

**FACTORS AFFECTING CURRICULUM IMPLEMENTATION IN
SECONDARY SCHOOLS IN KENYA: A CASE OF KAKAMEGA SOUTH
DISTRICT.**

By

KAHERA JULIAH ZIGANYU

L50/61058/2010

**A RESEARCH PROJECT SUBMITTED TO THE UNIVERSITY OF NAIROBI IN
PARTIAL FULFILMENT OF THEREQUIREMENT IN A WARD OF A MASTERS OF
ARTS DEGREE IN PROJECT PLANNING AND MANAGEMENT.**

July 2010

DECLARATION

I, undersigned declare that this project report is my original work and it has never been submitted to any other college or institution for academic credits.

Signed í í í í í í í í í í í í í í í í .Date í í í í í í í í í í í í í í í í ..

JULIAH KAHERA ZIGANYU

L50/61058/2010

This project report has been submitted for examination with my approval as the college appointed supervisor.

Signatureí í í í í í í í í í í í í í í í ..Dateí ..

MR. MOSES SHILILU

Part time Lecturer

Department of Extra Mural Studies

University of Nairobi

DEDICATION

I dedicate this research to my loving husband Godwin who has been very supportive throughout my course work, to my daughters Rita and Relo and my sons Blevin and Jones and all teachers of the world.

ACKNOWLEDGEMENT

I am grateful to the Almighty God for the energy grace endeavor, courage and enlightenment throughout this course. First my sincere thanks go to my supervisor Mr. Moses Shililu for his devotion in offering assistance and guidance to the project. He willingly read and guided me to make this project report. Special thanks to my family, my great husband Godwin for the care, understanding encouragement and financial support and accepting dual responsibilities due to my time taken away from parenting. My daughter Relo you kept me company late into the night as I wrote this report. Many thanks go to my course mates at the University of Nairobi for their cooperation and encouragement from whom I sought ideas and consulted throughout the period. I also appreciate the contributions of Dr. Zachariah Shitote and Rev. Osore for their dedication and support during the entire period. Lastly I thank the Amalemba Pentecostal Church for their prayers and understanding during the entire period I was away from church.

ABSTRACT

The society is dynamic. As the society changes variables such as wealth creation, technology innovation, political emancipation and social structures also change with it. This has forced the Kenyan government to develop a subsidized education system commonly referred to as Free Primary and Free Day Secondary Education. The history of education in Kenya can be traced to 1963 when the country got its independence from the British colonial rule. By this time the country promised free education to its people. This promise did not take effect until 2003 when Free Primary Education started. [Kenya Economic Recovery Report (KERR) 2005]. The reason the Government did not make education free earlier was due to the fact that the economy was low however the number of people in a household has kept on increasing. Citizens were expected to produce to the education fund by paying fees, taxes and labor services. The main objective of this study was to establish the factors affecting curriculum implementation in secondary schools in Kenya. This research was conducted in Kakamega South District of Kakamega County. The research focused on secondary schools located in the rural areas of the district. Officers at the district education office were also included in the study. The study was set to find out the impact of government education policies on curriculum implementation with a focus on recruitment of teachers and quality assurance in secondary schools in Kenya. The challenges schools face in implementation of these policies were also established. A total sample of thirteen schools were selected using the stratified random sampling method. Data collection was done by the researcher through interviews of 13 Principals in the sampled schools and 3 Officers in the education office administered with the use of interview guide. Additional data was collected by use of questionnaires administered to 75 teachers and 174 students randomly selected in the sampled schools. The general observation made was under staffing was the main challenge affecting curriculum implementation. In servicing of teachers was lacking. Most schools had a number of teachers employed on B.O.M. The distribution of teachers in the district is not even. Parents and the general community support on matters regarding the curriculum implementation was minimal. Most schools experience inadequate facilities and infrastructure. It was also established that drug and substance/alcohol abuse affected teaching. Teaching and learning resources were not sufficient to have effective curriculum implementation. The study recommended that the TSC should address critical understaffing in schools. In servicing of teachers should be done in a properly organized manner especially in non-science subjects. There is need for all stakeholders to support the government effort in provision of basic infrastructure especially in upcoming schools. The community should also be educated on the need to invest in education in totality. The government should also embrace timely disbursement of FDSE funds.

TABLE OF CONTENTS

| | |
|--|-----------|
| DECLARATION | i |
| DEDICATION..... | ii |
| ACKNOWLEDGEMENT..... | iii |
| ABSTRACT | iv |
| TABLE OF CONTENTS | v |
| LIST OF FIGURES | viii |
| LIST OF TABLES | x |
| LISTS OF ABBREVIATIONS AND ACRONYMS | xi |
| CHAPTER ONE: INTRODUCTION | 1 |
| 1.0 Background to the Study | 4 |
| 1.1 Statement of the Problem | 4 |
| 1.2 Purpose of Study | 5 |
| 1.3 Objectives of the Study | 6 |
| 1.3.1 Research Questions | 6 |
| 1.4 Significance of Study | 6 |
| 1.5 Delimitations of the Study | 7 |
| 1.6 Limitations of the Study | 7 |
| 1.9 Basic Assumptions of the Study | 8 |
| 1.8 Definition of Significant Terms | 8 |
| CHAPTER TWO: LITERATURE REVIEW..... | 10 |
| 2.0 Introduction..... | 10 |

| | |
|---|-----------|
| 2.1 Theoretical Framework | 10 |
| 2.2 Empirical Review | 15 |
| 2.3 Quality Assurance Policy | 16 |
| 2.3.1 The evaluation of education policy | 17 |
| 2.4 Other factors affecting curriculum implementation | 18 |
| 2.5 Responding to challenges facing curriculum implementation | 19 |
| CHAPTER THREE: RESEARCH METHODOLOGY | 25 |
| 3.0 Introduction | 25 |
| 3.1 Research Design | 25 |
| 3.2 Target population | 26 |
| 3.3 Sample Size | 26 |
| 3.3.1 Random Sampling | 26 |
| 3.4 Data | 27 |
| 3.4.1 Methods of Data collection | 27 |
| 3.4.2 Primary Sources | 28 |
| 3.5 Piloting | 28 |
| 3.6 Reliability of Research Instruments | 28 |
| 3.7 Validity of Research Instruments | 29 |
| 3.8 Data Collection Techniques | 29 |
| 3.9 Data Analysis Techniques | 29 |
| CHAPTER FOUR: DATA ANALYSIS PRESENTATION AND INTERPRETATION AND DISCUSSION | 31 |
| 4.0 INTRODUCTION | 31 |
| 4.1 Response Rate | 31 |
| 4.2 Impact of the TSC Policy on Curriculum Implementation | 32 |

| | |
|--|-----------|
| 4.4 Quality assurance and standards | 35 |
| 4.3 Challenges schools face in implementation of policy..... | 37 |
| CHAPTER FIVE: SUMMARY OF FINDINGS CONCLUSIONS AND RECOMMENDATIONS | 39 |
| 5.1 Introduction..... | 39 |
| 5.1.1 Impact of TSC policy on curriculum implementation..... | 39 |
| 5.1.2 Impact of standards and assurance policy on curriculum implementation..... | 40 |
| 5.1.3 Challenges schools face in implementation of policy | 41 |
| 5.2 Conclusion | 41 |
| 5.3 Recommendations | 42 |
| 5.4 Prospects for future studies..... | 43 |
| REFERENCES | 44 |
| APPENDICES | 44 |
| APPENDIX i: Cover letter | 46 |
| APPENDIX ii: District Education Office Questionnaire..... | 47 |
| APPENDIX iii: Head of school interview guide..... | 50 |
| APPENDIX iv: Students Questionnaire..... | 54 |
| APPENDIX v: Budget plan..... | 57 |

LIST OF FIGURES

| | |
|--|----|
| Figure 1: The Instructional cycle..... | 11 |
| Figure 2: Conceptual framework | 23 |

LIST OF TABLES

| | |
|---|----|
| Table 1: Respondents by gender | 27 |
| Table 2: Response rate | 31 |
| Table 3: Heads of schools by gender | 32 |
| Table 4: Heads of schools by age..... | 33 |
| Table 5: Effectiveness of TSC policy on staffing | 33 |
| Table 6: Staffing in Schools | 34 |
| Table 7: Testing frequency in a term | 34 |
| Table 8: Rating of District assessment by principals..... | 35 |
| Table 9: Reasons for cheating in examinations | 36 |
| Table 10: Frequency of assessment in schools | 37 |
| Table 11: Enrollment in schools in the District | 38 |
| Table 12: Teacher student ratio | 38 |

ABBREVIATIONS AND ACRONYMS

| | |
|--------------------|--|
| A.E.O | Area Education Officer |
| B.O.G | Board of Governors |
| D.E.B | District Education Board |
| D.E.O | District Education Officer |
| DQASO | District Quality Assurance and Standards Officer |
| F.P.E | Free Primary Education |
| F.S.E | Free Secondary Education |
| H.O.D | Head of Department |
| K.C.S.E | Kenya Certificate Secondary Education |
| K.E.S.S.P | Kenya Education Support Sector Program |
| K.E.S.I | Kenya Education staff Institute |
| K.I.E | Kenya Institute of Education |
| K.N.E.C | Kenya National Examination Council |
| K.N.U.T | Kenya National Union of Teachers |
| K.U.P.P.E.T | Kenya Union of Post Primary Tertiary Teachers |
| M.M.U.S.T | Masinde Muliro University of Science and Technology |
| M.O.E.S.T | Ministry of Education Science and Technology |
| N.G.O | Non-Governmental Organization |
| P.T.A | Parents Teachers Association |
| S.M.A.S.S.E | Strengthening Mathematics and Science in Secondary Schools Education |
| T.S.C | Teachers Service Commission |
| USAID | United States Agency on International Development |

CHAPTER ONE

INTRODUCTION

1.0. Background to the study

The greatest challenge facing Kenya and other countries in the world is provision of quality education to her people. In all sectors of the economy, both formal and informal education is a paramount requirement. Education refers to comprehensive exposure to opportunities and in life aimed at achieving an all-round preparation of the individual for the challenges and roles awaiting him as a member of the immediate environment. Shiundu J. S et al (1992). At independence in 1963, the government recognized education as a basic human right and a powerful tool for human resource and national development. Ominde Report (1964) since then policy documents have reiterated the importance of education in eliminating poverty, disease and ignorance. Enrolment in secondary education rose from 30,000 students in 1963 to over 862,907 students in 2003. The number of public secondary schools has increased from 151 at independence to 3,661 1999 census data 2.8 million boys to girls aged between 14 and 17 years should have been in secondary school were not enrolled. Policy measures are therefore required to address the poor access to secondary education as a way of supporting the country's overall development goals. (Session Paper No. 1 2005).

