

**IMPLICATIONS OF SCHOOL CULTURE ON ACADEMIC  
PERFORMANCE IN SELECTED PUBLIC SECONDARY  
SCHOOLS IN MACHAKOS COUNTY, KENYA**

**BY**

**MAGDALENE MBULA NGUMUTA**

**A THESIS SUBMITTED TO THE SCHOOL OF EDUCATION IN  
PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE  
AWARD OF THE DEGREE OF MASTER OF EDUCATION  
(SOCIOLOGY OF EDUCATION AND POLICY STUDIES),  
KENYATTA UNIVERSITY**

**JUNE, 2022**

## **DECLARATION**

I Magdalene Mbula Ngumuta, confirm that this thesis is my original work and has not been presented in any other university/institution for certification. This thesis has been complemented by referenced works duly acknowledged. Where text, data, graphics, pictures or tables have been borrowed from other works, including the internet, the sources are specifically accredited through referencing in accordance with anti-plagiarism regulations.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

MAGDALENE MBULA NGUMUTA

REG. NO. E55/7160/2002

### **Supervisors' Declaration**

We confirm that the work reported in this Thesis was carried out by the candidate under our supervision as University Supervisors.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Dr. Francis Kirimi

Department of Educational Foundations

Kenyatta University

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Dr. Rubai Mandela

Department of Educational Foundations

Kenyatta University

## **DEDICATION**

I dedicate this work to my late parents Ngumuta and Ndeleve for educating me; my daughters Dianah and Dhahabu and my sister-in-law Rebecca who patiently gave me support as I went through this course.

## **ACKNOWLEDGEMENTS**

First of all, I thank the Almighty God for giving me good health, and guiding me through the entire course.

The completion of this study would have been impossible without the material and moral support from various people. I therefore extend my gratitude to all of them.

I am greatly indebted to Dr. F. Kirimi Kiara and Dr. R. Mandela who are my supervisors, for their effective supervision, dedication, availability and professional advice. I extend my gratitude to my lecturers who taught me in the M.Ed. programme, therefore enriching my thesis with knowledge. My informants in my study deserve my appreciation for their support and willingness to provide the required information during data collection. My appreciation also goes to my classmates with whom I weathered through the storms, giving each other encouragement and for their positive criticism.

Finally, I sincerely thank my family and my dear friends for their unlimited support and encouragement, making me realize the dream of completion of my master's degree.

## TABLE OF CONTENT

<b>DECLARATION.....</b>	<b>ii</b>
<b>DEDICATION.....</b>	<b>iii</b>
<b>ACKNOWLEDGEMENTS .....</b>	<b>iv</b>
<b>TABLE OF CONTENT.....</b>	<b>v</b>
<b>LIST OF TABLES .....</b>	<b>x</b>
<b>LIST OF FIGURES .....</b>	<b>xi</b>
<b>LIST OF ABBREVIATIONS AND ACRONYMS .....</b>	<b>xii</b>
<b>ABSTRACT.....</b>	<b>xiii</b>
<b>CHAPTER ONE .....</b>	<b>1</b>
<b>INTRODUCTION AND CONTEXT OF THE STUDY.....</b>	<b>1</b>
1.1 Introduction.....	1
1.2 Background to the Study.....	1
1.3 Statement of the Problem.....	7
1.4 Purpose of the Study .....	9
1.4.1 Objectives of the Study .....	9
1.4.2 Research Questions.....	10
1.5 Significance of the Study .....	10
1.6 Limitations of the Study.....	11
1.7 Delimitations of the Study .....	12
1.8 Assumptions of the Study .....	13
1.9 Theoretical Framework of the Study .....	14
1.10 Conceptual Framework of the Study .....	18
1.10.1 The Relationship between the Conceptual Framework and the Theoretical Framework .....	19
1.11 Definition of Operational Terms.....	21

