruction is

scaffolder to support their learning progress. The implications of study's results extend to the Advocacy Coalition Framework (ACF), particularly in the context of policy change related to mother tongue education. The findings inform the formation of advocacy coalitions that support the implementation of mother tongue education policies.

Chomsky's theory, which underscores the innate human capacity for language acquisition, is consistent with the positive attitudes of teachers toward teaching in the Kimeru language. These attitudes support the idea that the native language is not only a crucial tool for communication but also a medium for effective education. The study's implications reinforce Chomsky's view that language is deeply ingrained in human cognition and plays a central role in learning.

In the context of this study, the positive attitudes of teachers toward teaching in the Kimeru language align with Piaget's notion that cognitive development is influenced by cultural and environmental factors. The commitment of teachers to the Kimeru language and culture implies that teaching practices can be designed to be more culturally relevant, which, according to Piaget, can enhance cognitive development in students by making learning more engaging and meaningful.

The ACF focuses on policy processes and how advocacy coalitions interact to shape policy outcomes. In this context, the implications of the above results suggest that teachers, as a significant component of the educational system, form an advocacy coalition aligned with the goals of the Mother-Tongue Education (MTE) Policy. Their positive attitudes toward teaching in Kimeru language and commitment to the policy's objectives can be seen as a powerful advocacy coalition that supports the policy's successful implementation.

5.5.2 Implications of the Findings on Policies

The implications drawn from the study's findings suggest several policy recommendations for enhancing mother tongue-based instruction in lower primary schools. Firstly, policies should prioritize the integration of modules on mother tongue-based instruction into teacher training programs, ensuring that educators are equipped with the necessary strategies and proficiency in indigenous languages. Furthermore, efforts should be made to diversify the language skills among lower primary school teachers, with policies focusing on recruiting educators proficient in various local languages spoken in the region, thereby enhancing the capacity for mother tongue instruction. In addition, policies should address resource provision by prioritizing the availability of teaching materials and resources in indigenous languages to support effective instruction, alongside adjusting funding allocations to ensure adequate resourcing in schools.

Moreover, there is a need for policies that foster teacher involvement in curriculum development processes, encouraging collaboration between educators and educational authorities to tailor instructional strategies to the local context, particularly in the realm of mother tongue-based education. Policies should also promote a positive school culture that values and celebrates the use of indigenous languages for instruction, potentially through incentive programs or recognition initiatives. Additionally, proficiency enhancement policies should continue to support efforts aimed at improving teachers' language proficiency through language enhancement programs and assessment mechanisms, ensuring educators are adequately skilled in utilizing indigenous languages for instruction. Lastly, policies should establish robust monitoring and evaluation frameworks to assess the implementation of mother tongue-based instruction, providing valuable feedback to

refine and adjust policy measures as needed, ultimately ensuring the effectiveness of the MTE Policy in lower primary schools.

Balancing local language promotion with proficiency in broader communication languages is crucial, as identified in this study, variations in subjects taught in Kimeru language underscore the importance of this balance. Moderate acceptance of mother tongue in teaching suggests its efficacy in explaining scientific concepts and facilitating planned work completion, particularly in subjects like Mathematics predominantly taught in Kimeru. However, challenges exist in rural and urban schools, necessitating teaching two foreign languages post-Grade 3, and indicating complexities in implementing language policy.

The study reveals the need for policy interventions addressing resource adequacy and curriculum alignment for effective Mother Tongue Education (MTE) implementation. Dissatisfaction with provided curriculum guidelines and limited access to instructional materials in Kimeru language calls for policy adjustments to ensure robust curriculum support. Furthermore, concerns about syllabus completion and orthographic difficulties highlight the necessity of addressing resource policy gaps to facilitate effective teaching and learning. Additionally, the qualitative findings emphasize the importance of community engagement, infrastructure development, and policy clarity to overcome challenges hindering MTE policy implementation in Meru County's lower primary schools.

Institutional preparedness emerges as a critical factor influencing MTE policy implementation, with implications for targeted interventions and policy adjustments. The positive correlation between institutional preparedness and policy implementation

underscores the need for focused actions in areas such as ICT resources, infrastructure, budget allocation, and cultural learning support. Moreover, the qualitative findings reinforce the importance of stakeholder engagement, professional development, and resource allocation in overcoming challenges related to teacher competency, resource shortages, and cultural biases. Overall, the convergence of quantitative and qualitative results insights highlights the multifaceted nature of challenges and the necessity for comprehensive policy frameworks to ensure successful MTE implementation in Meru County's lower primary schools.

5.5.3 Implications of the Findings on Practices

The study's findings underscore the complex dynamics surrounding mother tongue teaching practices in Meru County's lower primary schools, highlighting several key implications for practice. They show variation in the definition of Mother Tongue (MT) across schools and sub-counties which calls for a better approach to policy development that considers local linguistic diversity. Balancing the promotion of local languages like Kimeru with proficiency in broader communication languages such as Kiswahili and English is crucial to cater for the needs of diverse learners. Moreover, the moderate embrace of mother tongue teaching suggests its perceived importance in enhancing students' understanding, particularly in explaining scientific concepts and facilitating planned work completion.

It is clear that the challenges related to syllabus completion and the effectiveness of using indigenous languages in teaching other subjects like English underscore the need for comprehensive policy interventions. Efforts to enhance the effectiveness of mother tongue teaching practices should address concerns about curriculum alignment, teacher

competency, and resource adequacy. Collaboration among stakeholders, including teachers, indigenous language experts, linguists, educational authorities, and community members, is essential in addressing these challenges effectively and ensure the successful implementation of Mother Tongue Education (MTE) policy.

Furthermore, the study highlights the vital role of institutional preparedness in facilitating policy implementation. While positive correlations between institutional preparedness and policy implementation are observed, substantial challenges related to resource scarcity, teacher competency gaps, and cultural biases persist. Addressing these challenges requires targeted interventions, including increased budgetary allocation, continuous teacher training, infrastructure upgrades, and community involvement. Comprehensive policies that prioritize stakeholder engagement and resource allocation are therefore essential to overcome these obstacles and ensure the effective implementation of MTE policies in Meru County's lower primary schools.

There is a clear need to integrate local languages into the curriculum and provide comprehensive teacher training programs to equip educators with the necessary skills and confidence. This training should focus on language proficiency, teaching strategies, and cultural sensitivity to ensure effective instruction in mother tongue languages. Additionally, teaching practices should adapt the development and use of curriculum materials designed for mother tongue education. This is critical in ensuring that teachers have access to appropriate textbooks, teaching aids, and resources.

The study underscores the importance of adopting multilingual teaching approaches that gradually transition from predominantly using English and Kiswahili to incorporating local languages. This gradual shift allows students to build their language proficiency over time

while maintaining academic progress. Furthermore, teaching practices should embrace technology and digital resources to enhance learning, including the use of educational software and online resources in local languages.

The findings also show that cultural sensitivity and community involvement are also critical aspects of effective teaching practices. Teachers should therefore engage with local communities and cultural experts to create culturally enriched learning experiences, incorporating storytelling, traditional songs, and cultural events into the curriculum. Moreover, teaching practices should incorporate effective monitoring and assessment strategies to gauge students' progress and inform adjustments to instruction and MTE curriculum content.

The overwhelmingly positive attitudes of teachers toward teaching in the native language align with the goals of the MTE Policy, suggesting that teaching practices should increasingly incorporate the use of local languages. This commitment to Kimeru language and culture implies the potential for enriched teaching practices that foster greater cultural relevance and community engagement. However, challenges and barriers exist, hence, teaching practices should focus on addressing these by providing targeted support and resources, ensuring flexibility, and continuous monitoring and adaptation to meet the objectives of the MTE Policy.

The convergence of quantitative and qualitative findings indicate need for improved teacher training, increased resource allocation, and community engagement are essential to address challenges and ensure the successful implementation of MTE policies. By addressing these issues comprehensively, policymakers and educators can create an environment conducive to teaching and learning in local languages, thereby enhancing

educational outcomes and promoting linguistic diversity and cultural preservation in the region's schools.

5.6 Recommendations for further Studies

Based on the results presented in preparedness in the implementation of the mother tongue language policy in lower public primary schools in Meru County, several areas for further research can be explored. Some suggested research topics for future studies are provided below. Longitudinal research on the long-term impact of mother tongue instruction on pupils learning outcomes, achievement, and equity. This could provide insights into the benefits of the policy over time. At the same time, studies comparing pedagogical approaches and best practices for teaching academic subjects in the mother tongue are inevitable. This could identify effective methods as noted in the research and best practices. The need to evaluate teacher training programs, particularly on developing language proficiency and cultural competency stood out in this study. An investigation of this aspect could improve training as highlighted in the teacher training construct. Further, research on the development and validation of assessment tools in mother tongue languages would also be important. The results of this study underscore community involvement owing to the connection between local community and indigenous languages. Investigating community perceptions, challenges, and support for mother tongue education is therefore recommended. The finding also show a need to analyze factors influencing effective policy adoption across different sociolinguistic contexts. This would help to expand best practices in sociolinguistic contexts.

Another area of further study is to explore students' attitudes, motivation, and engagement levels when taught in their mother tongue compared to other languages. This can be expanded to also investigate the factors that influence students' preferences for certain languages in the classroom. Considering pupils in primary schools have strong attachment to their parents, it is important to investigate the role of parents in supporting mother tongue-based education. The focus can be to assess the extent to which parents are involved in their children's education and their attitudes towards indigenous language instruction.

A further study is recommended to assess the impact of mother tongue education on academic achievement in varying subjects such as languages, arts, mathematics, and science. This research can provide more insight into the effectiveness of different instructional languages on student performance. Finally, a comparative study can compare the results and experiences of mother tongue-based education in Meru County with other regions or countries that have implemented similar programs. This would be significant in the identification of common challenges and successful strategies that can inform policy and practice.

REFERENCES

- Abacioglu, C. S., Volman, M., & Fischer, A. H. (2020). Teachers' multicultural attitudes and perspective taking abilities as factors in culturally responsive teaching. *British journal of educational psychology*, 90(3), 736-752.
<http://dx.doi.org/10.1111/bjep.12328>.
- Abbas, T., & Ghulam, Y. H. (2022). A critical review on universal grammar of Chomsky in learning a second language. *Ascarya: Journal of Islamic Science, Culture, and Social Studies*, 2(2), 190–198. <https://doi.org/10.53754/iscs.v2i2.465>.
- Annie, B., Aprillette, D., & Sheila, D. (2018). Attitude toward English among Vietnamese students in the Philippines. *The Asian EFL Journal*, 20(2), 6 – 19.
<https://www.researchgate.net/publication/324527519>.
- Agonga, A. (2020). *Reflections on de-colonizing knowledge and curriculum: the transition of education system in Kenya (1963-1970)*. Cambridge Scholars Publishing.
- Alieto, E., Devanadera, A., & Buslon, J. (2020). *Women of K-12: Exploring teachers' cognition in language policy implementation*. <https://ssrn.com/abstract=3588029>.
- Andrew, I. C. (2018). *Advocacy Coalition Framework as an Actor-Centred Approach to Policy Formulation and Implementation*. Leicester.
- Anyiendah, M. S. (2017). Challenges faced by teachers when teaching English in public primary schools in Kenya. *Frontiers in Educational*, 2(13),1-3.
<https://doi.org/10.3389/feduc.2017.00013>.