Education plays a big role in national development. According to Sessional Paper No. 1(2005:23). The government recognizes that education is not only a welfare indicator per se but also a key determinant of earnings, and therefore an important exit route from poverty. As a result increased investment in human capital including health and education is identified as one of the four pillars of the Government's overall recovery strategy.

Education is also an investment on human capital. Human capital is an important

determinant of economic growth. Recent studies of human capital returns in Kenya show that capital returns increase as the level of education goes higher. Studies have also shown that individuals also benefit a great deal from the education of others. Education can reduce social and economic inequity. Kenya is having large inequities with respect to income distribution and this has constrained economic growth. Sessional Paper No. 1 (2005). Investment in Education is an important strategy to address this and facilitate faster economic growth.

Investment in human capital through education and training will also increase demand for more equitable education attainment, which is an important human welfare by itself. The Ministry of Education is determined to take advantage of the positive changes the country is under going to improve access, equity, equality and relevance of education through better management of service delivery to all learners. Many people do not have access to education because of poverty and ignorance. The government policy of making education accessible to all led to the introduction of free basic education. In line with Sessional paper No. 1 of 2005 the governments first priority is increased access to educational opportunities at all levels. In this plan there are three major strategic thrusts. Firstly is to expand access to educational opportunities at all levels particularly basic education. Access to quality education has to be increased because of the globally competitive quality education system. Basic education entails early childhood development, primary school education, and secondary education. Efforts to achieve this are being done through FPE and FSE. Secondly is to improve the quality of education at all levels starting from the ECD, primary school across to the secondary, tertiary as well as University. This includes access to resources, curriculum rationalization and development of infrastructure especially in regions with high poverty levels. Thirdly is to improve the institutional services. In this thrust the MOE provides a sufficient framework for action plans to be developed within the districts. The process will cascade to institutional level and supported by resource allocations through the districts. (Ministry of Education Strategic Plan 2006-2010).

Secondary school education has developed over the years. The government policy on

FSE has increased enrolment in the recent past. Under the K.E.S.S.P the government has developed strategies to enhance enrolment and quality in secondary education. However additional investment in this sub-sector is required to address the key challenges to the high cost of schooling, which account for 30% of those unable to access education at this level. (Ministry of Education 2006). In addition there are quite a number of indicators of an ineffective curriculum implementation. The lack of adequate secondary schools has hampered enrolment at this level. Schools are an essential tool in the implementation of the curriculum; the current situation is likely to undermine the country's efforts towards the realization of the EFA by 2015. Other factors include high cost of learning and teaching materials, school environment, negative effects of HIV/AIDS pandemic; and rising repetition rates. All these factors undermine curriculum implementation in schools. There has been poor performance in national exams especially in core subjects such as Mathematics and Sciences. The pupil-text book ratio has been high. However, with the introduction of FSE this ratio is expected to reduce though the funds allocated per student are still minimal. More funding has to be directed towards this sub sector. The K.C.S.E exam irregularities recorded in the recent past due to cheating is an indicator of failure to effectively implement the curriculum. This makes the unprepared students opt to steal. Some schools have had results cancelled due to involvement of teachers in the cheating. (MOE 2000)

Failure in national examinations has been rampant partly due to lack of facilities in some schools and others due to negligence on the part of teachers. Though a national assessment team has been established the efficiency of such teams in the field are at times compromised. Some schools have experienced strikes causing havoc to school property and even death of students at the extreme end. Research has shown that students respond differently at certain times of the term. Pressure resulting from exams may build up and cause unrest. Various policy guidelines have been put in place to manage examination, assessment, selection and recruitment, fees payment, parent's participation and infrastructure development. There are policies in matters regarding discipline, access and retention in school, HIV/AIDS as well as age entry.

Curriculum implementation is affected by teacher availability too. Secondary schools teacher distribution has not been equitable, with critical shortages in key subjects such as English, Mathematics, Kiswahili, Physics, Chemistry, Biology, Business Studies, Agriculture, History and C.R.E. Inequalities in teacher distribution also exist between regions. Due to the rapid growth of the primary sub-sector total enrolment in secondary schools is expected to grow and so will the need for more teachers. Teachers are the curriculum implementers in the school. Deficiency in this factor imparts negatively in curriculum implementation. The new policy on decentralization of teacher recruitment is not equitable. All constituencies are treated equal and given equal number of slots regardless of the number of schools in a constituency or students population in a school. Secondary schools are managed by head teachers and school board. It is envisaged that management capacities of head teachers and members of B.O.Gs will be enhanced. There is need to put up as policy on curriculum implementation in the schools. (Ministry of Education 2006).

1.1 Statement of the Problem

The secondary school curriculum is developed by KIE. Due to the importance of curriculum in educational quality, the Ministry has made efforts to strengthen the operations of the institute. However the developed curriculum has to be implemented. It is the government policy that the curricula developed by KIE be implemented in all public and private schools which use the 8-4-4 system of education. (Ministry of Education 2006)

The Ministry of Education has incorporated other interested partners in education under the KESSP program. The government started the program in order to increase access to education and reduction in poverty impediments with a view of addressing twenty three sectors among them notwithstanding, secondary education. About 400 million shillings in bursary funds have been disbursed to support curriculum implementation in secondary schools. 129 schools from pockets of poverty were identified and 40 million shillings disbursed to all in March 2007. Besides, grants for laboratories in 10 schools per district

were identified (627 schools) and each received Kshs.202, 183. (K.E.S.S.P presentation at K.E.S.I Mombasa). Laboratories are essential for implementation of the science curriculum in secondary schools. Policy guidelines have been put in place for establishment of standards laboratories in secondary schools. Such projects under normal circumstances are to be done by parents through the PTA fund. Students are required to take at least two science subjects and therefore lack of laboratories in some schools disadvantages them. Most parents are unable to pay the PTA levies especially in district day schools. In addition the grants and bursaries done by K.E.S.S.P have gradually become inadequate for program activities. Some committees do not even follow bursary award policy guidelines therefore denying the needy children. There is lack of a clear measure in determination of who is needy thus denying the needy students the chance to benefit adequately. Schools have also experienced inadequate allocation and late disbursement of funds. There has been in servicing of science and mathematics teachers through SMASSE. These policy segregates on in-servicing of the other subject teachers in humanities, technical and applied subjects. There is need to have the other teachers in serviced too for better curriculum implementation.

The research interest in selecting this topic came up following the fact that government policies on education and curriculum implementation are many and need to be interpreted correctly to achieve best results. With the introduction of free secondary education in Kenya in the recent past, encouragement of mixed day schools by the government and policy guidelines regarding payment of boarding and PTA fees, there is need to develop a clear policy on curriculum implementation.

1.2 Purpose of the Study

The purpose of this study was therefore to find out the factors affecting curriculum implementation in secondary schools in Kenya, with special reference to Kakamega South Sub County.

1.3. Objectives of the Study

The study was guided by the following objectives, to:

- 1) Investigate impact of the T.S.C policy on curriculum implementation in secondary schools.
- 2) Establish the impact of recruitment policy on curriculum implementation in secondary schools in Kenya
- 3) Investigate how government policy on Quality Assurance affects curriculum implementation in secondary schools in Kenya
- 4) Find out challenges schools face in implementation of policy curriculum implementation in secondary schools in Kenya.

1.3.1 Research Questions

The following questions will be used in the study:

- 1) Does T.S.C policy affect curriculum implementation in secondary schools?
- 2) What are the effects of school assessment on curriculum implementation in secondary schools in Kenya?
- 3) How does the recruitment policy affect curriculum implementation in secondary schools in Kenya?
- 4) What challenges do schools face in the implementation of policy?

1.4. Significance of the Study

This study attempted to bring to focus information about the major policies that affect curriculum implementation in secondary schools to maintain education standards. The information obtained from the research study will be of great importance to the government policy makers to support curriculum implementation fully. The government

will strictly enforce legislation to prevent misappropriation of government funds meant for schools. From this study the Ministry of Education will find means to improve education standards and encourage proper ways of bursary allocation to needy students in secondary schools and improve on timely disbursement of FSE funds to schools.

This will enable such organizations understand the need of allocating more funds to secondary education to assist in curriculum implementation as well as supporting development projects of schools in their regions. The high school teacher will find this information vital. He will be able to understand the environment he is working in and seek for better ways of dealing with policy issues in curriculum implementation. The teacher will have a better understanding of the role of parents in the implementation of the curriculum. The community will become sensitive on the need to play a proactive role in curriculum implementation in order to attain sustainable school development. Curriculum developers such as KIE will use this study to make curriculum that can easily be implemented by all schools without many obstacles and compromising standards at the same time. Curriculum evaluator that is KNEC will also use the information to set exams especially practical papers that can be attempted by all students without segregation due to socio-economic forces. T.S.C will also use this information to address the shortages of manpower in secondary school and forge a better way of utilizing the teachers in the field. The commission will be able to look for better ways of remunerating and motivating teachers working in different socio-economic backgrounds. The school B.O.Gs and D.E.Bs will also use the information in the management and support to schools to check on service delivery. The research study will add knowledge on education and curriculum to the data bank. Finally but not least this research will give impetus to the fight against poverty and illiteracy not only in Kakamega South District but also in line with EFA by 2015. (Sessional Paper No. 1 2005).

1.5 Delimitations of the Study

The researcher is a teacher with vast knowledge on teaching and as a curriculum implementer has a passion for effective curriculum implementation. In addition most secondary schools have well developed policies in response to the requirements by the

DQASO in order to meet the school mission and vision.