<b>CHAPTER TWO .....</b>	<b>23</b>
<b>REVIEW OF RELATED LITERATURE.....</b>	<b>23</b>
2.1 Introduction.....	23
2.2 Aspects of School Culture and Students’ Academic Performance .....	23
2.2.1 Layers of School Culture .....	23
2.2.2 High and Low Performing Schools.....	26
2.3 School Achievement Orientation and Students’ Academic Performance .....	29
2.3.1 School Achievement Orientation Culture .....	29
2.3.2 Students’ Own Individual Interest in Academic Activities .....	32
2.4 Emphasis and Practice of School Shared Ideology and Students’ Academic Performance .....	33
2.4.1 Collaboration and Collective Working of School Community Members .....	33
2.4.2 School Mentoring.....	35
2.4.3 Hindrances to Development of Positive School Culture .....	36
2.5 The Role of School Principals and Academic Performance.....	39
2.5.1 Central Role of a School Principal in Creating a Learning and Teaching Culture .....	39
2.5.2 Studies on Principals’ Leadership Styles and Students’ Academic Performance .....	41
2.6 Summary of the Gaps of Knowledge that the Study Intended to Fill.....	45
<b>CHAPTER THREE.....</b>	<b>48</b>
<b>RESEARCH DESIGN AND METHODOLOGY .....</b>	<b>48</b>
3.1 Introduction.....	48
3.2 Research Design.....	48
3.2.1 Variables .....	50
3.3 Location of the Study.....	51
3.4 Target Population.....	53

3.5 Sampling Techniques.....	54
3.6 Sample Size.....	55
3.7 Data Collection Procedure .....	56
3.8 Research Instruments .....	57
3.8.1 School Culture Survey (SCS) .....	57
3.8.2 School Culture Typology (SCT).....	57
3.8.3 Interview Schedule for Principals, Deputy Principals and Key Informants .....	58
3.8.4 Interview Guide for the County Education Administrator and School Principals .....	59
3.8.5 Questionnaire for Students.....	60
3.8.6 Questionnaires for Teachers .....	60
3.8.7 Focus Group Discussions for Teachers.....	60
3.8.8 Document Analysis .....	60
3.9 Piloting Study.....	61
3.9.1 Validity of Research Instruments.....	62
3.9.2 Reliability of Research Instruments.....	62
3.10 Data Analysis .....	64
3.11 Logistical and Ethical Considerations .....	65
3.11.1 Logistical Considerations.....	66
3.11.2 Ethical Considerations .....	66
<b>CHAPTER FOUR.....</b>	<b>68</b>
<b>DATA ANALYSIS, PRESENTATION AND DISCUSSIONS .....</b>	<b>68</b>
4.1 Introduction.....	68
4.2 General and Demographic Information .....	69
4.2.1 General Information.....	69
Table 4.1: The Questionnaire Return Rate by Students.....	69
4.2.2. Demographic Information.....	69

4.3 The Effects of Salient Aspects of School Culture on Academic Performance in Selected Public Secondary Schools in Machakos County .....	70
4.3.1 Effects of a School’s Cultural Systems on Academic Performance .....	78
4.4. Role of Students' and Teachers' Achievement Orientation Culture in Academic Performance .....	83
4.5 Emphasis and Practice of a School’s Shared Ideology and Academic Performance. ....	89
4.6 The Central Role of a School Principal in Fostering a Learning and Teaching Culture in Selected Public Secondary Schools in Machakos County .....	95
<b>CHAPTER FIVE .....</b>	<b>101</b>
<b>SUMMARY, CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>101</b>
5.1 Introduction.....	101
5.2 Summary of the Findings Based on Each Study Objective .....	101
5.2.1 Effects of Aspects of School Culture and their Influence on Academic Performance .....	101
5.2.2 Implications of Students’ and Teachers’ Achievement Orientation Culture on Academic Performance .....	102
5.2.3 The Role of a School’s Shared Ideology on Academic Performance.....	103
5.2.4 Implications of School Principal’s role in Fostering a Learning and Teaching Culture on Academic Performance .....	104
5.3 Conclusions of the Study .....	105
5.4 Recommendations of the Study .....	107
5.4.1 Policy Recommendations.....	107
5.4.2 Recommendations Related to Practices .....	107
5.4.3 Recommendations for Further Research.....	108
REFERENCES .....	109
APPENDICES .....	114
APPENDIX A: QUESTIONNAIRE FOR STUDENTS .....	114

APPENDIX B: QUESTIONNAIRE FOR TEACHERS .....	119
APPENDIX C: INTERVIEW SCHEDULE FOR SCHOOL PRINCIPALS .....	127
APPENDIX D: PSEUDO NAMES OF INFORMANTS .....	132
APPENDIX G: AUTHORIZATION LETTER – KU GRADUATE SCHOOL .....	133
APPENDIX H: RESEARCH AUTHORIZATION LETTER - NACOSTI .....	134
APPENDIX I: AUTHORIZATION LETTER – NACOSTI CERIFICATE .....	135
APPENDIX J: AUTHORIZATION LETTER – NACOSTI GUIDELINES .....	136
APPENDIX K : AUTHORIZATION LETTER - MACHAKOS COUNTY .....	137