- Aperocho, M. D. (2023). A policy reform framework for mother tongue-based multilingual education in the Philippines. *International Journal of Multidisciplinary: Applied Business and Education Research*, 4(3), 692-700. <https://doi.org/10.11594/ijmaber.04.03.02>.
- Apolonio, A. L., Hedman, C., & Magnusson, U. (2022)"Adjusting to linguistic diversity in a primary school through relational agency and expertise: a mother-tongue teacher team's perspective" . *Multilingua, Journal of Cross-Cultural and Interlanguage Communication* 42(1), 139-164. <https://doi.org/10.1515/multi-2021-0070>.
- Asade, B. K. R. (2000). *Language, literature and national development. in language, literature and linguistics in the 21st century*. NCCE Publication.
- Asmara African Languages and Literatures Conference Organizers. (2000). *the Asmara declaration on African languages and literatures*. <https://www.academia.edu/21770107>.
- 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. <https://www.ajol.info/index.php/jolte/article/view/186558>.
- Baba, P. T. (2013). Mother Tongue Debate and Language Policy in South Africa. *International Journal of Humanities and Social Science*, 3(13),1-10. <https://www.ijhssnet.com/journal/index/1927>.
- Bacon, S. M., & Finnemann, M. D. (1990). A study of the attitudes, motives, and strategies of university foreign language students and their disposition to authentic

oral and written input. *Modern Language Journal*, 74(4), 459–473. <https://doi.org/10.2307/328520>.

Bakare, O. B. (2000). *Mother tongue as a medium of instruction in the years 2000 and beyond; implication for Nigerian primary education: language, literature and linguistics in the 21st century*. NCCE Publication.

Bamgbose, A. (2005a). *Mother tongue education: lessons from the Yoruba experience, languages of instruction for African emancipation: focus on post-colonial contexts and considerations*. Mkuki na Nyota Publishers.

Bamgbose, A. (2011). *African languages today: The challenges of and prospect for empowerment under globalization*. In *Selected proceedings of the 40th annual conference on African linguistics*, Somerville, MA: Cascadilla. Proceedings Project.

Bamgbose, A. (2019). *A recurring decimal: English in language policy and planning*. The handbook of world Englishes. <https://doi.org/10.1002/9781119147282.ch36>

Barr, R., & Dreeben, R. (1983). Subject departments and the implementation of National Curriculum policy: an overview of the issues. *Journal of Curriculum Studies*, 24(2), 7-115. <https://www.researchgate.net/publication/248986176>.

Baumgartner, F. R., & Jones, B. D. (2010). *Agendas and instability in American politics*. University of Chicago Press.

- Bautista, J. (2022). *Lawmakers urged to back Filipino as medium of instruction*. Philippine Daily Inquirer. <https://newsinfo.inquirer.net/1658456/lawmakers-urged-to-support-filipino-as-medium-of-instruction>.
- Becker, G. (1976). *The economic approach to human behaviour*. Chicago and London. The University of Chicago Press.
- Begi, N. (2014). Use of mother tongue as a language of instruction in early years of school to preserve the Kenyan culture. *Journal of Education and Practice*, 5(3), 37-49. <https://core.ac.uk/download/pdf/234635280.pdf>.
- Benson, C., & Wong, K. M. (2015). Development discourse on language of instruction and literacy: sound policy and Ubuntu or lip service? *Reconsidering Development*, 4(1),1-10. <https://pubs.lib.umn.edu/index.php/reconsidering/article/view/584>.
- Berardo, S. A. (2006). The use of authentic materials in the teaching of reading. *The Reading Matrix*, 6(1), 60-69. <https://readingmatrix.com/articles/berardo/article.pdf>.
- Billones, M. G., & Cabatbat, M. G. (2019). Experiences of teachers handling MTB-MLE instruction in Mid-sayap North Cotabato. *International Journal of Social Sciences and Humanities Research*, 7(2), 1326-1333. <https://www.ijfmr.com/papers/2024/3/21601.pdf>.
- Bold, T., Filmer, D., Martin, G., Rockmore, G., Stacy, B., Svensson, J., & Wane, W. (2017). *What do teachers know and do? does it matter? evidence from primary*

schools in Africa. Education Global Practice Group Development Research Group
Africa Region

Brennen, B. S. (2017). *Qualitative research methods for media studies*. Routledge.

Brokensha, D., Warren, D. M., & Werner, O. (1980). *Indigenous knowledge systems and development*. University Press of America.

Bronteng, J. E., Berson, I. R., & Berson, M. J. (2019). Public perception of early childhood language policy in Ghana: an exploratory study. *Early Years*, 39(3), 310-325.
<https://doi.org/10.1080/09575146.2019.1631759>.

Bukoje, R. O. (2019). Utilization of instruction materials as tools for effective academic performance of students: Implications for counselling. *Multidisciplinary Digital Publishing Institute Proceedings*, 2(21), 1395.
<https://doi.org/10.3390/proceedings2211395>.

Burton, L. A. (2013). *Mother Tongue-Based Multilingual Education in the Philippines: Studying Top-Down Policy Implementation from the Bottom Up*. [Doctoral Dissertation. University of Minnesota].
<https://conservancy.umn.edu/server/api/core/bitstreams/9f9ea972-2333-492c-a9ce-95e5dddfe785/content>.

Cabansag, N. J. (2016). The implementation of mother tongue-based multilingual education: seeing it from the stakeholders' perspective. *International Journal of English Linguistics*, 6(5), 12-16. Canadian Center of Science and Education.

Castro, D. C., Páez, M. M., Dickinson, D. K., & Frede, E. (2011). Promoting language and literacy in young dual language learners: Research, practice, and policy. *Child*

development perspectives, 5(1), 15-21. <https://doi.org/10.1111/j.1750-8606.2010.00142.x>.

- Cenoz, J., & Gorter, D. (2017). Minority languages and sustainable translanguaging: threat or opportunity? *Journal of Multilingual and Multicultural Development*, 38(10), 901–912. <https://doi.org/10.1080/01434632.2017.1284855>.
- Chebet, E., & Kiptoo, W. (2021). Influence of teacher demographics on mother tongue usage in classroom instruction among pupils in rural ECDE centres in Nandi County, Kenya. *Journal of Research in Education and Social Science*, 3(1), 1102-1014. <https://grandmarkpublishers.com/journals/31400Evelyne.pdf>.
- Chebet, E. (2018). Mother tongue usage and classroom instruction. does influence of teacher's attitude matter? Evidence from Kenya? *International Journal of Research in Education and Social Sciences (IJRESS)*, 1(1), 52-62. <https://journals.indexcopernicus.com/api/file/viewByFileId/419230>.
- Chebet, E., Kiprop D., & Ndaita, J. (2018). Influence of teacher preparedness on mother tongue usage in classroom instruction among the rural ECDE Centres in Nandi County, Kenya. *Africa International Journal of Management Education and Governance (AIJMEG)*, 3 (3), 1-19. <https://www.academia.edu/37316342>.
- Chokera, K. J. (2014). Influence of teacher characteristics on pupils' academic performance in public primary schools in Kenya: a case of Akithi Division, Meru county, Kenya. [Thesis University of Nairobi] Kenya. <http://erepository.uonbi.ac.ke/bitstream/handle/11295/73679>.
- Cherry, K. (2014). *Piaget's Stages of Cognitive Development*. http://psychology.about.com/od/piagets_theory/a/keyconcepts.htm.

- Chinyere, U. F. (2022) *A comparative Study of Selected Language Acquisition Theories*. Imo State University. <http://www.jolledu.com.ng/index.php/joll/article/view/145>.
- Chivhanga, E., & Chimhenga, S. (2014). Student Teachers' Attitudes towards the use of Indigenous Languages as Medium of Instruction in the Teaching of Science Subjects in Primary Schools of Zimbabwe. *IOSR Journal of Research and Method in Education (IOER-JRME)*, 4(4), 37-43. 10.9790/7388-04443743.
- Chomsky, N. (2009). *Cartesian linguistics: a chapter in the history of rationalist thought*. Cambridge University Press.
- Clark, E.V. (2009). *First Language Acquisition*. Cambridge University Press.
- Crain, S., & Lillo-Martin, D. (1999). *An introduction to linguistic theory and language acquisition*. Blackwell Publishing.
- Creswell, J. W. (2014). *A concise introduction to mixed methods research*. SAGE publications.
- Crystal, D. (2010). *The Cambridge Encyclopedia of Language*. Cambridge.
- Cummins, J. (1979b). Linguistic interdependence and the educational development of bilingual children. *Review of Educational Research*, 49(2), 222-251. <https://www.jstor.org/stable/1169960>.
- Cummins, J. (1996). *Negotiating identities: Education for empowerment in a diverse society*. California Association for Bilingual Education.
- Cummins, J. (2000). *Language, power, and pedagogy: bilingual children in the crossfire*. Multilingual Matters. <https://doi.org/10.21832/9781853596773>.

- Dada, A. (2012). *The new language policy in Nigeria: Its problems and its chances of success. In Language of inequality*. De Gruyter Mouton.
- Danladi, S. S. (2013). Language policy: Nigeria and the role of English language in the 21st century. *European Scientific Journal*, 9(17), 1- 21. <https://core.ac.uk/download/pdf/328023643.pdf>.
- Danping, W. (2019) Translanguaging in Chinese foreign language classrooms: students and teachers' attitudes and practices. *International Journal of Bilingual Education and Bilingualism*, 22(2), 138-149. 10.1080/13670050.2016.1231773.
- Davis, E., & Agbenyega, J. S. (2012). Language policy and instructional practice dichotomy: The case of primary schools in Ghana. *International Journal of Educational Research*, 53, 341-347. <https://doi.org/10.1016/j.ijer.2012.04.007>.
- Deng, F., & Zou, Q. (2016). A study on whether the adults' second language acquisition is easy or not-from the perspective of children's native language acquisition. *Theory and Practice in Language Studies*, 6(4), 776.<https://doi.org/10.19044/esj.2013.v9n17p%25p>.
- Duarte, J. (2018). Translanguaging in the context of mainstream multilingual education. *International Journal of Multilingualism*, 17(2), 232–247. <https://doi.org/10.1080/14790718.2018.1512607>.
- Eickelmann, B., & Vennemann, M. (2017). Teachers' attitudes and beliefs regarding ICT in teaching and learning in European countries. *European Educational Research Journal*, 16(6), 733–761. <https://journals.sagepub.com/doi/10.1177/1474904117725899>.