1.6 Limitations of the Study

The research was conducted during working hours. The researcher was limited by time and was forced to operate out of the normal working schedule. Collecting data involved traveling, visiting the web sites, and involving an expert in data analysis. The researcher was not able to travel extensively or acquire expensive materials for the research. Although there are several schools in Kakamega South District, only a few were investigated. The involvement of DQASOs and other officers of education was not easy because most of them are field officers. The researcher had to fix appointments with them at their time of convenience. Finally the research literature and any other material were limited to what the researcher could afford.

1.7 Basic Assumption of the Study

The following assumptions were laid down for this study. Firstly, it was assumed that the respondents will respond accordingly. Secondly, the researcher assumed that these factors, T.S.C policies, assessment and recruitment policies were affecting curriculum implementation in secondary schools located in Kakamega South District. It was also assumed that the schools in this region are experiencing challenges in the implementation of the curriculum.

1.8 Definition of Significant Terms

The following terms are defined below as used in the text;

- i) Curriculum refers to the subjects taught at secondary school that the learner is exposed to.
- ii) Curriculum implementation refers to putting in practice the officially prescribed course of study, syllabi and subjects by the teachers in the school.
- iii) Curriculum implementation entails helping the learner acquire knowledge skills ideas and attitudes that are aimed at enabling the same learner to function effectively in the society.

- iv) School refers to the institution in which learners come to with the view of covering the secondary school curriculum.
- v) Policy entails laid down procedures either by the school in line with the ministry and other stakeholders.
- vi) Education refers to attainment of knowledge and skills that enable the learner to pass K.C.S.E.
- vii) Assessment refers to the process of checking, monitoring and evaluating the curriculum implementation with a view of correcting areas that have been misunderstood.
- viii) Impact is the extent at which policies influence curriculum implementation.

CHAPTER TWO

LITERATURE REVIEW

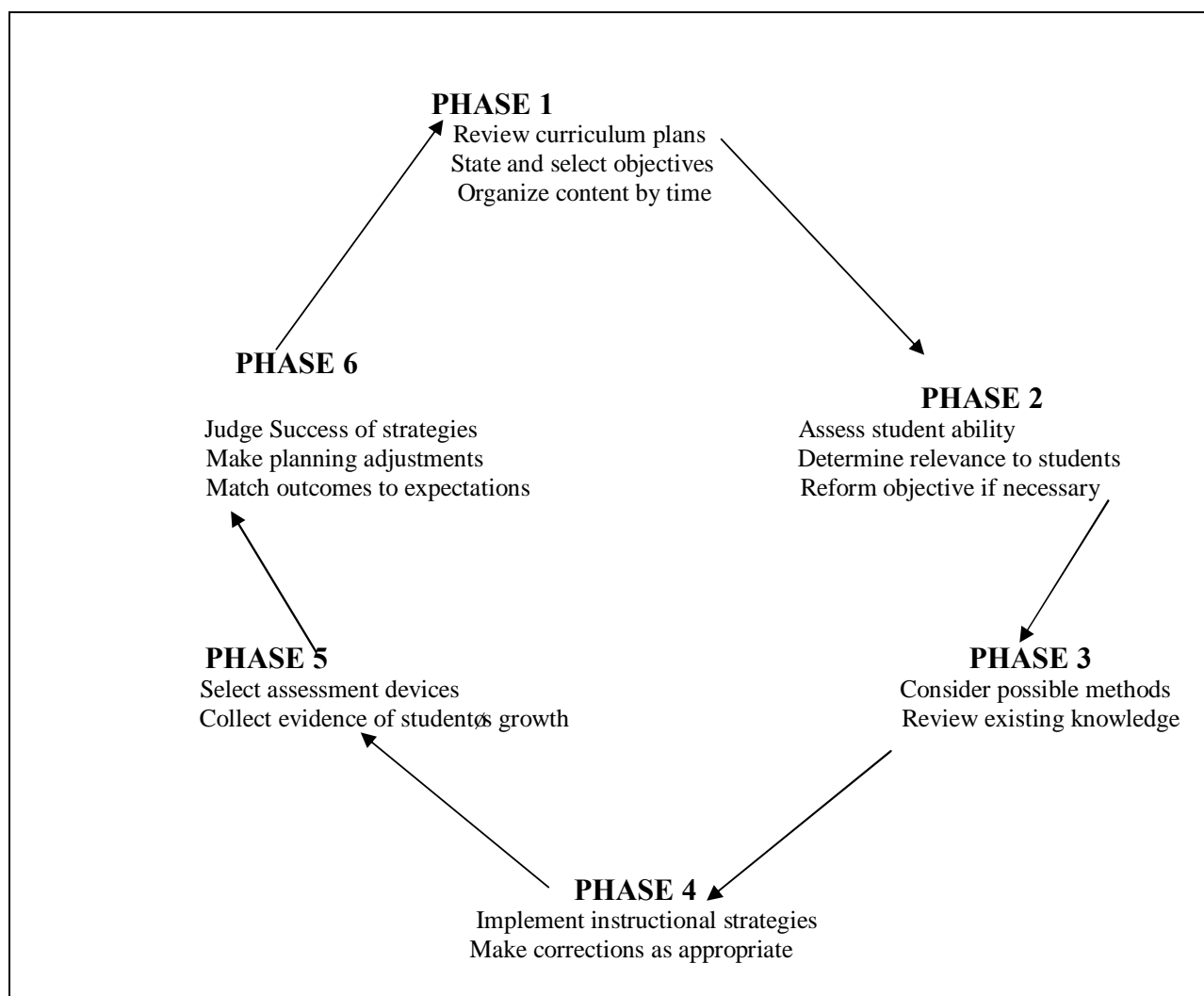
2.0 Introduction

This section comprises of literature review which is relevant to the impact of policy on curriculum implementation in secondary schools in Kenya. The literature review is a collection of literature from Government sessional papers, National Development Plans, several research papers, national and international seminar reports and from books on education, curriculum, management and research. The study highlights the factors affecting curriculum implementation in Kakamega South District.

2.1. Theoretical Framework

The traditional method of instruction in schools has always been perceived as a subset of curriculum planning. Curriculum development evolves through a cycle in which a situation is analyzed, a program is designed, steps are taken to implement the program and then assessment is made to certain the degree to which the program achieved its goals. Classroom instruction has followed a similar cycle. In the instructional cycle a teacher enters the classroom with planned curriculum, analyzes that plan in terms of the students being taught. He then adjusts it to fit the students according to such variables as ability, interest, motivation, or relevance. The teacher then proceeds to implement the plan (teach the lesson) normally this teaching is followed by some sort of student's assessment. This teaching act can be understood or rationalized only in terms of the objectives of the curriculum. In this model the teacher is like an interior decorator rather than an architect; that is, the teacher is not in charge of the purpose or design of instruction; only the delivery.

Figure 1. The Instructional Cycle.



Adopted from Bondi J. and Wiles J. (2007)

Various controls assist the teacher in assuring that what is intended in the curriculum is taught. Students are contained in a space (classroom) and there is a scheduled duration

for the learning. (40mins/lesson). The teacher is the primary source of access to learning by the student. Curricula have boundaries (scope) and order (sequence). The format/media (textbook software, program, and video) are generally linear and predetermined. The teacher directs the students in the learning. (Bondi J. Wiles J. 2007)

Dysfunctions can occur in the process if the teacher is unaware of or lacks allegiance to the curriculum intent in selecting content, media, grouping, pacing and evaluation options for example, the teacher colors the curriculum. This emphasis at classroom level will either reinforce or detract from the plan. The teacher needs to understand and be committed to the purpose for which the curriculum is intended and its outcomes. Adoption of the curriculum at the classroom can be seen as a six step cycle of instructional delivery. These stages are firstly determine teaching tasks and students outcomes, secondly match objectives to student's abilities. In addition design the instructional process then deliver the planned curriculum and instruction. Lastly adjust instructional delivery.

Curriculum implementation at the classroom level involves the teacher and the learner. Though other factors contribute greatly to implementation it is worth noting that the teacher plays a big role in the success of any given curriculum. The first stage involves determining teaching tasks and student's outcome. In this stage the teacher must arrive at an understanding of the teaching task, including any mandated student outcomes. Having extracted these critical measures the teacher views the planning process as a distance-rate time problem. The tools at this stage include textbooks, teacher guides, curriculum maps/outlines and testing standards. In the second stage, these expectations need to be matched with the capacity of the students being taught. By questioning student's ability, background and motivation, the teacher may begin to adjust the planned curriculum in significant ways. At this point understanding the intent of the curriculum (orientation mastery, application) is very important. In the third stage the teacher becomes the designer of instructions process. Experiences and professional knowledge are essential to

decision making. Most teachers learn by trial and error and experience gives insight as to what works under certain circumstances. Teachers become professional when they discover that research can provide guidance in this process beyond their own experience. George (1995)

Education has a rich literature and an extensive research base that can be used by teachers who understand this designing function. Any experienced teacher knows that different students require different strategies. Individual strategies for individual students is a noble goal but as long as the teacher is assigned 35 students, these strategies must be global (work books, reading groups rather than individual curriculum at the classroom level).

A number of variables may distort the intended curriculum for instance time, space, materials and media woven together according to the perception of the teacher. The key to success at this stage is organization. The exemplary teacher has a plan, contingency plan, materials, equipment and an understanding of the purpose of the lesson when she/he enters the classroom corrections and improvisations are conditions warrant during the school day are elements of the art of teaching. The fifth phase involves feedback. The teacher weighs the appropriateness of both planned curriculum and delivered instructions and make adjustments for future teaching episodes. The successful teacher has a way of documenting such progress, including score books, schemes of works, test scores on standardized tests, K.C.S.E and other student's applications. Proofs of students learning applications are passed on from year to year. The sixth phase deals with instructional design. This entails redesigning the way the curriculum is delivered. A teacher's ability to reflect on and make mature adjustment in teaching behavior depends on that teacher's intrinsic motivation. Professionalism assessment of course begins the cycle once again. Teachers must process a way of thinking about learning to be effective in the classroom. Teachers who have not conceptualized an approach to the teaching-learning act often present unclear instructional patterns to their students to fail in the achievement of intended outcomes. (Mithal H.C 1978).