## LIST OF TABLES

Table 3.1 Stratified Sampling of Schools .....	55
Table 3.2 Sampling Frame of Informants .....	56
Table 4.1 Questionnaire Return Rate by Students .....	69
Table 4.2 Gender of Study Informants .....	70
Table 4.3 Categories of School Cultural Aspects in Five Groups of Coded Public Secondary Schools in Machakos County.....	71
Table 4.4 Effects of Schools' Cultural Systems on Academic Performance-Positive and Negative Aspects (scale 1-5).....	79
Table 4.5 Comparison of Students' and Teachers' Academic Orientation Culture ..	83
Table 4.6 Emphasis and Practice of a School's Shared Ideology .....	90
Table 4.7 The Role of School Principals in Fostering a Learning and Teaching Culture .....	96

## **LIST OF FIGURES**

Figure 1.1 Conceptual Framework.....	18
Figure 3.1 Map of Machakos County Showing the Eight Sub-Counties.....	53

## **LIST OF ABBREVIATIONS AND ACRONYMS**

<b>BOM</b>	Board of Management
<b>CDE</b>	County Director of Education
<b>CEA</b>	County Education Administrator
<b>EFA</b>	Education for All
<b>FGD</b>	Focus Group Discussion
<b>KCSE</b>	Kenya Certificate of Secondary Education
<b>KNEC</b>	Kenya National Examination Council
<b>MKO</b>	More Knowledgeable Other
<b>NACOSTI</b>	National Commission for Science Technology and Innovation
<b>SCS</b>	School Culture Survey
<b>SCT</b>	School Culture Typology
<b>SMART</b>	Specific, Measurable, Attainable, Realistic and Time bound
<b>SPPS</b>	Statistical Package for the Social Sciences
<b>TSC</b>	Teachers Service Commission
<b>ZPD</b>	Zone of Proximal Development

## ABSTRACT

The study was prompted by concerns raised by various stakeholders in Machakos County over declining performance of public secondary schools that used to perform well in the past decades' national examinations. The study sought to examine specific school cultural aspects and their relationship to students' academic performance as evidenced by Kenya Certificate of Secondary Education (KCSE) results in selected Public Secondary Schools in Machakos County, Kenya. Objectives of the study were to: Investigate the effects of aspects of school culture on academic performance in selected Public Secondary Schools in Machakos County, Kenya; Examine the role of students' and teachers' achievement orientation culture and how it affects academic performance in selected Public Secondary Schools in Machakos County, Kenya; Establish how emphasis and practice of a school's shared ideology enables high academic performance in selected Public Secondary Schools in Machakos County as well as examine the effects of the role a secondary school's administration in fostering a learning and teaching culture which affects academic performance in selected public secondary schools in Machakos County. Both qualitative and quantitative research methods were employed. The study was guided by Vygotsky's Theory of Social Interactionism. The study utilized a sample of 21 selected Public Secondary schools out of 212 public secondary schools in Machakos County. These schools included high and low performing Schools which were purposively selected. Sample size of the study was 200 students of which 100 were boys and girls were 100; 21 principals [men were 11 and 10 were women] and 21 deputy principals [10 men and 11 women], 25 teachers [12 men and women 13], 1 lady County Education Officer from Machakos County. The study adopted a descriptive research design. It employed both probability and non-probability sampling methods. Data analysis was guided by themes from research objectives. Data was analysed quantitatively and qualitatively. Analysed data was presented using qualitative and quantitative methods. Qualitative methods included narratives and descriptions while quantitative methods included tables showing comparisons, fluctuations and distributions in percentile presentations. The study found out that there were various school cultural aspects that affect students' academic performance. They included shared norms by teachers, positive assumptions on academic performance of students and good incidences among teachers which were most predominant positive cultural aspects in selected Public Secondary Schools that enhanced Students' academic performance. Findings also revealed some predominant negative cultural aspects in schools; these were rumours among students and rumours among teachers. The study therefore concluded that positive school cultural aspects had significant influence on students' academic performance. The study recommends that School cultural aspects should be given strong emphasis since they have great influence on school climate that contributes to students' academic performance.