- Echessa, K. (2004). *Teaching local languages will help integrate Kenyan children*. Daily Nation, February 1, 2014.
- Elizabeth, S., & Lisa, M. (2021). Constraints of hierarchy on meso-actors' agency: evidence from Vietnam's educational language policy reform. *Current Issues in Language Planning*, 22(1-2), 180-198. 10.1080/14664208.2020.1716577.
- Engelbrecht, P., Nel, M., Smit, S., & Deventer, M. (2016) The idealism of education policies and the realities in schools: the implementation of inclusive education in South Africa. *International Journal of Inclusive Education*, 20(5), 520-535. <https://www.tandfonline.com/doi/full/10.1080/13603116.2015.1095250>.
- Espada, J. P. (2012). The native language in teaching kindergarten mathematics. *Journal of International Education Research (JIER)*, 8(4), 359-366. <https://www.researchgate.net/publication/264890281>.
- Faizatul, F., & Syaodih, E. (2016). *Analysis on the Importance of Mother Tongue in Early Childhood*. Universitas Pendidikan Indonesia. <https://www.atlantispress.com/proceedings/icece-16/25869325>.
- Fasold, R. (1992). *The Sociolinguistics of Society*. Blackwell.
- Fatmawati, S. R. (2015). First Language acquisition based on psycholinguistics. *Lentera*, XVIII
- Fromkin, V. R., & Hyams, N. (2010). *An Introduction to Language*. Thomson-Henle.
- Gachathi Report (1976). *Nairobi*. Government Printer. <https://academia-ke.org/library/download/report-of-the-national-committee-on-educational-objectives-and-policies-the-gachathi-report-1976/>.

- Gandolfo, A. (2009). Education-medium and African linguistic rights in the context of globalisation. *Globalisation, Societies and Education*, 7(3), 321–336. <https://www.tandfonline.com/doi/abs/10.1080/14767720903166129>.
- Gavora, P. (2015). The state-of-the-art of content analysis. *Education Sciences*, 1, 6-18. http://nevelestudomány.elte.hu/downloads/2015/nevelestudomány_2015_1_6-18.pdf.
- Ganuza, N., & Hedman, C. (2015). Struggles for legitimacy in mother tongue instruction in Sweden. *Language and Education*, 29(2), 125-139. <https://www.researchgate.net/publication/271727952>.
- Giannakoulopoulos, A., Pergantis, M., Konstantinou, N., Lamprogeorgos, A., Limniati, L., & Varlamis, I. (2020). Exploring the Dominance of the English Language on the Websites of EU Countries. *Future Internet*, 12(4), 76. <https://www.researchgate.net/publication/340868171>.
- Goodwin, L. (2017) Who is in the classroom now? teacher preparation and the education of immigrant children. *Educational Studies*, 53(5), 433-449. 10.1080/00131946.2016.1261028.
- Gordon Jr, R. G. (2005). *Ethnologue; languages of the world*. Summer Institute of Linguistics. <https://www.ethnologue.com>.
- Gorman, T. P. (1974). *The development of language policy in Kenya with particular reference to the educational system*. *Language in Kenya*. Oxford University Press.
- Gorter, D., & Cenoz, J. (2017). Language education policy and multilingual assessment. *Language and Education*, 31(3), 231-248. 10.1080/09500782.2016.126189

- Government of Nepal (GoN). 2019. *National Education Policy*. The Ministry of Education.
- Gumbi, D. P. (2021). *The smuggling of isiZulu into KwaZulu-Natal classrooms: the case of African languages as tools to teaching, learning & assessment*. Academia Letters, Article 848. <https://doi.org/10.20935/AL848>.
- Gupta, E. (2007). *Putting identity into community: nurturing an early childhood learning community through visual art and project work in the curriculum*. New Beginnings Preschool Centre for Innovation; Final Research Report. New Zealand Ministry of Education.
- Guthrie, M. (1967). *Comparative Bantu: V. 1. The Comparative Linguistics of the Bantu Languages*. Gregg International Publishers.
- Halpern, M. (2016). How children learn their mother tongue: They don't. *Journal of psycholinguistic research*, 45(5), 1173-1181.
<https://pubmed.ncbi.nlm.nih.gov/26025265>.
- Hamroev, R. A. (2019). Modelling activities of teachers when designing creative activities of students. *European Journal of Research and Reflection in Educational Sciences*, 7(10), Special Issue: Education in Uzbekistan ISSN 2056-5852.
- Harris, P. G. (2011). *Language in schools in Namibia: The missing link in education achievement?* Urban Trust of Namibia.
- Ho, W. C., & Lu, J. (2019). Culture versus the state? The “Defend-My-Mother-Tongue” protests in Guangzhou. *The China Journal*, 81(1), 81-102.
<https://scholars.cityu.edu.hk/files/191728339/27485630.pdf>.

- Hornberger, N. H., & Link, H. (2012). Translanguaging and transnational literacies in multilingual classrooms: A biliteracy lens. *International Journal of Bilingual Education and Bilingualism*, 15(3), 261-278.
<https://doi.org/10.1080/13670050.2012.658016>.
- Hulin, R., & Na, X. (2014). A study of Chomsky's universal grammar in second language acquisition. *International Journal on Studies in English Language and Literature (IJSELL)*, 2(12), 1-7. <https://www.arcjournals.org/pdfs/ijSELL/v2-i12/1.pdf>.
- Irem, B., & Kutlay, Y. (2018). The impact of Dutch teachers on family language policy of Turkish immigrant parents. *Language, Culture and Curriculum*, 31(3), 220-234.
<https://www.researchgate.net/publication/326757100>
- Iyamu, E. O., & Ogiegbaen, S. E. A. (2007). Parents and teachers' perceptions of mother-tongue medium of instruction policy in Nigerian primary schools. *Language, culture and curriculum*, 20(2), 97-108.
<https://www.researchgate.net/publication/254327832>.
- Jang, S., Weible, C. M., & Park, K. (2016). Policy processes in South Korea through the lens of the advocacy coalition framework. *J Asian Public Policy*, 9, 1-17. <https://doi.org/10.1080/17516234.2016.1201877>.
- Jean- Baptist, S. B. M. B., & Ogawa, K. (2023). Analyzing language of instruction and students' learning achievements in Zambia: a fixed effects approach using PISA-D data. *Compare: A Journal of Comparative and International Education*, 1–16.
<https://doi.org/10.1080/03057925.2023.2170169>.

- Kamunge Report (1988). *Report of the Presidential Working Party on education and manpower training for the next decade and beyond*. Government Printer Nairobi.
https://demo.education.go.ke/wp-content/uploads/2021/11/Kamunge-Report-1988_compressed.pdf.
- Karikari, A., Kumi, O., Achiaa, A., & Adu, J., (2022). The Impact of Using Mother Tongue as Instructional Language in Teaching and Learning of Mathematics in Rural Primary Schools. *International Journal of Novel Research in Education and Learning*, 9(1), 26-38.
<https://www.noveltyjournals.com/upload/paper/The%20Impact%20of%20Using%20Mother-08022022-1.pdf>.
- Kenya Institute of Education. (2012). Primary education syllabus (Vol. 1). Nairobi, Kenya:.
- Kenya Institute of Curriculum Development. (2019). *Basic Education Curriculum Framework: Nurturing every learner's potential*. <https://kicd.ac.ke/wp-content/uploads/2019/08/Basic-Education-Curriculum-Framework-2019>.
- Kerfoot, C., & Heerden, M. (2015) Testing the waters: exploring the teaching of genres in a Cape Flats Primary School in South Africa. *Language and Education*, 29(3), 235-255. <https://www.tandfonline.com/doi/full/10.1080/09500782.2014.994526>.
- Khamroev, R. A. (2021). Modeling of Teacher Activity in The Design of Creative Activities of Students in Primary School Mother Tongue Education. *Middle European Scientific Bulletin*, 1,1- 8. <https://doi.org/10.47494/mesb.2021.8.181>.
- Khejeri, M. (2014). Teachers' Attitudes towards the Use of Mother Tongue as a Language of Instruction in Lower Primary Schools in Hamisi District, Kenya. *International*

- Kimani, A. (2012). *Sheng does enrich English language*. NMG Press.
- Kioko, A. N., Ndung'u, R. W., Njoroge, M. C., & Mutiga, J. (2004). *Mother Tongue Education in Africa: Publicising the Reality*. In *Multilingual Education*. A Springer Open Journal.
- Kirkgöz, Y., Çelik, S., & Arıkan, A. (2016). *Laying the Theoretical and Practical Foundations for a New Elementary English Curriculum in Turkey: A Procedural Analysis*. <https://dergipark.org.tr/en/pub/kefdergi/issue/22607/241637>.
- Kitur, P. J., & Kirigia, K. (2018). *Challenges of mother tongue education in selected primary schools in nandi county, kenya*. *Journal of Advances in Education and Philosophy*.
- Koech Report (1999). *Koech TIQET Report 1999*. Nairobi Government Printer.
- Kosonen, K. (2005). *Education in local languages: Policy and practice in South-East Asia. Asia-Pacific Programme of Education for All First Language First: Community-based Literacy Programmes for Minority Language Contexts in Asia*. UNESCO Bangkok.
- Kosonen, K., Young, C., & Malone, S. (2006). *Promoting Literacy in Multilingual Settings*. Asia and Pacific Regional Bureau for Education.
- Lao, C. (2010). Parents' attitudes toward Chinese–English bilingual education and Chinese language use. *Bilingual research journal*, 28(1), 99-121.
<https://doi.org/10.1080/15235882.2004.10162614>.

- Leeman, J. (2018). It's all about English: The interplay of monolingual ideologies, language policies and the U.S. Census Bureau's statistics on multilingualism. *International Journal of the Sociology of Language*, 1 (252), 21–43. <https://culturalstudies.gmu.edu/people/jleeman>.
- Les, B., & Howard, S. (2006). *Education policy process, themes and impact*. Routledge
- Leung, C. (2016). English as an additional language—a genealogy of language-in-education policies and reflections on research trajectories. *Language and Education*, 30(2), 158-174. <https://doi.org/10.1080/09500782.2015.1103260>.
- Li, W., & Weible, C. M. (2019) China's policy processes and the advocacy coalition framework. *Policy Stud J*, 49, 703–730. <https://doi.org/10.1111/psj.12369>.
- Lipinge, K., & Huddlestone, K. (2023). English lingua franca as a language of learning and teaching in northern Namibia: A report on Oshiwambo teachers' experiences. *Southern African Linguistics and Applied Language Studies*, 41(3), <https://www.ajol.info/index.php/salas>.
- Lim-Ramos, S., Francisco, W., Leduna, N. A., Librado, K. S., Nuñez, M. R., Deran, J. J., & Alieto, E. (2020). Substituting English with a Local Language: Examining Parents' Belief Toward Chavacano as Language of Instruction. *Asian EFL*, 27(1), 177-195. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3570325.
- Littlewood, W., & Yu, B. (2011). First language and target language in the foreign language classroom. *Language Teaching*, 44(1), 64-77. <https://www.researchgate.net/publication/240472157>.

- Machida, T., & Walsh, D. J. (2015) Implementing EFL policy reform in elementary schools in Japan: a case study. *Current Issues in Language Planning*, 16(3), 221-237. <https://eric.ed.gov/?id=EJ1072218>.
- Mackay Report (1981). *Mackay Report*. Nairobi Government Printer.
- Maio, G. R., & Olson, J. M. (1995). Relations between values, attitudes, and behavioral intentions: The moderating role of attitude function. *Journal of Experimental Social Psychology*, 31(3), 266–285. <https://doi.org/10.1006/jesp.1995.1013>.
- Mashinja, B. Z., & Mwanza, D. S. (2020). The efficacy of translanguaging as pedagogic practice in selected Namibian multilingual primary classrooms. *Multilingual Margins*, 7, 49–68. <https://www.epubs.ac.za/index.php/mm/article/view/1422>.
- Martinez, N. (2023). Indigenous literacies: A look at pedagogies and policy in the Southwest United States. *Journal of Adolescent & Adult Literacy*, 66, 282– 289. <https://doi.org/10.1002/jaal.1282>.
- Mandillah, L. (2019). *Kenya curriculum reforms and mother tongue education issues, Challenges and implementation strategies*. University of Venda, South Africa. <https://orcid.org/000-0003-1020-8916>.
- Mashige, M., Cekiso, M., & Meyiwa, T. (2019). Foundation Phase teachers' experiences with instruction in the mother tongue in the Eastern Cape. *South African Journal of Childhood Education*, 9(1), 1-10. <https://files.eric.ed.gov/fulltext/EJ1237562.pdf>.
- Mazmanian, & Sabatier, (1989). *Implementation and public policy with a new postscript*. University press of America. <https://g.co/kgs/viygYV3>.
- Mbaabu, I. (1992). *The Impact of Language Policy on the Development of Kiswahili from 1930 -1990*. [Unpublished Thesis-Howard University]. Washington.