It is clear that classroom management, discipline, record keeping, resources, media and technology are essential for effective curriculum implementation. Curriculum planners must help teachers understand the planning variables in the classroom. This will help the planners determine the degree to which the curriculum is to serve the student. The greatest challenge that faces curriculum planning is a mismatch between the official and actual curriculum. There has always been resistance to change due to traditional attitude. Sometimes curriculum planners want to achieve too much too fast and can have opposite results. Planners may be too ambitious causing them to create large changes without enough time for preparation. Courses may be added or deleted but teacher practices may not change at all in the process. (Shiundu J.S Omulando S.1992).

The study is based on the following theory by John Dewey; "The aim of education is to develop the power of self-control in each student. The primary source of control does not reside in the teacher but with the student. Developing experiences for students and activities that will guide them is the task at hand." Wiles J. Bondi J. (2007) this implies that subject matter in the curriculum has to be student oriented and not abstract. This theory is applicable to this study because the interest of the study is based on policy issues and their impact on effective curriculum implementation. Effective curriculum implementation cannot be achieved without proper planning from the on start. Dewey suggests that empowering the learner is the essence of education. According to Wiles and Bondi, (2007) the choice facing teachers in delivering the curriculum in the classroom begin with basic learning theory simply stated; teachers enter the classroom with a set of assumptions about how learning occurs. Based on these assumptions they plan instruction. Although a few teachers formalize these beliefs on a day to day basis, these beliefs none the less under gird the process of planning. This implies that Educators and Policy makers must modify the curriculum in line with the changes in the environment and the interest of the learners. Best practice to implement policy in order to meet goals of education in line with the national goals and aspirations need to be emphasized. With effective curriculum implementation exam cheating during evaluation will not arise.

Learners play an important measure of effective delivery that is why the curriculum should be learner centered, however success has been measured in passing of the national exam at the end of the four years which is misleading and need to be addressed. Curriculum does not involve formal but rather all the activities that take place in the school. According to Dewey the quality of education has a lot to do with the quality of implementation. It is on this basis that application can be made to this study in line with effective curriculum implementation. Policy should not be an obstacle to effective curriculum implementation but a positive force to attainment of the set objective. (George B.1995).

All said and done, the product of the curriculum should be able to adjust positively to the changing global needs if the above views are incorporated in curriculum implementation.

2.2 Empirical Review

The Teacherø Service Commission is charged with the mandate of registering, recruiting, redeploying transfer and discipline of teachers. It is the Teachers Service Commission that has to supply the schools with the required teachers to implement the curriculum. Sufficient man-power would lead to effective curriculum implementation and vice versa. The current situation is that there are many schools that are calling for more teachers. In post primary institutions in which secondary schools lie, school specific demands indicate that teachers of particular subjects are required. The distribution of teachers is not even and is skewed in terms of geographical location, regional and socioeconomic dynamics, the rural areas for purposes of school dynamics, the rural areas for the purpose of school enrollment and staffing levels have been broken down into rural, rural urban, rural ASAL and urban ASAL (Gabriel K. L 2005:11).

There has been concern about deployment of existing teachers and their optimal utilization. This is also to do with teacher quality and equity. It is clear that the country has been experiencing teacher shortages in the recent past. According to the Curriculum Based Establishment (CBE), it is the T.S.C. policy that each teacher needs to have 27 lessons per week. In addition every teacher is required to have 40 pupils per class in the modern staffing norms. Senior teachers are given lesser load to make time for

administrative roles and lesson preparation for ordinary teachers. Staffing gaps exist, which are difficult to address even with staff balancing. Factors such as; mortality rates and changes in enrollment of pupils, due to demographic and socio-economic factors have been experienced. Physical facilities in schools have a high impact on staffing. Teachers are inadequate and this may combine classes to reduce the number of teachers in a school. Teacher absenteeism has also grown due to the HIV/AIDS scourge. This varies across the geographical and socio-cultural activities. Male teachers also have a higher tendency of changing jobs as compared to their female counterparts. (Kamotho K. 2008). The T.S.C. has for the first time developed a policy in an attempt to improve the management of learning institutions and delivery of education services. This implies a new policy is being put in place to govern on appointment of institutional heads. This gives the T.S.C. a better way of selecting a head that is capable of improving the performance index of the school. The head teacher is expected to be a person of integrity; high level management skills acquired through KESI training and are a model teacher in curriculum implementation. The policy says management and control of institution's resources remains in the hands of the Head Teacher. Subject teachers are required to be able to teach at least two subjects. This policy is in use and most teachers are deployed to teach the two. T.S.C retention policy requires a teacher who has acquired more education to be retained at the level he was, so long as he is still needed at that category. T.S.C policy on transfer of teachers is based on availability of a vacancy in the institution and a replacement. The commission is addressing understaffing issues by balancing understaffed schools. This plays a positive impact on curriculum implementation. (Gabriel K. L 2005:11).

Selection and recruitment of staff is done by the T.S.C. However, several changes in this mandate have been recorded over years. Initially the T.S.C would absorb all the graduate teachers immediately they completed colleges. This trend has changed. Once a teacher is through with training, he registers with the commission and waits till vacancies are advertised in various schools. It is quite clear that vacancies do exist, however the financial aspect forces the commission to recruit very few at indefinite intervals. In the

new policy on recruitment and selection, teachers are employed in places needed by the schools B.O.Gs. Such details of interviewed candidates are taken to the T.S.C for action. Recruited teachers are expected to stay in the stations for a period not less than five years. (Kimutai N. volume 12. 2007).

2.3 Quality Assurance Policy

According to Wango G. (2009) Standards assessment in education is inevitable part of the school and will continue to be central to education policy for the foreseeable future. In essence a lot of resources, both people and finances are bestowed to schools which in return should be put into good use. Education standards are based on the National Curriculum and other assessment tasks. The school is expected to ensure that quality education is offered to students in the school. The purpose of standards assessment is to ensure that there is standardization of education throughout the republic. The standards of education in Kenya are controlled through these assessments. Schools are advised to carry out internal assessments more often. However external assessments may be made partly as a matter of routine or when prevailing conditions demand that this is done. A school that is well managed tends to perform well in terms of national examination which in most cases is used as a measure of effective curriculum implementation

2.3.1. The evaluation of education policy

Evaluation is done with the intention of promoting the highest possible educational standards through reporting of education in schools and colleges. According to Wango (2009), the principle aims of Quality Assurance and Standards are to: promote the highest educational standards, assessing, monitoring and reporting on the outcomes of education in schools and colleges. It also entails reporting on the nature, scope and effectiveness of the student support service. The findings of assessment are the reported at the relevant Department of Education and other stake holders. School assessment is essential to raise the standards of education in an educational institution. Assessment of schools is done in different ways ranging from routine, mass, panel, investigative, presidential award, financial audit and assessment of registration. (Lengoiboni G. Volume 10, 2005).

The areas of concern in school assessment include: the educational standards achieved in the school including K.C.S.E results. Quality of education provided by the school including effective curriculum delivery is also checked. In addition the quality of leadership and management including: overall school organization, financial management and resource management are also addressed. The school assessment visits are prompted by a number of factors. These factors among others include: department work plans and work programs, Officers's personal initiative, request from stake holders, adverse reports including anonymous letter, follow up of previous visits, trends in performance, inquiry visits, misappropriation of school funds, low or declining enrollment, incidences of school strikes, theft, burglary, fire break out in school and others, the need to expand the school or introduce a new subject, the need to improve performance in schools, in a subject or a region. Schools may be notified about these assessments in advance or not basing on the driving factors as observed above. Assessment is not a fault finding mission but is with a view of improving the standards in the school in order to boost performance. (Wango G. 2009).

2.4. Other factors affecting curriculum implementation

Effective curriculum implementation goes beyond issues to do with policy. These among others include the influence of interest groups such as sponsors and other interested organizations. These groups may also influence learners to reject certain courses they consider detrimental to the interests of the group. The school environment may also affect curriculum implementation. Schools are located in different environs each having a different influence on the school. For example schools located in urban centers tend to have modern facilities and sufficient teachers than those located in the rural parts of the country that are still remote. (Michael Volume 2.2006)

Professional factors also affect curriculum implementation. These have to do with job satisfaction and professional growth. Very often resources and facilities are scanty in most schools making it hard for teachers in this situation to effectively do their job. Such teachers will seek transfers to places where they can easily get the resources and where

they can meet fellow professionals with whom to share career experiences. Relevant training for those who will implement the program is important. Various curriculum writers have under-scored the role of the teachers in curriculum implementation. John Dewey (1920), Ralph Tyler (1957), John Kerr (1973) and therefore the teacher must be conversant with objectives. According to Omulando, Shiundu (1992) the process of curriculum implementation is a complex one and therefore requires an extremely skillful assortment of participants and relevant content for effective results. Policy implementation experiences considerable degrees of challenges. First it is clear that understaffing is a common phenomenon in most schools. An understaffed institution may not be able to implement school and government policy sufficiently. Secondly infrastructure requirements for effective policy implementation is lacking, this is an impediment to curriculum implementation too. In addition deployment of existing teachers and their optional utilization has been a matter of great concern. Teacher quality and equitable distribution has to be addressed. With the introduction of FSE by the government, additional teachers are needed to cater for the increased enrollment in most secondary schools. The other key measure the commission has taken recently in line with providing quality education is their view of staffing norms that have been in place since 1984. (Hussein I. vol. I 2005).

2.5. Responding to challenges facing curriculum implementation

According to Hussein vol. I (2005) there are a number of ways suggested to respond to these challenges. These among others include: continuous review of staffing levels, decentralization of recruitment, ensure staff stability and equity, need to achieve optional utilization of teachers especially those teaching the optional subjects. In addition there is need to provide relief teachers in the event of a teacher's long absence as a result of illness or any other leaves available. There are plans in progress to increase the minimum load from 27 lessons to 30 lessons.

According to the KIE (2010) report on; a secondary school education summative evaluation done on behalf of the MOE and funded by USAID, there is still a lot that has

to be done on the secondary school curriculum in Kenya. The objectives of the evaluation were to establish the extent of achievement of curriculum objectives, relevance to the needs of Kenyans, capacity of implementers, availability and adequacy of resources. The evaluation also aimed at establishing the type frequency and usefulness of assessment and role of management in curriculum implementation. (KIE 2010). Although the curriculum has been revised it was expected that it would be manageable, provide the youth with requisite knowledge skills and attitudes; be acceptable to the Kenya and international environment and communities, promote nationalism and patriotism, prepare Kenyans for the challenges and opportunities of the 21st century, lay the foundation for a literate society interested in further training, stimulate innovative ideas for the enhancement of industrialization, modern technology and provide for the development of individual talents and personality. (KIE 1999). With such broad deeply rooted ideas it is imperative that curriculum be well implemented in order to achieve the objectives and goals especially at secondary school level. The curriculum is manageable within the stipulated time barring for certain impediments. These include difficult and broad content, inadequate instructional materials, and high pupil teacher ratios. An appropriate balance in teaching load is vital for successful teaching and learning in a school. Teaching and learning are likely to be influenced by the work load teachers have in the school. It is here that the impact of curricular is felt: that teaching methods work well or not, and that learners are well motivated to participate and learn how to learn. The actual teaching methods, styles and learning processes (as these occurs in the classroom) include the time teachers spend on teaching, assessing students and monitoring students' progress. (Bondi Wiles. J. 2007).

It was also established that the centralized curriculum used for all regions in Kenya does not take into account the learners context. Further there has been a concentration of imparting theoretical skills at the expense of practical skills development. The situation has been worsened by lack of adequate facilities for practical activities. This has particularly affected science and technical education which need a heavy practical component. Vision 2030 can only be realized if emphasis is laid on science and

technological education as critical ingredients for advancement. The study underscored the role of ICT in teaching and learning as well as a tool in administration. There are quite a number of learners with special needs but have not been catered for adequately. (Kihumba K.2007).

Capacity building in curriculum implementation has remained one of the major areas that have to be addressed in the education sector. Various education commissions, task forces and studies have shown that in the majority of cases competences are not always marched with tasks. (KIE 2010). Teacher development under the in service training is a key strategy. There is need for continuous improvement in the quality of services through continuous teacher development, the rationale being to remove existing weaknesses in the teacher quality and to equip practicing teachers with skills beyond those acquired in the pre service training. (The Sessional Paper No. 1 2005).In service training is essential in professional development opportunities, school improvement initiatives and appraisal with a mentoring system designed to support the teacher in mastering the many aspects related to teaching and learning. The in service courses should not be supply driven but demand driven. It is generally agreed by most teachers that the in service training received is effective in meeting their various needs. However about 53% of teachers are reported to have received any orientation or in service training. (Ministry of Education 2006).

The school infrastructure which includes: buildings play grounds, special rooms and school compound as perceived in there adaptability, comfort health and aesthetics play an important role in facilitating academic and physical education in schools. Most schools have inadequate facilities to carter for the teachers and learners needs. The situation has been aggravated by the upsurge in enrolments due to implementation of the FSE strategy. The T.S.C has staffed all schools with teachers. However, there is a high student teacher ratio affecting completion of syllabuses and leads to heavy workload and discontented teachers. In most schools there are inadequate facilities for teaching and learning leaving the teachers to depend mainly on text books. Some of the books are not available in local

bookshops and contradictions occur in others. The schools have set policies regarding examinations in order to prepare learners for the summative examinations. Schools overburden learners with frequent continuous assessment at expense of learning due to high stakes placed on K.C.S.E. This has resulted into development by KNEC of parallel syllabus to that of KIE and it appears more attractive to teachers. This according to KIE is evidence enough that teachers teach for assessment rather than for achievement of educational objective. (Kihumba K.2007).

Achievement of the secondary education objectives has been hampered by a broad subject content, inadequate support materials and high pupil teacher ratios. A comprehensive needs assessment has to be done with a view of addressing the challenges. Management plays a vital role in curriculum implementation. Principals need to attend management courses to enable them provide effective leadership in curriculum implementation. Most BOGø have inadequate capacity to perform their role of managing school finances, human and material resources, physical facilities, discipline, procurement and school performance among others which are essential in effective curriculum implementation. (MOE 2000)

- Budgetary constraints
- Educational level of managers.
- Nature of the school and size
- Facilities in the school
- Staffing

Independent variables
Dependent variables

- Curriculum implementation
- Syllabus coverage
- Monitoring and evaluation
- Utilization of resources

Intervening variables

- Government policy
- Attitude of all stakeholders
- Community participation

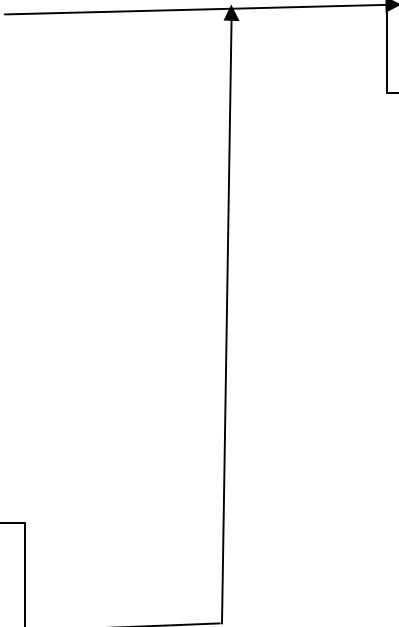


Figure 2: Conceptual framework

In order to effectively implement curriculum in the school, certain factors are eminent; Firstly facilities in the school are key components to support teaching and learning. However since resources are limited schools experience budgetary constraints with variations from one school to another. The education level of school managers is an important asset in curriculum implementation. It is on this basis that the Education Act 2013 emphasizes on at least secondary education level for PTA executive members and Diploma level for Board of Management members. Secondly staffing in the school with regard to the teachers and non-teaching staff are key in effective curriculum implementation since teachers are the implementers. The availability of the key resources in the school both physical and human determine the size and nature of the school.

The school management, the teachers and all stake holders involved use the available resources to teach, monitor and evaluate the curriculum implementation process with a view of improving the performance of the school with the learners' performance in each year serving as a base line. The BOM is mandated by government to get resources and improve the school. (Basic Education Act 2013).

The MOE on the other hand ensures that the education policies and guidelines are adhered to by the schools through the school management. The attitude of the learners' parents and other stakeholders in matters pertaining to education are key in improvement of the schools performance. Generally effective curriculum implementation is viewed by the stakeholders in terms of students' excellent academic achievement in the national examination. This is achieved best when all stakeholders and the community is involved in all matters regarding education.

2.6 Summary of Literature Review

This chapter has discussed literature review addressing the impact of policy on curriculum implementation in Kenya. Various policies have been addressed among them

the T.S.C policy, school policy, quality assurance and standards policy as well as the recruitment policy. A detailed description of curriculum implementation and policies on effective curriculum implementation has been discussed. Challenges facing implementation of the curriculum and possible solutions have been identified too.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter details the methodology that was used in the study on the impact of policy on curriculum implementation in secondary schools in Kenya. The strategies that were used to collect data for the study are discussed. It includes a description of the population and sampling procedures. Data collection methods and content analysis is also given here and how they were used to get proper and maximum information related to the subject under study.

3.1 Research Design

Kothari, (1996) a research design is the arrangement of conditions for collection and analysis of data in manner that aims to combine relevance to the research purpose with economy in procedure. Decisions concerning what, when, where, how much and by what means concerning an inquiry or research study constitute a research design.

The type of study that was employed was descriptive survey. According to Mugenda and Mugenda (1999) descriptive survey is an attempt to collect data from members of a population in order to determine the current status of that population with respect to one or more variables. Survey research is therefore a self-report study which requires the collection of quantifiable information from the sample. Descriptive research is a process of collecting data in order to test hypothesis or to answer questions concerning the current status of the subject. Descriptive research therefore is the process of collecting quantifiable data from members of a population in order to determine the current status of the subject. This method was suitable for this study because the curriculum under study is ongoing, since survey research seeks to obtain information that describes existing phenomena by asking individuals about their perception views, attitude and behavior. In addition studies on education usually use surveys. (Mugenda and Mugenda 1999).

The researcher's interest was to collect original data, explore the existing status of the curriculum implementation versus policy for the purpose of describing the population. In addition the population was large and survey was suitable for measuring the characteristics of such a large proportion.

3.2 Target Population

According to Oppenheim (2003), a population is used to denote all those who fall into the category of concern. The population comprised all the twenty three schools in the District, the teachers, head teachers and their deputies and officers in the education office at the district as well as students

3.3 Sample Size

Oppenheim (2003) a sample is one that has similar characteristics as its population but is smaller in numbers. The sample population comprised of 200 respondents including head teachers, their deputies, HODs, officers in the education office without forgetting the

students in the district. When taking a sample we can never totally be sure that what we are taking is a total representation of the population. Gorrads (2001), Mugenda and Mugenda (1999), Oppenheim (2003). When a large sample is in the study it requires to be broken into sub groups. A sample population of 265 helped cut down on sampling error. Sampling also helped the researcher to collect data at a lower cost, with greater accuracy of results, greater speed of data and availability of data elements.

3.3.1 Random sampling

Simple random sampling was used to select the schools. Purposive sampling was also employed to select heads of schools and education officers at the District. Stratified random sampling was employed to select the respondents. According to Mugenda and Mugenda (1999), the goal of stratified random sampling is to achieve a desired representation from various sub groups in the population. In stratified random sampling subjects were selected in such a way that the existing sub groups in the population were more or less reproduced in the sample. This means that the sample consisted of more than two subgroups; that are the students, head teachers, officers in the district office. The criterion or variable used for stratification was the distinct groups in which they fell. These groups play different roles in government and school policy implementation in matters regarding the curriculum.