- Mbah, B. M. (2012). Language policy, mother tongue education and the role of the Nigerian language teacher in Nigerian language education. *Language Policy*, 3(10), 48-54. <https://core.ac.uk/download/pdf/234633578.pdf>.
- Mbaka, W. N., Atieno, C. P., & Karuri, M. (2013). Implementation Status of Kenya's Language in Education Policy: A Case Study of Selected Primary Schools in Chuka Division, Meru South District, Kenya. *Journal of Education and Practice*, 4(23), 97-104. <https://www.iiste.org/Journals/index.php/JEP/article/view/8403/8695>.
- Mberia, K. (2016). Mother tongues as media of instruction: The case of Kenya. The University of Nairobi. *Journal of Language and Linguistics*, 5 (2016), 46-59. <https://uonjournals.uonbi.ac.ke/ojs/index.php/unjll/issue/view/193>.
- Meganathan, R. (2011). Language Policy in Education and the Role of English in India: From Library Language to Language of Empowerment. *Online Submission*. <https://eric.ed.gov/?id=ED530679>.
- Merriam, S. B. (2014). *Qualitative research: a guide to design and implementation*. Jossey-Bass.
- McIvor, O. (2018). *Indigenous languages in Canada: What you need to know*. Ottawa, ON, Canada: CCUNESCO.
- Mohamed, C. (2013). Mother Tongue in Education: The African Experience. <https://www.moroccoworldnews.com/2013/06/94121/mother-tongue-in-education-the-african-experience>.
- Min, G. (2006). Vygotsky's sociocultural Theory and The Role of Input and Output in Second Language Acquisition. *CELEA Journal*, 29 (4),1-14. https://www.academia.edu/29803273/VYGOTSKY_%C3%.

- Ministry of Education (2012). *Sessional Paper Number 14 of 2012 on reforming education and training sectors in Kenya*. Nairobi MoE.
- Ministry of Education, Science and Technology (2014). *Language Policy in Basic Education Institutions*. Circular Nairobi Government of Kenya.
- Mkandawire, S. B. (2017). Familiar Language Based Instruction Versus Unfamiliar Language for the Teaching of Reading and Writing Literacy Skills: A Focus on Zambian Languages and English at Two Primary School in Lusaka. *Zambia Journal of Language Studies*, 1(1), 53 – 81.
<https://www.researchgate.net/publication/327545348>.
- Mose, P. N. (2015). The development of trilingual literacy in primary schools in Kenya [Unpublished doctoral dissertation -Rhodes University]. Grahams town, South Africa.
- Mose, P. N. (2016). Bilingualizing linguistically homogeneous classrooms in Kenya: Implications on policy, second language learning, and literacy. *International Journal of Bilingual Education and Bilingualism*, 22(4), 1-14.
<https://eric.ed.gov/?id=EJ1210969>.
- Mose, P. N. (2017). Language-in-education policy in Kenya: Intention, interpretation, implementation. *Nordic Journal of African Studies*, 26(3), 16-16.
<https://www.njas.fi/njas/article/view/86>.
- Mose, P., & Kaschula, R. (2019) Developing Mother Tongues as Academic Languages in Primary Schools in Kenya: Exploring Extent and Indispensability, *Journal of Language, Identity & Education*, 18(5), 329-342, DOI: 10.1080/15348458.2019.1645605.

- Moser, C. A., & Kalton, G. (2017). *Survey methods in social investigation*. Routledge.
- Mose, P. N. (2015). The development of trilingual literacy in primary schools in Kenya. [unpublished doctoral dissertation - Rhodes University]. Grahamstown.
- Mufanechiya, A., & Mufanechiya, T. (2011). Using mother tongue as a medium of instruction in the teaching of mathematics in the Zimbabwean junior primary schools: Desirable or feasible? *Journal of Asian Scientific Research*, 1(4), 194-203. https://scielo.org.za/scielo.php?script=sci_nlinks&ref=6279516&pid=S2223-7682201900010005400013&lng=en.
- Mugaddam, A. H., Garri, D. S. A., & Alnour, A. (2020). Language Policy and Conflict as Learning Barriers: The Plight of Linguistic Minority Schoolchildren in Darfur, Sudan. *World Journal of Education*, 10(2), 1-14. <https://files.eric.ed.gov/fulltext/EJ1249800.pdf>.
- Mugambi, P. J. (n.d.). *An analysis of the politics of language in Kenya: Harnessing linguistic diversity for national and regional development*. Nairobi, Kenya. Department of Kiswahili and African Languages, Kenyatta University.
- Muthwii, M. J. (2004). Language of instruction: A qualitative analysis of the perceptions of parents, pupils and teachers among the Kalenjin in Kenya. *Language, Culture and Curriculum*, 17(1), 15–32. <https://psycnet.apa.org/record/2004-17973-002>.
- Muthwii, M. J. (2002). *Language Policy and Practice in Kenya and Uganda*. Phoenix Publishers.
- Mwakira, G., & Mwangi, V. (2021). The use of mother tongue language and its effect on academic performance in public schools in Kenya. *International Journal of*

Linguistics, 1(1), 20-27.

<https://www.iprjb.org/journals/index.php/IJL/article/view/1240?srsltid>.

Mwamwenda, T. S. (2009). *Educational Psychology. An African Perspective*. Durban.

Heinemann.

Mwaniki, M. (2014). Mother tongue education in primary teacher education in Kenya: a

language management critique of the quota system. *Multilingual Education*,

4(1),1-17. <https://doi.org/10.1186/s13616-014-0011-4>.

Nabea, W. (2009). Language policy in Kenya: Negotiation with hegemony. *Journal of Pan*

African Studies, 3(1), 121–138.

<http://www.jpanafrican.com/docs/vol3no1/3.1%20Kenya%20Language%20Policy.pdf>.

Naidu, S. N. M., & Rajanthiran, S. (2021). Education in Malaysia: Educating for Inclusive-

Holistic Growth, Political Needs? —The Transformation of Vernacular and

Particularised Education towards Integration into “Malaysian Education”. *Open*

Journal of Social Sciences, 9(3), 471-490.

https://www.scirp.org/pdf/jss_2021033014565761.pdf.

Naom, N., & Ambiyu, S. (2014). Mother Tongue in Instruction: The Role of Attitude in

the Implementation. *International Journal of Research in Social Sciences*, 4 (1),

77–87. [http://www.ijsk.org/uploads/3/1/1/7/3117743/8_mother_tongue](http://www.ijsk.org/uploads/3/1/1/7/3117743/8_mother_tongue_and_education.pdf)

[_and_education.pdf](http://www.ijsk.org/uploads/3/1/1/7/3117743/8_mother_tongue_and_education.pdf).

Nardi, P. M. (2018). *Doing survey research: A guide to quantitative methods*. Routledge.

- Negede, D. (2000). *An Investigation of the Washback Effect of the Ethiopian School Leaving Certificate (ESLCE)*. [Master's thesis - Addis Ababa University].
Kampala.
- Nekvapil, J. (2016). Language Management Theory as one approach in Language Policy and Planning. *Language and Education*, 14(1), 22-31.
<https://www.researchgate.net/publication/283685130>.
- Nel, N., & Heléne, M. (2010). The impact of teachers' limited English proficiency on English second language learners in South African Schools. *South African Journal of Education* ,30 (4), 635–650.
http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S0256-01002010000400009.
- Ngetich, N. (2022). *Language in Education Policy in Kenya: What Place for Foreign Languages?* Moi University.
<https://www.ajol.info/index.php/jllcs/article/download/267010/251950/630523>.
- Ngcobo, M. N., & Barnes, L. A. (2021). *English in the South African language-in-education policy*. <https://theconversation.com/where-kenya-is-spending-money-on-education-and-whats-missing-119393>.
- Njoroge, C. M. (2017). The efficacy of using mother language in the teaching of mathematics and science in primary schools: evidence from grade one classrooms in Kenya. *Journal of Applied Linguistics and Language Research*, 4(8), 133-150.
<http://www.jallr.com/index.php/JALLR/article/view/728>.

- Noormohamadi, R. (2008). Mother Tongue, a Necessary Step to Intellectual Development. *Pan-Pacific Association of Applied Linguistics*, 12(2), 25-36.
<https://files.eric.ed.gov/fulltext/EJ921016.pdf>.
- Nyaga, S., & Christine, A. (2012). Teaching in linguistically diverse classrooms: difficulties in the implementation of the language-in-education policy in multilingual Kenyan Primary School Classrooms. *A Journal of Comparative and International Education*, 42 (6), 863–79.
<http://dx.doi.org/10.1080/03057925.2012.707457>.
- Nyarigoti, N. (2014). *Mother tongue in instruction: the role of attitude in the implementation*. <https://www.researchgate.net/publication/333934187>.
- Nyariki, L. (2020). *Kenya: the key role of national languages in education and training*. Association for the Development of Education in Africa (ADEA).
- Obiero, O. J. (2010). A case of a mother tongue and another mother tongue in school: efforts at revitalization of Olusuba language of Kenya. *Journal of Third World Studies*, 27 (2), 267–91. <http://ir.jooust.ac.ke/handle/123456789/227>.
- O'Brien, B., Yussof, N. T., Vijayakumar, P., Mohamed, M. B. H., & Leong, X. E. R. (2020). Exploring characteristics of quality in language teaching & learning: The Mother Tongue Adapted Coding Scheme (MACS). *Early Childhood Research Quarterly*, 53, 586-600. <https://doi.org/10.1016/j.ecresq.2020.07.003>.
- Olaoye, A. A. (2009). *Language and the Re-branding Project in Nigeria. A Lead Paper Presented at the National Conference of the School of Languages, FCE. Obudu, Cross Rivers State.*

- Olaoye, A. A. (2013). The Role of Indigenous Languages in National Development: A Case Study of Nigerian Linguistic Situation. *International Journal of Applied Linguistics & English Literature*, 2 (3), 29-37. <https://journals.aiac.org.au/index.php/IJALEL/article/view/847>.
- Ondondo, E. A. (2020). The Role of Indigenous Languages in Sustainable Development in Kenya. *International Journal of Applied Linguistics and Translation*, 6(2), 42-46. <https://www.researchgate.net/publication/342891921>.
- Önkaş, N. A. (2011). New approaches to the teaching of mother tongue. *Journal of Communications Research*, 3(1). <https://www.researchgate.net/publication/292123087>.
- Opoku-Amankwa, K., Edu-Buandoh, D. F., & Brew-Hammond, A. (2015). Publishing for mother tongue-based bilingual education in Ghana: Politics and consequences. *Language and Education*, 29(1), 1-14. <https://www.researchgate.net/publication/269286616>.
- Osei-Kojo A, Ingold K, Weible C M (2022) The advocacy coalition framework: Lessons from application in African countries. *Politische Vierteljahresschrift*, 63,181–201. <https://link.springer.com/article/10.1007/s11615-022-00399-2>.
- Othieno, J. (2014). *Our Languages are the Best Method to Teach our Children*. Daily Nation, February 10, 2014.
- Owu-Ewie, C. (2006). *The language policy of education in Ghana: A critical look at the English-only language policy of education*. In *Selected proceedings of the 35th annual conference on African linguistics* (pp. 76-85). Somerville, MA: Cascadilla Proceedings Project. <https://www.lingref.com/cpp/acal/35/paper1298.pdf>.