The population according to the strata was defined as shown in table 3 below

Table.1 Respondents by Gender

| Sample type | Male | Female | Total |
|-----------------------------|-------------|---------------|--------------|
| Officers at the DEOs office | 2 | 1 | 3 |
| Principals | 10 | 3 | 13 |
| HODs | 50 | 25 | 75 |
| Students | 100 | 74 | 174 |
| Total | 162 | 103 | 265 |

Source: Research data (2010)

The sample required per size was proportionate because some population of the group

was smaller. This method of sampling was appropriate as it included the education office that would have otherwise been ignored were it not employed.

3.4 Data

The study relied on two complementary sources of data: primary and secondary

3.4.1 Methods of Data collection

Secondary data was consulted and analyzed in order to constitute the theoretical and conceptual framework for initiating the study. Secondary evidence included written sources like books, journals, articles, daily newspapers, M.A and PHD thesis. These were accessed from MMUST and the National Library of Kakamega. On line journals available on the internet were also used. More information was derived from school libraries and policy documents send to schools by the government. Additional information was derived from seminar and workshop document presentations.

3.4.2 Primary sources

Primary sources of data refer to original works of research or raw data without interpretation or pronouncements that represent an official opinion or position. Schindler P, Cooper Donald (2003) the researcher made visits to schools and the DEO's office in order to get first-hand information which was collected using questionnaires and oral interview schedules.

3.5 Piloting

The whole lengthy process of designing and trying out questions and procedures is usually referred to as pilot work. Oppenheim (2003). Piloting was done to cut down on time that would have been wasted if it is skipped. The researcher had the opportunity to make adjustments on the questionnaire in terms of wording and to check on general faults in order to make corrections in time. During piloting, the researcher did not take anything for granted. Piloting was done on the questions lay out on the page, instructions given to the respondents, the answer categories and even the question numbering system. Sampling aspects of the study was piloted too in order to check if stratified random

sampling was suitable for the study. Statistical treatment of the results was also piloted. The researcher checked for omissions. The researcher ran through the sequence of the survey backwards in order to check on the coherence of the work. Pre-testing was done through relying on colleagues, respondents' surrogates and actual respondents to refine measuring instruments. The pilot addressed comprehensibility of the various techniques and proposed modifications to items that required them. The questionnaire and interview scheduled were then amended and standardized for field work applications.

3.6 Reliability of Research Instruments

Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. Mugenda and Mugenda (1999). The researcher maximized on data reliability by issuing questionnaires to the different categories of the population in a given school. Besides each school has several Heads of Department from whom similar information was gathered. The test re test technique was used to test reliability. In a school setting, policies don't just change overnight.

3.7 Validity of Research Instruments

In order to get the accuracy and meaningfulness of inferences based on research results, the researcher used several strategies. Data was collected through interviews and administration of questionnaires that was analyzed to build coherent justification for various aspects. The researcher compared the results at the end of every data collection to ensure that what was collected was not subject to personal bias. Pretest of the questionnaires was done before the research so that questions were corrected at this stage to curb misinterpretation. This was done through expert opinion, literature search and pretest.

3.8 Data Collection Techniques

The instruments of research; questionnaire, was done by the researcher. The method involved sending out questionnaires by personal delivery, interviewing, testing,

inspecting and reviewing documentary evidence. Interview schedules were made by the researcher. The researcher made sure that all tools were completed and validated. Sufficient copies of the tools were printed. Adequate stationery and sufficient travel resources were procured too. Appointments were made for actual field work with the education officers as well as the head teachers. Research was conducted when schools were in session in order to find the respondents easily. Field assistants were selected and trained during the pretesting. A field work monitoring form was used to monitor administration of the tools closely and carefully. The questionnaires were administered mainly to Heads of department. This is because at this level an HOD is aware of various policy issues not only in the school but also within the MOE. The researcher also administered questionnaires to students in the selected schools within the district.

3.9 Data Analysis Techniques

This refers to studying the processed data in order to develop summaries for the different statistical accounts, determine relationship patterns and differences. After the field work data collected from documentary sources and the field was analyzed using descriptive statistics. The data pieces were organized, inspected, edited and coded. A coding frame was developed for each instrument and all the coding frames were compiled too form a code book.

The measures of central tendency were used to represent various responses. Measures of variability were also employed, distribution and percentages. A detailed explanation of figures, tables and their implications were given for each case and conclusions drawn to indicate the relationship resulting from dependent variables. The data was analyzed using the SPSS program.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION

4.0 Introduction

This chapter presents data that was collected through interviews and questionnaires. Analysis of the data was done in relation to the procedures applied in order to establish the factors affecting curriculum implementation in secondary schools in Kenya: a case of Kakamega South District. The findings from respondents and observations are represented. A total of 200 questionnaires were issued to students and 50 to heads of departments. Interviews were carried out on Heads of schools as well as the officers at the district office.

4.1 Response rate

The response rate was encouraging because the researcher managed to interview and

have questionnaires filled without difficulty. The responses can be summarized as shown in table 2 below.

Table 2. Response rate

| Respondents | Frequency | Percentage |
|---------------------|------------------|-------------------|
| Heads of schools | 13 | 4 |
| Heads of Department | 50 | 16 |
| M.O.E Officers | 2 | 2 |
| Students | 200 | 78 |
| Total | 265 | 100 |

Source: research data (2010)

4.2 Impact of the T.S.C policy on curriculum implementation

The researcher established that 77% of the schools in the sub county are headed by men. Out of the 13 heads that were interviewed 10 representing 77% are male and only three representing 23 % were headed by female as shown in table 3 below. Although the T.S.C is encouraging female heads this policy has only been implemented in girls' schools mainly leaving most mixed schools mainly men headed.

Table 3. Heads of schools by gender

| Gender | Frequency | Percentage |
|---------------|------------------|-------------------|
| Male | 10 | 77 |
| Female | 3 | 23 |
| Total | 13 | 100 |

Source: research data (2010)

The research also established that 62% of heads were in the age brackets 35 years and

above an indication that a teacher has to gain experience, understand trends in education before he is appointed head of an institution under ordinary circumstances. Schools that recorded heads of 25 years and below in age representing 30% were young schools whose intake has not reached form 4 and the heads were on schools boards. These heads though trained teachers, their staff comprised of form 4 leavers who were waiting to join university and other tertiary colleges. Although students indicated that there was no shortage of staff in all the sample schools in the district, it was established from the Head Teachers that such shortages were addressed by employing teachers on School Boards. Information given by students therefore shows how school management is addressing this issue of shortages.

Table 4. Heads of schools by age

| Age | Frequency | Percentage |
|----------------|------------------|-------------------|
| 25 to 34 years | 1 | 8 |
| 35 to 44 years | 4 | 30 |
| 45 to 54 years | 8 | 62 |
| Total | 13 | 100 |

Source: research data (2010)

Staffing was viewed by all as an important aspect of curriculum implementation. With the introduction of FSE enrolment in schools has increased over the years and the commission policy on recruitment has been dependent on availability of funding from the government. According to table 5 below, 48% of the HODs were of the opinion that staffing was fair, 52% rated T.S.C policy on staffing not effective in the district. Staffing was viewed by all as an important aspect of curriculum implementation.

Table 5. Effectiveness of T.S.C policy on staffing

| Response | Frequency | Percentage |
|-----------------|------------------|-------------------|
| Yes | 24 | 48 |
| No | 26 | 52 |
| Total | 50 | 100 |

Source: research data (2010)

According to the teachers service commission a teacher is expected to teach about 27-30 lessons. However there are cases where some teachers have beyond this number and make it hard to even fit on the timetable. This makes curriculum implementation ineffective because of lack of adequate and trained personnel. The rating of teaching manpower in the schools in the district by heads of schools show, 61% indicated understaffing and only 39% indicated were well staffed as shown in table 6 below.

Table 6. Staffing in schools.

| Staffing | Frequency | Percentage |
|-----------------|------------------|-------------------|
| Understaffed | 8 | 61 |
| Well-staffed | 5 | 39 |
| Total | 13 | 100 |

Source research data (2010)

In order to implement curriculum effectively schools have also developed policies that will enable proper running. Some of these policies include: the examination policy, in this policy examinations are done regularly. Responses from students on how often they sat for examination indicated that most schools 73% take three exams in a term and 27% take two exams as shown in table 7 below.

Table 7. Testing frequency in a term

| No. of examinations | Frequency | Percentage |
|----------------------------|------------------|-------------------|
| Two | 34 | 27 |
| Three | 166 | 73 |
| Total | 200 | 100 |

Source: research data (2010)

It was also established that with the new policy on FSE, the government is strongly attributed to the increase in the number of examinations done per term as opposed to previous years. This has enabled most schools to be able to test their students adequately. It was established from most heads that government funding on tuition had eased pressure related with inability of parents to pay for the same. However, most parents are still unable to meet their children's boarding expense. In response to what was the main cause of absenteeism in schools was, it was clear among students 73.6% are because of fees. It was also established that the number of teachers leaving the service in the recent past (one year) has reasonably reduced. (Lengoiboni G K. 2005).

4.3 Quality assurance and standards

Schools are assessed mainly by DQASOs. However schools also carry out internal assessments. Quality assessment in education is an inevitable part of the school and will continue to be central to education for the foreseeable future. Wango (1990). It was established that assessment actually takes place in the District, but the frequency is varied from one school to another. Assessment may vary from one school to another due to the varied reasons that call for inspection ranging from officers personal initiative, request from stake holders, adverse reports follow ups of previous visits trends in performance, inquiry visits misappropriation of school funds low or declining enrollment, incidences of school strikes, theft burglary. Other reasons may be the need to introduce a new subject or register another stream or the need to improve performance. It is generally agreed among majority of HODs and heads that assessment adds value to curriculum implementation accounting for 92.3% of the respondents. Of the 13 heads interviewed,

members held the view that the assessment in the district is vital because it adds value to curriculum implementation. Rating of district assessment had the following results as shown in table 8 as shown below.

Table 8. Rating of district assessment by Principals

| Response | Frequency | Percentage |
|-----------------|------------------|-------------------|
| Good | 1 | 7 |
| Fair | 11 | 86 |
| Poor | 1 | 7 |
| Total | 13 | 100 |

Source: research data (2010)

On Principals rating of district assessment 8% responded was good, 85% of the respondents indicated that it was fair while 7% indicated that it was poor. According to the interviews carried out, it was established that quality and standards is a collective responsibility of both the school and the DQASO. Schools have policies on internal assessments which are done by various departments within the school through the guidance of the Principal and the Director of Studies. These assessments are vital as they make teachers keen on their work in the classroom. Quality and standards in a day to day instruction is maintained through preparation of teachings records, schemes of work, lesson notes and lesson plan. Evaluation of what is taught is also recorded and this is continuous throughout the term. (Wango G.2009).

On cheating during exams 66% students attributed this to lack of preparation, 19% difficult exams or subjects, 13% indiscipline while 2% gave poor exam supervision as a reason for cheating. Only 2% of the learners indicated that cheating was as a result of difficult examination subject as shown in table 9 below.

Table 9. Reasons for cheating in examinations

| Reasons for cheating | Frequency | Percentage |
|-----------------------------|------------------|-------------------|
|-----------------------------|------------------|-------------------|

| | | |
|-------------------------------|------------|------------|
| Lack of preparation | 132 | 66 |
| Indiscipline | 38 | 19 |
| Poor examination supervision | 26 | 13 |
| Difficult examination subject | 4 | 2 |
| Total | 200 | 100 |

Source: research data (2010)

The following suggestions were made by students to prevent cheating in examination. First there should be proper preparation for examinations which can be effective coupled with early syllabus coverage as was the view of HODs. Secondly, stern measures are taken against those found cheating in order to discourage others from the same vice. Thirdly, proper supervision of examinations should be done by the teachers for this will not give room to cheating.

Table 10. Frequency of assessment in schools

| Variation | Frequency | Percentage |
|------------------|------------------|-------------------|
| Annually | 6 | 32 |
| Termly | 5 | 26 |
| Regularly | 4 | 21 |
| Twice a year | 1 | 5 |
| After 2 years | 2 | 11 |
| Not at all | 1 | 5 |
| Total | 19 | 100 |

Source: research data (2010)

Although frequency of assessment is varied from school to school, as shown in table 10 above; it was established from HODs that quality and standards are maintained through

preparation of schemes of work, setting quality exams, vertical teaching, and taking common exams in the district especially with the examination class form 4. In addition internal supervision and assessment by HODs was also in place. The officers at the education office echoed these sentiments. One of the impediments causing irregular school visits it was established is due to inadequate staffing at the District. It was also established that the road network in the district was poor and impassable during the wet season discouraging accessibility to some schools.

4.4 Challenges schools face in implementation of policy

Inadequate staffing was seen as one of the greatest challenges in implementation of policy. 50.9% of the students viewed inadequate facilities as a factor affecting learning and inadequate staffing took 38%. Discipline was also mentioned by students taking 21% of the factors affecting learning. Students opinion on provision of adequate facilities would enhance learning also took 50.9%. Enrollment in schools has increased with FSE strategy and schools have too many students in a class. Most of the schools have over 200 students 24% have between 100 to 200 students, 32% have between 201 and 350 students and 32% have over 351 learners as shown in table 11 below. Practical lessons in some schools that are not established experienced difficulties because of lack of laboratories. Others had laboratory rooms that were incomplete because they were C.D.F projects awaiting completion.

Table 11. Enrollment in schools in the district

| Enrolment | Frequency | Percentage |
|------------------|------------------|-------------------|
| 100 and below | 5 | 20 |
| 100 to 200 | 7 | 28 |
| 201 to 350 | 10 | 40 |
| 351 and above | 3 | 12 |
| Total | 25 | 100 |

Source: research data (2010)

Student teacher ratio was seen to be varied from school to school too. While some schools were adequately staffed others had a great deficiency an indication that staffing was not uniformly done as shown in table 12 below.

Table 12. Teacher student ratio

| Teacher student ratio | Frequency | Percentage |
|------------------------------|------------------|-------------------|
| 1: 30 | 2 | 15 |
| 1: 45 | 4 | 31 |
| 1: 50 | 4 | 31 |
| 1:60 | 3 | 23 |
| Total | 13 | 100 |

Source: resource data (2010)

Technological changes were also viewed by HODs as a factor affecting curriculum implementation. Some teachers are resistant to change and continue doing things the traditional way. HODs proposed there should be regular in servicing of teachers in all the areas presented by the curriculum. It was noted that science subject teachers regularly organize for SMASSE an issue that should be extended to other subjects. It was also established that Heads of Schools were in serviced more often on management of schools.

CHAPTER FIVE

SUMMARY OF FINDINGS CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The purpose of the study was to establish the factors affecting curriculum implementation in secondary schools in Kenya; special attention was put on policy issues and the impact on curriculum implementation in Kenya. Based on T.S.C policy (staffing), Quality and Standards Assurance policy (DQASO) and challenges facing implementation of the curriculum as the dependent variables 48% of the respondents felt policy on staffing by the T.S.C was effective. The researcher found that each had a major contribution to

curriculum implementation. The chapter gives a summary of the study, findings answers to research questions conclusions and recommendations.

5.1.1 Impact of T.S.C policy on curriculum implementation

Based on the study, it is clear that T.S.C policy on staffing was effective in the district. However 61.5% schools indicated understaffed there by overworking the teacher with only 38.5% being well staffed. This agrees with Gabriel K. L. (2005) that distribution of teachers is not even and is skewed in terms of geographical location, regional and socio economic dynamics. It is clear that the government has been experiencing shortages of teachers in the recent past. T.S.C is dependent on the provisions and allocations from the MOE. Senior teachers, HODs, Principals and their Deputies were to teach lesser load to allow time for administrative roles. However this may not be the case today because of the shortages experienced in schools. A number of young schools have one or two trained teachers (the head and the deputy) with a group of B.O.G teachers. This will make curriculum implementation and policy interpretation difficult for such schools. Although staffing gaps exist, they are difficult to address even with balancing. In the course of the year it was established that 84.6% of the school had not received any new teachers. This indicates that balancing policy may not be as easily as is spoken. With 61.5% of the schools being understaffed the government policy on FSE and the mushrooming of new schools, there is need for staffing in schools to be addressed in totality.

5.1.2 Impact of standards and assurance policy on curriculum implementation

Generally 92.3% of the respondents agreed that assessment adds value to curriculum implementation. It was also established that quality and standards was a collective responsibility by all the stakeholders in education. This is in agreement with Wango (1990) that assessment is not a fault finding mission but is with a view of improving the standards in the school in order to boost performance. Majority of the respondents had been inspected by the DQASOs. In addition internal assessments had been reported as a way of maintaining quality in the schools. Continuous assessment of students in the term was also a measure of assessing not only what the teacher had taught but a judgment of

what the learner had grasped. Although quality evaluation can be hampered with cheating by students, 66% attributed this to lack of preparation 19% difficult subject matter, 13% poor exam supervision, 2% indiscipline by the students. According to KIE (2010) schools overburden learners with frequent assessment at the expense of learning due to high stakes placed on summative evaluation. Other consequences of this as noted by KIE were remedial tutoring private tuition, use of commercial papers and schemes of work overburdening learners and use of KNEC syllabus. Quality may not easily be achieved with inadequate staffing, poor or lack of facilities to effectively implement the curriculum. Students are vital in curriculum implementation yet absenteeism due to lack of school levies took 73.6%. Most parents are still unable to pay for their children's lunch and boarding. Lack of trained teachers in some schools and lack of in service facilities to practicing teachers was viewed as factors that were affecting quality implementation. Technological changes resulting from changes in global trends affected teachers as some are resistant to change. However with in servicing of teachers even the 20 year veteran will be interested in learning new things. HODs recognized the contributions of SMASSE to effective teaching of sciences but this gesture need to be extended to other subjects. Heads of schools it was established are in serviced regularly through KESI and other workshops and seminars.

5.1.3 Challenges schools face in implementation of policy

The main challenges schools face in implementation of policy include: inadequate staffing forcing most schools to employ teachers on school boards. In addition to inadequate teaching and learning resources are poor or lacking, insufficient infrastructure, poor communication, insufficient and delayed funding by the government to schools. A lot of expectations are put on the teacher forcing them to forge ways of excelling in the exams. With the new policy of every school in the district to produce at least two As such pressure is likely to be redirected to the students. It was established that certain schools have better facilities than others yet this students are subjected to the same assessment. Some teachers lack information on prevailing policies within the system due to poor

communication.

5.2 Conclusion

The findings indicate the main variables T.S.C policy, standards and quality assurance resources and other government policies affect curriculum implementation. This was arrived at from the fact that staffing was viewed as a major factor on effective curriculum implementation. It is therefore vital for the T.S.C to ensure that this issue is addressed fully. Although teachers need to be trained continuous in service is vital for all departments in order to keep a breast with any changes that arise. Changes in the curriculum should only be made after a needs assessment is done and teachers contribute to the changes to be made. Most school heads were teachers who had experience in teaching. However some schools lacked skilled teachers to run them leaving the schools to young school leavers employed by school boards. Standards of schools in the district are low due to inadequate facilities. This is likely to continue affecting proper implementation.

School performance depends on contributions by all stake holders, students, parents, teachers, sponsor and any other interested partner in education. Provision of teaching and learning facilities is an important aspect in curriculum implementation. Assessment whether internal or external adds value to the implementation process. It is therefore vital for the DQASO to ensure regular assessment in the district. The district needs to establish systems that will encourage team spirit in the teachers within and outside the school. Employee behavior depends on social organizational circumstances of work leadership style group cohesion and job satisfaction as determinants in work out put. Armstrong (2007) Principals need to be aware of the staff social needs and carter for them if teachers are to collaborate with the official organization rather than the work itself. The study found that teachers student contact be enhanced to boost performance. Teachers need to embrace new trends in education such as e-learning. Over burdening of the learner needs to be eased and curriculum developed be learner centered and not teacher centered. Government funding on FSE was not sufficient, and timely thus forcing some students to

miss classes due to school levies. Parents contributed a lot to absenteeism by delay or inability to meet their obligations on school levies. The study found out that transport and communication in the district was a problem due to poor road network hindering free assessment by officers in the district during the rainy season. The study also established drug abuse within the locality together with lack of parents' commitment and good will affected education standards in the schools in the district.