- Patten, M. L., & Newhart, M. (2017). *Understanding research methods: An overview of the essentials*. Routledge.
- Peyton, J. K. (2015). Language of Instruction: Research Findings and Program and Instructional Implications. *Reconsidering Development*, 4 (1), 1-19.
<http://pubs.lib.umn.edu/reconsidering/vol4/iss1/6>.
- Phelps Stoke Commission (1924). *Report of the Commission of Inquiry*. Nairobi Government Press.
- Piaget, J. (1983). *Piaget's theory*. *Handbook of Child Psychology*. Wiley.
- Piper, B., & Emily, M. (2011). Mother tongue and reading: using early grade reading assessments to investigate language-of-instruction policy in East Africa. In the early grade reading assessment: applications and intervene.
<https://www.researchgate.net/publication/330977301>.
- Piper, B., Dunston, K., & Arbogast, O. (2015). *The Primary Math and Reading (PRIMR) Initiative, DFID/Kenya Rural Expansion Programme, Bungoma and Machakos Endline Study. Prepared for DFID/Kenya under Contract no. 202657- 108*.
 Research Triangle Park, NC: RTI International.
- Piper, B. (2009). *Impact Study of SMRS Using Early Grade Reading Assessment in Three Provinces in South Africa. Prepared for USAID/Southern Africa under the Integrated Education Program, Contract no. 674-C-00-04-00032-00*. Research Triangle Park, NC: RTI International.
https://www.eddataglobal.org/courses/survey/resources/Handout_3_FINAL_RSA_SMRS_EGRA_Impact_Study.pdf.

- Piper, B., Evelyn, J., & Kennedy, K. (2015). Pro-Poor PRIMR: Improving Early Literacy Skills for Children from Low-Income Families in Kenya. *Africa Education Review*, 12 (1), 67–87. <https://dx.doi.org/10.1080/18146627.2015.1036566>.
- Piper, B. (2010a). *Kenya Early Grade Reading Assessment findings report. Prepared in cooperation with Makerere University Institute for Social Research, for the William and Flora Hewlett Foundation, under the Monitoring of Learning Outcomes in Sub-Saharan Africa project, Contract No. 2008-3367*. Research Triangle Park, RTI International.
- Piper, B. (2010b). *Uganda Early Grade Reading Assessment findings report: Literacy acquisition and mother tongue. Report prepared for the William and Flora Hewlett Foundation under the Monitoring of Learning Outcomes in Sub-Saharan Africa project, Contract No. 2008-3367*. Research Triangle Park RTI International.
- Pramod, K. S., & Guofang, L. (2022) Translanguaging or unequal languaging? Unfolding the plurilingual discourse of English medium instruction policy in Nepal’s public schools, *International Journal of Bilingual Education and Bilingualism*, 25(6), 2075-2094, DOI: 10.1080/13670050.2020.1849011.
- Probyn, M. (2009). ‘Smuggling the vernacular into the classroom’: Conflicts and tensions in classroom codeswitching in township/rural schools in South Africa. *International Journal of Bilingual Education and Bilingualism*, 12(2), 123–136. <https://doi.org/10.1080/13670050802153137>.

- Rajathurai, N. (2020). Understanding of the Importance of Mother Tongue Learning. *International Journal of Trend in Scientific Research and Development*, 5(1), 77-80. www.ijtsrd.com/papers/ijtsrd35846.pdf.
- ReMohajan, H. K. (2013). Poverty and Economic Development of Kenya. *International Journal of Information Technology and Business Management*, 18 (1), 72-82. https://mpira.ub.uni-muenchen.de/51072/1/MPRA_paper_51072.pdf.
- Republic of Kenya. (1976). *Report of the National Committee on Educational Objectives and Policies (Gachathi Report)*. Nairobi Government Printer.
- Rosemary, W., Caroline, D., & Taadi, M. (2022). Enhancing visibility of local African languages in South Africa through learning to read. *Journal of Multilingual and Multicultural Development*. <https://www.semanticscholar.org/paper/Enhancing-visibility-of-local-African-languages-in-Wildsmith-Cromarty-Dyer/ca9c106bbff3d3c8bef922c33843f89cd233901b>.
- Rotumoi, J., & Kipkoech, L.C. (2014). Teachers' attitudes towards the use of instructional resources in teaching of the novel. *English Language and Literature Studies*, 4(3), 58-64. <https://ccsenet.org/journal/index.php/ells/article/view/39906>.
- Runo, M. (2010). *Identification of Reading Disabilities and Teacher-Oriented Challenges: In Teaching Reading to Standard Five Learners in Nyeri and Nairobi Districts, Kenya*. VDM Publishing.
- Rwantabagu, H. (2011). "Tradition, Globalisation and Language Dilemma in Education: Africa." *International review of Education*, 57. https://www.sil.org/sites/default/files/files/languages_in_educ_and_development_kenya_june2015.pdf.

- Safakish, M. (2015). The Role of Indigenous Knowledge in Sustainable Rural Economic Development. *Journal of Applied Environmental and Biological*, 5 (9), 285-28. https://www.academia.edu/27907336/The_role_of_indigenous_knowledge_in_sustainable_rural_economic_development.
- Sahar, A. (2016). *Using Games as a Tool in Teaching Vocabulary to Young Learners*. King Abdul Aziz University, Saudi Arabia. <http://dx.doi.org/10.5539/elt.v9n7p120>
- Samuelson, B. L., & Freedman, S. W. (2010). Language policy, multilingual education, and power in Rwanda. *Language policy*, 9(3), 191-215. <https://link.springer.com/article/10.1007/s10993-010-9170-7>.
- Sara Hennessy, B., & Riikka, H. (2015) Challenges and opportunities for teacher professional development in interactive use of technology in African schools. *Technology, Pedagogy and Education*, 24(5), 1-28, DOI: 10.1080/1475939X.2015.1092466.
- Schroeder, L. (2000). *Let's read Tharaka: a self-teaching transition primer for Kitharaka*. Nairobi BTL.
- Schroeder, L. (2003). *Teacher Training Program Basics, written for the Tharaka program in Kenya*. Unpublished
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Shaghghi, N., Ghosh, S., Ali, F., & Ali, A. B. (2021). *An English to Urdu educational video translation pipeline to reinforce mother-tongue based learning. in world congress on services*. Springer.

- Sharma, U., & Nuttal, A. (2016). The impact of training on pre-service teacher attitudes, concerns, and efficacy towards inclusion. *Asia-Pacific journal of teacher education*, 44(2), 142-155.
<https://www.tandfonline.com/doi/abs/10.1080/1359866X.2015.1081672>.
- Sheikh, F., Rich, M., & Galvão, W. (2023). Language of Instruction and Education Policies in Kenya. *Reconsidering Development*, 7(1).
<https://pubs.lib.umn.edu/index.php/reconsidering/article/view/4569>.
- Stanton, N. (2009). *Mastering Communication. Palgrave: Macmillan. Technology Policy Studies Network*. University Press.
- Surrain, S. (2021). ‘Spanish at home, English at school’: how perceptions of bilingualism shape family language policies among Spanish-speaking parents of preschoolers, *International Journal of Bilingual Education and Bilingualism*, 24(8), 1163-1177.
<https://www.tandfonline.com/doi/abs/10.1080/13670050.2018.1546666>.
- Suri, H. (2011). Purposeful sampling in qualitative research synthesis. *Qualitative Research Journal*, 11(2), 63-75.
<https://www.emerald.com/insight/content/doi/10.3316/QRJ1102063/full/html>.
- Syatriana, E., & Akib, E. (2020). The Potential of Local Language and Language Acquisition: A Case Study of Makassar Language, Indonesia. *Journal of Critical Reviews*, 7(13), 24 – 44.
- Snyder, M., & DeBono, K. G. (1989). *Understanding the functions of attitudes: Lessons from personality and social behavior*. <https://psycnet.apa.org/record/1989-97417-013>.

- Tackie-Oforu, V., Mahama, S., Vandyck, E. S. T. D., Kumador, D. K., & Toku, N. A. A. (2015). Mother Tongue Usage in Ghanaian Pre-Schools: Perceptions of Parents and Teachers. *Journal of Education and Practice*, 6(34), 81-87. <https://files.eric.ed.gov/fulltext/EJ1086075.pdf>.
- Taylor, S., & von Fintel, M. (2016). Estimating the impact of language of instruction in South African primary schools: A fixed effects approach. *Economics of Education Review*, 50, 75-89. <https://doi.org/10.1016/j.econedurev.2016.01.003>.
- Terra, S. E. (2021) Bilingual education in Mozambique: a case-study on educational policy, teacher beliefs, and implemented practices. *International Journal of Bilingual Education and Bilingualism*, 24(1), 16-30. <https://www.tandfonline.com/doi/abs/10.1080/13670050.2018.1441803>.
- Thondhlana, J. (2002). *Using indigenous languages for teaching and learning in Zimbabwe*. <http://jan.ucc.nau.edu/~jar/ILAC>.
- Timor, T. (2012). Use of the mother tongue in teaching a foreign language. *Language Education in Asia*, 3(1), 7-17. https://camtesol.org/Download/LEiA_Vol3_Iss1_2012/LEiA_V3_I1_02_Timor_Use_of_the_Mother_Tongue.pdf.
- Tollefson, J. W. (Ed.). (2012). *Language policies in education*. Routledge.
- Toyin, M. A., & Cina, M. (2019). Experiences of teachers in implementing inclusion of learners with special education needs in selected Fort Beaufort District primary schools. *South Africa, Cogent Education*, 6(1), 1703446. <https://www.tandfonline.com/doi/full/10.1080/2331186X.2019.1703446>.