5.3 Recommendations

The study findings were clear on a number of issues. Firstly a better staffing policy should be established in order to meet the rising needs of schools. The government FSE strategy is commendable. This policy has encouraged majority of students to join schools and opening up of new institutions. There is need for a better way to address these shortages in order to meet the targets of EFA by 2015 and vision 2030.

It was also clear that some schools lack adequate facilities for effective curriculum implementation. Through various agents the government is committed to development of education standards throughout the country, leaders and all stake holders should take issues of education with the seriousness it deserves. Most schools commended the C.D.F for the financial support given to them. However schools C.D.F supported projects should be allocated sufficient funds and completed in the shortest possible time. Rather than giving several schools peanut infrastructural support at the same time projects be done in totality from one school to another. There is also need for the community to be educated on the need to embrace education in totality. Parents need to invest more in education of their children. It was also observed that community support on school management was low the community needs to address their interests in schools in a positive way. Quality of education in the district was hampered by poor road network. There is need for the district development community to open up in accessible areas to boost assessment. Personnel at the district need to be increased too in order to improve on efficiency.

Most teachers in the district have not addressed the e-learning concept mainly because of lack of electricity in most schools. Schools should be supplied with power to enhance modern methods of learning. Modern laboratories should be created to allow for achievement of vision 2030 on industrialization. Besides science subjects should be made compulsory in order to move in line with this vision; industrialization may not be achieved with this kind of perspective. The other area to be addressed includes timely dispersal of funds to the schools. The situation at hand of unreliable remittance leaves some schools in a confused state. A well-defined policy should be put in place to determine how effective these funds are put in use.

5.4 Prospects for future studies

This study was carried out among 13 selected schools in Kakamega South District. A similar study can be replicated in middle level colleges all over the country especially among the private and public colleges that are mushrooming today.

REFERENCES

Bondi, J. & Wiles, J. (2007). *Curriculum Development, a guide to practice*. Columbia Ohio. Met Hill Prentice Hall.

Donald, R. & Schindler, C. (1985). *Business Research Methods*, 8th Edition. New Delhi McGraw Hill: Publishers.

George, B. (1995). *Curriculum Development; A text book for Students*. Nairobi. Macmillan Education Limited.

Gorrads, S. (2001). *Quantitative Methods in Education Research. The role of Numbers made easy*. New York Tower Building Publishers.

Kimutai, N. (2007). Volume 12. *Five year Requirement explained*. Teachers Image Getting Promoted. Nairobi. Oakland Media Services Ltd.

Kihumba, K. (2007). Volume 14. *Crucial Education Reports*. Teachers Image Education Policies. Nairobi. Oakland Media Services.

Kothari, C. R. (2004). *Research Methodology*. New Delhi India. New Age International Publishers.

Lengoiboni, G. Volume 10 (2005). *Responding to Teaching Challenges. The Revised Code of Regulations*, Teachers Image. Oakland Media Services. Nairobi Kenya.

Michael, K. Volume 2 (2006). *The Case for Relief Teachers*. Teachers Image. Oakland Media Services Nairobi Kenya.

Mugenda, A. and Mugenda, O. (1999). *Research Methods Quantitative and Qualitative Approaches*. Acts Press Nairobi Kenya.

Mithal, H. C. (1978) *Foundations of Education Thought and Practice*. Dhanpat. Dhanpat.

Ndalegwa, A. Z. (2007) *Challenges facing marketing of middle level colleges a case of Nairobi*. (Diploma Project: Kenya Institute of Management)

Ministry of Education, (2005) *Strategic Plan 2006 – 2011*, M.O.E Government Printers Harambee Avenue Nairobi. Government Printers

Ministry of Education, (2005). *Sessional paper No. 1 of 2005. A policy Framework for Education Training and Research. Meeting the challenges of Education Training and Research in Kenya in the 21st Century*. Nairobi Kenya. Government Printers.

Oppenheim, A. N. (1996). *Questionnaire Design Interviewing and Attitude*. New edition London, New York. Continuum.

Shiundu, J. S. & Omulando, S. (1992). *Curriculum Theory and Practice*. Nairobi. Oxford University Press

Skinner, C. (1992) 4th ed. *Education Psychology* India. Prentice Hall.

Uribe, A. O. (1985). *Curriculum Studies*. U.K Singapore. Longman Publishers.

Wango, G. (2009). *School Administration and Management. Quality Assurance and Standards in schools*. Nairobi. Jomo Kenyatta Foundation.

APPENDICES

Appendix (i)

Cover letter

JULIAH KAHERA,

P.O BOX 2316,

KAKAMEGA.

20/05/2010.

Dear sir/Madam

RE: RESEARCH STUDY

I am a student at the school of Extra Mural Studies of the University Of Nairobi pursuing Master of Arts Degree in Project Planning and Management. I am expected to conduct a research as part of the requirement for the completion of the course. I will be involved in data collection in secondary schools and the education office.

It is my humble request that you assist me by filling in the questionnaire attached. I assure that any information provided will be treated with in confidentiality, accorded the privacy restricted to use and purpose of this research project only.

I look forward to your kind cooperation.

Yours Sincerely

Kahera Juliah

Appendix (ii)

Questionnaire

District Education Office

SECTION A: BACKGROUND INFORMATION

Kindly answer the following questions. Your answers shall be treated with confidentiality and used for academic purpose only.

1. Gender

Maleí í í í í í í í Femaleí í í í í í í í .

2. Age bracket

Up to 25 yrs. í í í 25-35yrsí í í .. 35-55yrsí í í í ... Above 55 yrs.í í í í .

3. How long have you been in the district?

Up to 3 monthsí í í í 6 months-1 yearí í . 2-4 yearsí í í í above 4 yearsí í í

4. What is your responsibility level?

H/Teacherí í D/Teacherí í . DQASOí í í í . H.O.Dí í í í .. Otherí í í í .

5. What is your educational level?

Secondaryí í í . Diplomaí í í í Universityí í í í Post graduateí í í í

6. How many hours do you spend in the school/office every day?

í í

SECTION B: T.S.C POLICY

7. What is your rating of staffing in the schools?

Excellentí .. Goodí .. Fairí .. Poorí .

What is the reason to your answer?

í
í
í
í í í í ..

8. Do you think TSC's policy on staffing of teachers strongly contribute towards effective curriculum implementation? Yesí í Noí .

Give a reason for your answer

í
í
í í í í í í

9. What are some of the challenges you experience in the implementation of policy?

í
 í
 í í í í í í í .

15. What is the text book student ratio?

1:1í í í í í í í 1:2í í í í í í í í 1:3í . í í í í í í . 1:4í í í í í í í í í í í í í

16. What is the position of infrastructure in the school?

Adequateí .. Inadequateí í Not informedí .. Any otherí ..

17. What is the general schools performance in K.C.S.E in the last three years?

Excellentí í í í Goodí í í í Fairí í í í í í . Poorí í í í

18. In your opinion what do you think is the reason for the performance?

í
 í
 í
 í í í í í í í í í í

19. Apart from SMASSE what other areas of in service of teachers are organized by the district?

í
 í
 í
 í í í í í í í í í í

20. What are some of the targets the district intends to achieve as far as performance is concerned?

í
 í
 í
 í í í í í í í í í í

Appendix (iii)

INTERVIEW GUIDE

Heads of schools

SECTION A. BACKGROUND INFORMATION

Kindly answer the following questions. Your answers shall be treated with confidentiality and used for academic purpose only.

1. Gender

Male í í í í í í í í í . Female í í í í í í í .

2. Age bracket (years)

3. How long have you been in the District (years)

Less than 1 year í í í í í .. 1-5í í í .. 5-10í í .. í . Above 10í í .

4. What is your level of education?

Diploma í í í Bachelors degree í í .. Masters í í . Any other specify í

5. How many hours do you spend at the office every day?

Less than 2 hours í í . 4 hours í í 6 hours í í .. 8 hours í í ..

Section B

6. What is the effect of staffing on curriculum implementation?

í
í
í í í í í í

7. How would you rate your teaching man-power?

Understaffed í í í í í Well-staffed í í í í í í . Overstaffed í í í í í ..

8. How many teachers have been transferred in the course of this year í í í í í ...

9. Have you received any new teachers in the year í í í .

10. How many streams is the school

1í í í í í 2í í í í í 3í í í í .. 4 and above í í í í í

Do you combine classes/streams when teaching?

16. As an officer how would you determine that policy is being implemented?

í
í
í
í
í
í í í í í í í í í í í í í í í í í

19. In your opinion, what ways would you suggest could be used to improve performance of schools in general?

í
í
í
í í í í í í í í í ..

QUALITY ASSURANCE AND STANDARDS

20. How do you rate assessment in the District

Excellent í í í Good í í í .. Fair í í í í .. Poor í í í

21. Do you think assessment adds value and quality to curriculum implementation?

Yes í í í í í í í No í í í í í í í í í í í í í .

Explain briefly your answer

í
í
í
í
í í í í í í

22. What do you think the DQASOs should do in order to maintain quality curriculum implementation in the school?

í
í
í
í í í í í í í í í

23. What are some of the areas addressed during assessment?

í
í í

í
í
í
í
í í

9. Apart from absenteeism what other factors affect learning?

í
í
í
í ..

10. What should be done to improve the school?

í
í
í
How many laboratories are in the school?

Noneí í í í .. 1í í í .. 2í í í .. 3 and aboveí í í í ..

12. How often do you take practical lessons in the laboratory in a term?

Noneí í í .. Every lessoní í í í .. Weeklyí í í í Termlyí í í í

13. In your opinion, in what ways can the teaching of practical subjects be improved?

í
í
í ..

14. How can the government improve on funding of secondary schools?

í
í
í í

15. In your opinion, what makes students cheat in examinations?

í
í
í í

What do you think should be done to stop this cheating?

í
í
í í

Appendix (v)

Budget plan

| Quantity | Price |
|------------------------------|---------------|
| Stationery | 3,000 |
| Secretarial | 8,000 |
| Transport | 6,000 |
| Lunch | 2,000 |
| Training research assistance | 2,000 |
| Total | 23,000 |