- Trudell, B. (2016). Language choice and educational quality in Eastern and Southern Africa a review. *Comparative Education*, 52(3), 281-293.
<https://eric.ed.gov/?id=EJ1106848>.
- Trujillo, J. S. (2020). The use of mother tongue in instruction: Pupil's performance across the years. *Globus Journal of Progressive Education*, 10(1), 59-67.
<https://globusedujournal.in/wp-content/uploads/2020/05/Juliet-Trujillo-GPEJJ20.pdf>.
- Tse, S. K., Shum, M. S. K. M., Ki, W.W. (2001). The Transition from English to Mother-Tongue Chinese as Medium of Instruction; Issues and Problems as Seen by Hong Kong Teachers. *L1-Educational Studies in Language and Literature*, 1, 9–3.
<https://www.academia.edu/16406303>.
- Tupas, R. (2015) Inequalities of multilingualism: challenges to mother tongue-based multilingual education. *Language and Education*, 29(2), 112-124.
<https://repository.nie.edu.sg/bitstream/10497/17671/1/LE-29-2-112.pdf>.
- UMAR, F. A. (2018). *Teacher factors influencing use of mother tongue in teaching of mathematics in lower primary schools in Yola South local government*. [Doctoral dissertation, School of Education, Kenyatta University]. Kenya.
- UNESCO (1953). *The use of vernacular language in education. UNESCO monographics on foundations of education, 8 Paris*. UNESCO.
- UNESCO (2005). *Challenges of implementing free primary education in Kenya: Assessment Report*. UNESCO.
<https://unesdoc.unesco.org/ark:/48223/pf0000151654>.

- Uwezo (2014). *Are Our Children Learning? Literacy and Numeracy in Kenya 2014*. Twaweza East Africa, Nairobi.
<http://www.twaweza.org/uploads/files/UwezoKenya>.
- Van der Jeught, S. (2015). *EU Language Law*, Groningen: Europa Law Publishing
- Varga, I. (2020). *Teaching English as the third language: The case of young Boyash Romanian speakers in Croatia* [Doctoral dissertation- University of Zagreb]. Zagreb.
- Vieira, M. D. (2020). *How is the advocacy coalition framework doing? some issues since the 2014 Agenda*. Pearson University.
- Vygotsky, L. S., & Cole, M. (1978). *Mind in society: Development of higher psychological processes*. Harvard university press.
- Walliman, N. (2017). *Research methods: The basics*. Routledge.
- Wamberia, K. (2016). Mother tongues as media of instruction: the case of Kenya. *The University of Nairobi Journal of Language and Linguistics*, 5(1), 46-59.
<http://erepository.uonbi.ac.ke/bitstream/handle/11295/96015>.
- Wang, L., & Kirkpatrick, A. (2015). *Trilingual education in Hong Kong primary schools: an overview*. <https://doi.org/10.1186/s13616-015-0023-8>.
- Wardhaugh, R. (1992). *An Introduction to Sociolinguistics*. Blackwell.
- Watson, K., (2007). Language, education and ethnicity: whose rights will prevail in an age of globalisation? *International Journal of Educational Development* 27, 252–265.
<https://www.sciencedirect.com/science/article/abs/pii/S0738059306001441>.

- Wildemuth, B. M. (Ed.). (2016). *Applications of social research methods to questions in information and library science*. ABC-CLIO.
- Wiley, T. G., & García, O. (2016). Language policy and planning in language education: Legacies, consequences, and possibilities. *The Modern Language Journal*, 100(S1), 48-63. <https://doi.org/10.1111/modl.12303>.
- Willott, L. (2019). *Average survey response rate: What you need to know*. <https://www.customerthermometer.com/customer-surveys/average-survey-response-rate>.
- Wolff, E. H. (2002). *The heart of the African language question in education*. *Speaking African: African languages for education and development*. CASAS Book Series, 21.
- Wolff, E. H. (2010). *Multilingualism and language policies in Anglophone and Francophone Africa from a sociolinguistic macro-perspective, with reference to language-in-education issues*. Institute of African Studies, Leipzig University.
- Wolff, E. H. (2015). *The case for dual medium instruction*. Seminar Paper Presented at UHURU, February, 2015. Rhodes University.
- World Bank (2014). *Education for All*. <https://www.worldbank.org/en/topic/education/brief/education-for-all>.
- World Bank (2021). *Loud and clear: effective language of instruction policies for learning*. *A world bank policy approach paper*. The World Bank Group.
- Young, C. (2010). First language first: Literacy education for the future in a multilingual Philippine society. *International journal of bilingual education and bilingualism*, 5(4), 221-232. <https://doi.org/10.1080/13670050208667757>.

Zaka, R., & Abdullahi, H. (2022). *Kwale County to implement mother tongue education program*. Kenya News Agency, News for Development Early Learning Toolkit: Mother Tongue instruction. <http://www.earlylearningtoolkit.org>.

APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

November, 2022

Dear Sir/Madam,

RE: PERMISSION TO CARRY OUT RESEARCH

I am a student undertaking a course in Doctor of Philosophy in Education Leadership and Management at Kenya Methodist University. I am required to submit, as part of my research work assessment, a research thesis on “**Preparedness for Implementation of Indigenous Language Policy in Lower Primary Schools in Meru County, Kenya.**” To achieve this, you have been selected to participate in the study. I kindly request the sampled respondents to fully, participate in the study. This information will be used purely for academic purpose and your name will not be mentioned in the report. Findings of the study, shall upon request, be availed to you.

Your assistance and cooperation will be highly appreciated.

Thank you in advance.

Yours faithfully,

Magaju Jacinta Kagendo

EDU-4-1278-2/2019

APPENDIX II: INFORMED CONSENT FORM

Appendix II: Consent to Participate in the Study

Jacinta Magaju

Kenya Methodist University

P.O. Box 267 – 60200.

Dear respondent,

I am writing to request for consent to participate in my study which will help me to actualize my academic research that investigates on *Preparedness for Implementation of Mother tongue Language Policy in Lower Primary Schools in Meru County, Kenya*. This research hope to inform the preparedness of public lower primary schools to execute the mother tongue policy in Meru County.

Procedure to be followed

The specific questions in the questionnaire and interview is organized into sections ranging from section A to G. Section A covers the introduction part constituting the biographical information of the sampled respondents. Sections B, C, D, E, and F contain questions regarding the variables of the study. Most questions in the questionnaire are closed-ended, and a few open-ended ones for each construct. All sentiments in the questionnaire are in 5 points Likert scale. In total. It takes approximately 10 to 15 minutes to complete the questionnaire and 30 minutes to respond to interview questions. The respondent is under no obligation to complete the questionnaire or to answer all questions presented or participate in the interview. If one comes across a question which one don't wish to answer, simply skip it.

I hope you will be willing to participate in this study in your capacity as one of key respondent identified for the study.

Discomforts and risks

In this study, there is no risks of participating in the research. The reputation of the participant will also not be injured. The respondent is welcome to discontinue participation in the study at any time, should one wish to do so due to discomfort.

Benefits

If you participate in this study you will help to inform the preparedness of public lower primary schools to execute the mother tongue policy in Meru County. Your input is therefore critical in generating new knowledge and that will help improve the preparedness schools.

Rewards

There is no reward for anyone who chooses to participate in the study. The participation is entirely voluntary. Each participants is asked to avail information freely as part of contribution to community development.

Confidentiality

Your participation in this study will remain strictly confidential. No name will be recorded on the questionnaire or attached to any of the data you provide. The data collection will be kept in a confidential location after collection and in future and, moreover, will not have anything to identify you.

Contact Information

Should you have questions regarding your participation, please contact me on jacinta.magaju@kemu.ac.ke. You may also contact my research supervisor at winfred.kithinji@kemu.ac.ke

I am kindly asking you to sign the consent form (below) indicating agreement for you to participate in this study.

Participant’s Statement

The above statement regarding my participation in the study is clear to me. I have been given a chance to ask questions and my questions have been answered to my satisfaction. My participation in this study is entirely voluntary. I understand that my records will be kept private and that I can leave the study at any time. I understand that I will not be victimized at my place of work whether I decide to leave the study or not and my decision will not affect the way I am treated at my work place.

Name of Participant..... Date.....

Signature.....

Investigator’s Statement

I, the undersigned, have explained to the volunteer in a language s/he understands the procedures to be followed in the study and the risks and the benefits involved.

Name of interviewer.....Date.....

Interviewer Signature.....

APPENDIX III: QUESTIONNAIRE FOR GRADE THREE TEACHERS

Dear respondent

The researcher is a student undertaking a Doctor of Philosophy course in Education Leadership and Management at Kenya Methodist University. I am required to submit, as part of my research work assessment, a research project on **“Preparedness for Implementation of Mother tongue Language Policy in Lower Primary Schools in Meru County, Kenya.”** The information you provide will be treated with confidentiality and entirely used for purposes of this study.

Section A: General Information

Please tick (✓) the appropriate answers in the boxes provided

1. Kindly indicate your gender (a) Male () (b) Female ()

2. Kindly indicate your age bracket

- (a) 26 – 30 yrs () (b) 31 – 35 yrs () (c) 36 – 40 yrs ()
(d) 41 – 45 yrs () (e) 46 – 50 yrs () (f) Above 50 yrs ()

3. What is your highest academic level attained?

- (a) Diploma () (b) Bachelors () (c) Masters () (d) PhD ()

4. How many years have you been a teacher?

- Less than 5 yrs () 5 – 10 yrs () 11 – 15 yrs ()
16 – 20 yrs () Above 20 yrs ()

5. How many ethnic groups are represented in the classes that you handle at the lower primary level in your school?

6. Kindly list the ethnic groups for teachers teaching at the lower primary level in your school

7. Kindly list the ethnic groups that the pupils in the lower primary level of your school belong to

.....

Section B: Use of Mother Tongue as the Language of Instruction in Primary Schools

8. To what extent do teacher in your school use Kimeru language (indigenous language) when teaching pupils in lower primary?

Never (1) Rarely (2) Sometimes (3) Most of the time (4) Always (5)

The following are statements related to establishing the extent to which is Kimeru language is used as the language of instruction in lower primary schools in Meru County. Please rate each statement according to your understanding by ticking (√) where it is appropriate. The question is, how often is Kimeru language to teach each of the listed subject?

Key: Never = 0 Rarely = 1 Sometimes = 2 Most of the time = 3 and Always = 4

	Subjects taught in Kimeru Language	Rating				
		Never (0)	Rarely (1)	Sometimes (2)	Most of the time (3)	Always (4)
a)	Mathematics	(0)	(1)	(2)	(3)	(4)
b)	English	(0)	(1)	(2)	(3)	(4)
c)	Kiswahili	(0)	(1)	(2)	(3)	(4)
d)	Science	(0)	(1)	(2)	(3)	(4)
e)	Social studies	(0)	(1)	(2)	(3)	(4)
f)	Christian religious studies	(0)	(1)	(2)	(3)	(4)

9. What other mother tongue languages (indigenous language) are used for instruction at your school apart from Kimeru?

.....

Please explain.....

.....

.....

10. To what extent do teachers who handle lower primary learners in your school switch from one language to another when teaching?

(a) Never (0) (b) To a low extent (1) (c) To a moderate extent (2)

(d) To a high extent (3) (e) To a very low extent (4)

13. Describe how learners respond to teaching in mother tongue language as compared to using other language such as English?

.....
.....
.....

14. What is the guidelines from your school regarding implementing mother tongue language policy in teaching learners in lower primary level?

.....
.....
.....

Identify challenges affecting the preparedness towards implementing the mother tongue language policy for teaching learners in lower primary school.

.....
.....
.....

15. Suggest possible solutions for the challenges you have identified above.

.....
.....
.....
.....

Section C: Teacher Factors in the Preparedness for Implementation of Mother-Tongue Language Policy in Lower Primary Schools in Meru County, Kenya

16. The following are statements related to the teacher factors influencing the instruction of learners in Kimeru language in primary schools in Meru County Please rate them according to your understanding by ticking (√) where it is appropriate.

Key: SD = Strongly Disagree, D = Disagree, MA = Moderately Agree; A= Agree and SA= Strongly Agree

	Statements on teacher factors	SD	D	MA	A	SA
a)	During their initial training, teachers were taught how to use mother tongue to teach	(0)	(1)	(2)	(3)	(4)
b)	Lower primary school teachers are able to teach using various mother tongue languages	(0)	(1)	(2)	(3)	(4)
c)	Use of mother tongue languages (indigenous language) require lower primary school teachers to get additional in-service training	(0)	(1)	(2)	(3)	(4)
d)	Some lower primary school teachers have been attending in-service training on how to use mother tongue language for teaching Grade 3 learners	(0)	(1)	(2)	(3)	(4)
e)	Lower primary school teachers are involved as stakeholders in curriculum development to ensure teaching strategies for mother tongue languages are considered	(0)	(1)	(2)	(3)	(4)
f)	I find the use of mother tongue languages natural when teaching	(0)	(1)	(2)	(3)	(4)
g)	I have been equipped with Mother Tongue Based Multilingual Education (MTB-MLE) resources	(0)	(1)	(2)	(3)	(4)
h)	Teachers in my school do not shy off from teaching and holding conversations in mother tongue languages	(0)	(1)	(2)	(3)	(4)
i)	I am proficient in Kimeru language	(0)	(1)	(2)	(3)	(4)
j)	I comfortable teaching the learners in Kimeru language	(0)	(1)	(2)	(3)	(4)
k)	Pupils are enthusiastic when taught in Kimeru language	(0)	(1)	(2)	(3)	(4)
l)	The interaction of teachers and pupils while teaching in Kimeru language in the school is good	(0)	(1)	(2)	(3)	(4)

17. Suggest what should be done to address the teacher preparedness in implementing mother tongue language policy for teaching learners in lower primary school.

.....

.....

.....

.....

Section D: Instructional Materials factor in the Preparedness for the Implementation of Mother-Tongue Language Policy in Lower Primary Schools in Meru County, Kenya

18. The following are statements related to the role of instructional materials in preparedness for the Implementation of Mother tongue language policy in lower primary schools in Meru County. Please rate them according to your understanding by ticking (✓) where it is appropriate.

Key: SD = Strongly Disagree, D = Disagree, MA = Moderately Agree; A= Agree and SA= Strongly Agree

	Statement on instructional materials	SD	D	MA	A	SA
a)	Kenya Institute of Curriculum Development has provided schools with Kimeru language curriculum and syllabus to guide teachers in lesson preparation	(0)	(1)	(2)	(3)	(4)
b)	The Kimeru language course text books for teachers and learners are adequate	(0)	(1)	(2)	(3)	(4)
c)	There are adequate reference materials for supporting teaching in Kimeru Language in our school	(0)	(1)	(2)	(3)	(4)
d)	Teachers in our school have access to instructional materials in Kimeru Language at our school	(0)	(1)	(2)	(3)	(4)
e)	The orthographies in the Kimeru language instructional material is relevant	(0)	(1)	(2)	(3)	(4)
f)	Learners do not struggle with the orthographies in the Kimeru language instructional materials	(0)	(1)	(2)	(3)	(4)
g)	I don't have difficulty teaching using the orthographies in the Kimeru language instructional material	(0)	(1)	(2)	(3)	(4)

19. Suggest what should be done to address the instructional materials preparedness in implementing mother tongue language policy for teaching learners in lower primary school.

.....

.....

.....

Section E: Institutional Preparedness for the Implementation of mother tongue Language Policy in Lower Primary Schools in Meru County, Kenya

20. The following are statements related to role of institutional preparedness to implement mother tongue language policy in lower primary schools in Meru County. Please rate them according to your understanding by ticking (√) where it is appropriate.

Key: SD = Strongly Disagree, D = Disagree, MA = Moderately Agree; A= Agree and SA= Strongly Agree

	Statement	SD	D	MA	A	SA
a)	Primary schools in our region have a policy for using non-mother tongue languages in teaching and conversations	(0)	(1)	(2)	(3))	(4)
b)	Instructional materials are written in English or Kiswahili, hence, the policy encourage the use of the two languages alone during teaching	(0)	(1)	(2)	(3))	(4)
c)	I am aware of the language policy in the basic education framework	(0)	(1)	(2)	(3))	(4)
d)	There is adequate ICT resources to enable our teachers teach in Kimeru language	(0)	(1)	(2)	(3))	(4)
e)	The available infrastructure in our school at the moment can adequately support the use of mother tongue languages in teaching lower primary	(0)	(1)	(2)	(3))	(4)
f)	Our school avails the requisite support for curriculum requirements in using mother tongue languages in teaching	(0)	(1)	(2)	(3))	(4)
g)	There are aspects of the curriculum which I do not think can be well covered using mother tongue languages	(0)	(1)	(2)	(3))	(4)
h)	Our school has a budget that supports the use of mother tongue language in teaching	(0)	(1)	(2)	(3))	(4)
i)	Our school support pupils visit to visit cultural sites to learn more about the Kimeru language	(0)	(1)	(2)	(3))	(4)

21. Suggest what should be done to address the institutional preparedness for implementing mother tongue language policy for teaching learners in lower primary school.

.....

.....

.....

Section F: Teachers’ attitudes in the Preparedness for Implementation of Mother-Tongue Language Policy Lower Primary Schools in Meru County, Kenya

The following are statements related to teachers attitudes on instruction in Kimeru language in primary schools in Meru County. Please rate them according to your understanding by ticking (√) where it is appropriate. **Key: SD = Strongly Disagree, D = Disagree, MA = Moderately Agree; A= Agree and SA= Strongly Agree**

	Statement on teachers’ attitudes	SD	D	MA	A	SA
a)	I enjoy teaching using the Kimeru language	(0)	(1)	(2)	(3)	(4)
b)	I have high regard for Kimeru language	(0)	(1)	(2)	(3)	(4)
c)	I usually feel motivated when teaching using the Kimeru language	(0)	(1)	(2)	(3)	(4)
d)	I have special interest in the Kimeru language as an indigenous language / subject	(0)	(1)	(2)	(3)	(4)
e)	I usually introduce myself as the Kimeru language teacher / indigenous language / subject	(0)	(1)	(2)	(3)	(4)
f)	I usually go extra mile guiding learners in Kimeru language	(0)	(1)	(2)	(3)	(4)
g)	My love for the Kimeru language has caused me to embrace new methods of instructing learners	(0)	(1)	(2)	(3)	(4)
h)	I miss to be in school to teach using the Kimeru language	(0)	(1)	(2)	(3)	(4)
i)	I find it easier to explain aspects to learners using the Kimeru language	(0)	(1)	(2)	(3)	(4)

j)	I am proud to be associated with the Kimeru language	(0)	(1)	(2)	(3)	(4)
k)	I find Kimeru dialectology pleasant while teaching	(0)	(1)	(2)	(3)	(4)
l)	I enjoy the Kimeru dialectology while teaching	(0)	(1)	(2)	(3)	(4)
m)	I highly recommend the use of Kimeru language in teaching lower primary school learners	(0)	(1)	(2)	(3)	(4)
n)	I read more to understand how to use Kimeru language in teaching lower primary school learners	(0)	(1)	(2)	(3)	(4)
o)	I am passionate using Kimeru language in teaching lower primary school learners	(0)	(1)	(2)	(3)	(4)

22. How would you describe your attitude towards using mother tongue in teaching learners in lower primary schools?

.....

.....

.....

.....

Describe what should be done on teachers' attitude as a preparedness measure towards implementing the mother tongue language policy for teaching learners in lower primary school.

.....

.....

.....

.....

*Thank you for your time
God bless you*

APPENDIX III: INTERVIEW SCHEDULE FOR CSOs AND SQASOs

Dear respondent

I am a PhD student undertaking a Doctor of Philosophy course in Leadership and Education Management at Kenya Methodist University. I am required to submit, as part of my research work assessment, a research project on **“Preparedness for Implementation of Mother tongue Language Policy in Lower Primary Schools in Meru County, Kenya.”** The information you provide will be treated with confidentiality and entirely used for purposes of this study.

Section A: General Information

Please tick (√) the appropriate answers in the boxes provided

- 1. Kindly indicate your gender Male () Female ()

- 2. Kindly indicate your age bracket
 26 – 30 yrs () 31 – 35 yrs () 36 – 40 yrs ()
 41 – 45 yrs () 46 – 50 yrs () Above 50 yrs ()

- 3. What is your highest academic level attained?
 Diploma () Bachelors () Masters () PhD ()

- 4. How many years have you been in your current position?
 Less than 5 yrs () 6 – 10 yrs () 11 – 15 yrs ()
 16 – 20 yrs () 20 yrs and Above ()

PART B: PREPAREDNESS FOR PUPILS INSTRUCTION IN MOTHER TONGUE LANGUAGES

- 5. What guidelines has the government put in place for supporting the implementation of mother tongue language for teaching learners in lower primary level?
.....
.....
.....

6. What challenges affect the primary schools' preparedness towards implementing the mother tongue language policy for teaching learners in lower primary school.

.....

.....

.....

.....

Suggest possible solutions for those challenges

.....

.....

.....

.....

Section C: Teacher Factors in the Preparedness for Implementation of Mother-Tongue Language Policy in Lower Primary Schools in Meru County, Kenya

7. Discuss the level of teachers' preparedness to use mother tongue language to teaching the learners in lower primary school?

.....

.....

.....

.....

8. Suggest what should be done on teachers' preparedness for implementation of mother tongue language policy for teaching learners in lower primary school.

.....

.....

.....

.....

Section D: Instructional Materials factor in the Preparedness for the Implementation of Mother-Tongue Language Policy in Lower Primary Schools in Meru County, Kenya

9. What is the status of the availability of instructional materials for use in teaching pupils in mother tongue languages in primary school in Meru County?

.....

.....

.....

.....

10. What do you have to say about the relevancy and up-datedness of instructional materials for supporting the implementation of mother tongue languages for teaching learners in lower primary schools?

.....

.....

.....

.....

Section E: Institutional Preparedness for the Implementation of mother tongue Language Policy in Lower Primary Schools in Meru County, Kenya

11. What institutional preparedness measures that the government has put in place to support the implementation of mother tongue languages for teaching learners in lower primary schools?

.....

.....

.....

.....

12. Discuss the status of institutional preparedness towards implementing mother tongue languages for teaching learners in lower primary schools?

.....

.....

.....

.....

13. What should be done to address the institutional preparedness challenges in order to implement mother tongue languages for teaching learners in lower primary schools?

.....

.....

.....

.....

Section F: Teachers' attitudes in the Preparedness for Implementation of Mother-Tongue Language Policy Lower Primary Schools in Meru County, Kenya

14. How would you describe the teachers' attitude towards using mother tongue in teaching learners in lower primary schools?

.....

.....

.....

.....

15. What has the government done to address the teachers' attitude towards using mother tongue in teaching learners in lower primary schools?

.....

.....

.....

.....

Section G: General questions

16. Do you think the Kimeru language use in the area is generally declining among residents?

.....

.....

.....

.....

17. What is your comment regarding the community support for use mother tongue languages for pupil instruction in schools in the area?

.....

.....

.....

.....

APPENDIX VII: FOCUS GROUP DISCUSSION GUIDE FOR HEAD TEACHERS

Dear respondents,

My name is Jacinta Magaju and I am a PhD student undertaking a Doctor of Philosophy course in Leadership and Education Management at Kenya Methodist University. I am required to submit, as part of my research work assessment, a research project on **“Preparedness for Implementation of Mother tongue Language Policy in Lower Primary Schools in Meru County, Kenya.”** The information you provide will be treated with confidentiality and entirely used for purposes of this study.

OVERVIEW AND INSTRUCTIONS

Let me begin our discussion by reviewing a few things about the focus group.

We will be focusing on some specific topics. We are interested in what everyone has to say about them. If someone throws out an idea that you want to expand on, or if you have a different point

of view, please speak up. Sometimes I may have to interrupt the discussion to bring us back to the topic or to move on to another question or topic, to make sure that we cover everything on our

agenda. We will follow several practical guidelines during this session:

- We want everyone to express your opinions about the discussion topics. We are interested in different points of view. There are no right or wrong answers, and we are not here to resolve any issues you may bring up or to reach agreement. We just want to understand your views.
 - Give us only your first name or a nickname. No one needs identifying information about you. If you know each other, we ask that you agree to keep information confidential – if you discuss the things people said here, do not identify the people who said them.
 - Feel free to agree or disagree with what other people say, while respecting their views.
 - Please do not hold side conversations. We want to be able to hear from everyone, and to be able to hear what everyone says.
 - Please wait to be recognized by the moderator before speaking.
 - Sometimes we will go around the table to share views on a topic. You can always “pass” if you prefer not to comment on that particular topic.
 - Because we are also audio-recording the session, it would really help us if you could speak up.
- Do you have any questions so far?

Section A: General Information

Please tick (√) the appropriate answers in the boxes provided

18. Kindly indicate your gender Male () Female ()
19. Kindly indicate your age bracket
26 – 30 yrs () 31 – 35 yrs () 36 – 40 yrs ()
41 – 45 yrs () 46 – 50 yrs () Above 50 yrs ()
20. What is your highest academic level attained?
P1 () Diploma () Bachelors () Masters () PhD ()
21. How many years have you been a head teacher?
Less than 5 yrs () 6 – 10 yrs () 11 – 15 yrs ()
16 – 20 yrs () 20 yrs and Above ()

SECTION B: PREPAREDNESS IN THE IMPLEMENTATION OF MOTHER TONGUE LANGUAGE POLICY IN LOWER PRIMARY SCHOOLS IN MERU COUNTY, KENYA

22. What guidelines have you put in place for supporting the implementation of mother tongue language for teaching learners in lower primary level?
23. What challenges affect the preparedness towards implementing the mother tongue language policy for teaching learners in lower primary school.
24. Explain how your school is overcoming the challenges that you have identified

Section C: Teacher Factors in the Preparedness for Implementation of Mother-Tongue Language Policy in Lower Primary Schools in Meru County, Kenya

25. Discuss the level of teachers' preparedness to use mother tongue language to teaching learners in lower primary school?
26. What have you done to prepare teachers for implementation of mother tongue language policy for teaching learners in lower primary school.

Section D: Instructional Materials factor in the Preparedness for the Implementation of Mother-Tongue Language Policy in Lower Primary Schools in Meru County, Kenya

27. What is the status of the availability of instructional materials for use in teaching pupils in mother tongue languages in your primary school?

28. What is your observation regarding the relevancy and up-datedness of instructional materials for supporting the implementation of mother tongue languages for teaching learners in lower primary schools?
29. Discuss the challenges that hindering instructional materials preparedness for implementation of mother tongue languages for teaching learners in lower primary schools?
30. What instructional materials preparedness measures have you put in place in your school to support implementation of mother tongue language policy in lower primary.

Section E: Institutional Preparedness for the Implementation of mother tongue Language Policy in Lower Primary Schools in Meru County, Kenya

31. What institutional preparedness measures have you put in place in your school to support implementation of mother tongue language policy in lower primary?
32. Discuss the status of institutional preparedness of your schools towards implementing mother tongue languages for teaching learners in lower primary schools?
33. Discuss the challenges that hindering institutional preparedness for implementation of mother tongue languages for teaching learners in lower primary schools?
34. What have you done to address the institutional preparedness challenges in order to implement mother tongue languages for teaching learners in lower primary schools?

Section F: Teachers' attitudes in the Preparedness for Implementation of Mother-Tongue Language Policy Lower Primary Schools in Meru County, Kenya

35. How would you describe the teachers' attitude towards using mother tongue in teaching learners in lower primary schools?
36. What measures have you put in place to address the teachers' attitude towards using mother tongue in teaching learners in lower primary schools?

APPENDIX VIII: INTRODUCTION LETTERS AND ETHICAL CLEARANCE



KENYA METHODIST UNIVERSITY

P. O. Box 267 Meru - 60200, Kenya
Tel: 254-064-30301/31229/30367/31171

Fax: 254-54-30162
Email: deanrd@kemu.ac.ke

DIRECTORATE OF POSTGRADUATE STUDIES

June 13, 2023

Commission Secretary,
National Commission for Science, Technology and Innovations,
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,

RE: MAGAJU JACINTA KAGENDO (REG. EDU-4-1278-2/2019)

This is to confirm that the above named is a bona fide student of Kenya Methodist University, in the School of Education and Social Sciences, Department of Education undertaking a Doctoral Degree in Leadership and Education Management. She is conducting research on "Preparedness for Implementation of Mother Tongue Education Policy in Public Lower Primary Schools in Meru County, Kenya".

We confirm that her research proposal has been presented and approved by the University.

In this regard, we are requesting your office to issue a research license to enable her collect data.

Any assistance accorded to her will be highly appreciated.

Yours sincerely,



Dr. John M. Muchiri (PhD)
Director, Postgraduate Studies

Cc: Dean SESS
CoD, Education
Postgraduate Co-ordinator-SESS
Student Supervisors



KENYA METHODIST UNIVERSITY
P. O. BOX 267 MERU - 60200, KENYA FAX: 254-64-30162
TEL: 254-064-30301/31229/30367/31171 EMAIL: INFO@KEMUJAC.KE

June 13, 2023

KeMU/ISERC/EDU/09/2023

MAGAJU JACINTA KAGENDO
EDU-4-1278-2/2019

Dear Jacinta,

SUBJECT: PREPAREDNESS FOR IMPLEMENTATION OF MOTHER TONGUE EDUCATION POLICY IN PUBLIC LOWER PRIMARY SCHOOLS IN MERU COUNTY, KENYA

This is to inform you that Kenya Methodist University Institutional Scientific Ethics and Review Committee has reviewed and approved your research proposal. Your application approval number is KeMU/ISERC/EDU/09/2023. The approval period is 13th June, 2023 – 13th June, 2024.


This approval is subject to compliance with the following requirements:-

- I. Only approved documents including (informed consents, study instruments, MTA) will be used.
- II. All changes including (amendments, deviations, and violations) are submitted for review and approval by Kenya Methodist University Institutional Scientific Ethics and Review Committee.
- III. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to KeMU ISERC within 72 hours of notification.
- IV. Any changes, anticipated or otherwise that may increase the risk or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to KeMU ISERC within 72 hours.
- V. Clearance for export of biological specimens must be obtained from relevant institutions.
- VI. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- VII. Submission of an executive summary report within 90 days upon completion of the study to KeMU ISERC.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://oris.nacosti.go.ke> and also obtain other clearances needed.




APPENDIX IX: NACOSTI RESEARCH LICENSE



REPUBLIC OF KENYA
National Commission for Science, Technology and Innovation


Ref No: 173506



**NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION**

Date of Issu: 20/June/2023

RESEARCH LICENSE




This is to Certify that Ms. Jacinta Kagendo Mwangi of Kenya Methodist University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Meru on the topic: **PREPARATION FOR IMPLEMENTATION OF MOTHER TONGUE EDUCATION POLICY IN PUBLIC LOWER PRIMARY SCHOOLS IN MERU COUNTY, KENYA for the period ending : 20/June/2024.**

License No: NACOSTI/P/23/27140


Applicant Identification Number

173506



Director General
**NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY &
INNOVATION**

Verification QR Code



NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR reader application.

See overleaf for conditions

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013 (REV. 2014)
Legal Notice No. 108: The Science, Technology and Innovation (Research Licensing) Regulations, 2014

The National Commission for Science, Technology and Innovation, hereafter referred to as the Commission, was established under the Science, Technology and Innovation Act 2013 (Revised 2014) hereinafter referred to as the Act. The objective of the Commission shall be to regulate and oversee quality in the science, technology and innovation sector and advise the Government in matters related thereto.

CONDITIONS OF THE RESEARCH LICENSE

1. The License is granted subject to provisions of the Constitution of Kenya, the Science, Technology and Innovation Act, and other relevant laws, policies and regulations. Accordingly, the licensee shall adhere to such procedures, standards, code of ethics and guidelines as may be prescribed by regulations made under the Act, or prescribed by provisions of International treaties of which Kenya is a signatory to
2. The research and its related activities as well as outcomes shall be beneficial to the country and shall not in any way:
 - i. Endanger national security
 - ii. Adversely affect the lives of Kenyans
 - iii. Be in contravention of Kenya's international obligations including Biological Weapons Convention (BWC), Cooperative Health-Tech-Bio Treaty Organizations (CTBTO), Chemical, Biological, Radiological and Nuclear (CBRN)
 - iv. Result in exploitation of intellectual property rights of consumers in Kenya
 - v. Adversely affect the environment
 - vi. Adversely affect the rights of consumers
 - vii. Endanger public safety and national cohesion
 - viii. Plagiarize consumer data's work
3. The License is valid for the proposed research, location and specified period.
4. The License may not be transferred
5. The Commission reserves the right to cancel the research at any time during the research period if in the opinion of the Commission the research is not implemented in conformity with the provisions of the Act or any other written law.
6. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research.
7. Excursion, filing, movement, and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
8. The License does not give authority to transfer research materials.
9. The Commission may monitor and evaluate the licensed research project for the purpose of assessing and ensuring compliance with the conditions of the License.
10. The Licensee shall submit one hard copy, and upload a soft copy of their final report (thesis) onto a platform designated by the Commission within one year of completion of the research.
11. The Commission reserves the right to modify the conditions of the License including cancellation without prior notice.
12. Research, findings and information regarding research systems shall be stored or disseminated, utilized or applied in such a manner as may be prescribed by the Commission from time to time.
13. The Licensee shall disclose to the Commission, the relevant Institutional Scientific and Ethical Review Committee, and the relevant national agencies any innovations and discoveries that are of National strategic importance.
14. The Commission shall have power to acquire from any person the right in, or to, any scientific innovation, invention or product of strategic importance to the country.
15. Relevant Institutional Scientific and Ethical Review Committee shall monitor and evaluate the research periodically, and make a report of its findings to the Commission for necessary action.

National Commission for Science, Technology and
Innovation (NACOSTI),
Off Waiyaki Way, Upper Kabete,
P. O. Box 30623 - 00100 Nairobi, KENYA
Telephone: 020 4007000, 0713788787, 0735404245
E-mail: dg@nacosti.go.ke
Website: www.nacosti.go.ke