## **CHAPTER ONE**

### **INTRODUCTION AND CONTEXT OF THE STUDY**

#### **1.1 Introduction**

This chapter is comprised of the background of the study, Statement of the problem, purpose of the study, objectives of the study, research questions, and significance of the study, limitations and delimitations of the study, assumptions of the study, theoretical and conceptual frameworks and operational definition of terms.

#### **1.2 Background to the Study**

Over the years, the result of studying on learners' performance has been identified as one of the main ideas in educational survey. Coleman, Campell, Mcparland, Mood, Weinfeld and York (1966) observed that, school factors had little effect on academic achievement as compared to family background factors. This study sparked off a series of studies as well as debate on whether family or school factors were more significant in relation to a student's academic performance.

Academic performance is the measure of a student's achievement across various academic subjects. Teachers and education officials typically measure achievement with classroom performance, graduation rates, and records from standardised examination bodies.

Academic achievement or academic performance is the extent to which a student, teacher or institution has attained their short-term and long-term educational goals. Completion

of Educational benchmarks such as Secondary School, Diplomas and bachelor's degrees are also deemed to be academic achievement.

The words Academic performance and Academic achievement can be used interchangeably in this study and the meaning will depend on the context of usage but basically, the two different terms may refer to the same thing at some point or the other. School Culture can be defined as the guiding beliefs and values evident in the way a school operates (Fullan, 2007). Again 'School Culture' can be used to encompass all the attitudes, expected behaviours and values that impact how the school operates.

The current study however, concerns itself mainly with school factors, with a focus on specific school cultural aspects that may have an effect on learners' academic performance in selected Public Secondary schools in Machakos County, one of the 47 counties in Kenya. The study sought to examine the specific school cultural aspects and their relationship to students' academic performance as evidenced by Kenya Certificate of Secondary Examination (KCSE) results in selected Public Secondary Schools in Machakos County, Kenya.

The study focussed on Public Secondary Schools in Machakos County because of the existing literature gaps. Many Authors have carried out studies in Kiambu County, Nairobi County and even Homabay County but not yet done so in Machakos County.

Omusunga, Kasadi and Indoshi (2008) focussed on the Influence of School culture on French as a Subject but did not consider other Subjects as well as other aspects of culture

on overall performances of students with respect to school culture. They did not mention Machakos County. Ouma (2011) established a strong relationship between school culture and pupils' performance in Kenya Certificate of Primary Education (KCPE) but it neither touched on KCSE performance nor Machakos County. Nyambuoro did a study in Matungulu and its neighbouring Kathiani areas of Machakos County but lacked objectivity by not looking at the entire Machakos County (Mutuku, Felicita, Nyambuoro and Ogola, 2017).

According to the Association for Supervision and Curriculum Development (1983), two major reasons appear that justifies why powerful schools' beliefs can better educational excellence. The foremost is the inner one: in majority of the learning institutions tutors and learners fail to realise what is expected of them and also fail to notice how their deeds are connected to the school's larger endeavours. Tutors, learners, guardian/parents, school managers and subordinate workers in most cases create subcultures around instant local interest that propel a school in different directions. In such an environment it is difficult to deduce the effects it would have on standards, beliefs, consistency, efforts, motivation and other vitalities crucial to instructing or learning. Powerful set of beliefs and customs assures there is an inner bond that facilitate tutors to teach learners to learn and for school managers, parents and other stakeholders to play their part in the teaching system. The second reason is exterior: for whatever reason, learning institutions viewed by facial outlook as well as by academic outcomes. In school quarrels, diverse signs, bad reports and absence of real evidence that an institution embraces a unique thing make it hard to attract the confidence and assistance of external organisations. A school can relay

its identity to outside organisations and rally them to participate via shared values, rituals and ceremonies, heroes and heroines and a supportive internal network.

Looking at salient school factors that can influence students' academic achievements, Hoy and Feldman (1999), in a study on the School Environment in America asserted that school is more than just the physical facilities. They underscored the need for a caring and supportive school environment which comprises of learner's motivations like trophies and prizes, sponsors to support and aid the students, guidance and counselling, good learning facilities, religious support, good and conducive learning and teaching environment and motivated teachers for learners to be motivated. Hoy, (2010) observed that successful institutions of learning that encourage great academic standards, right administration and collegiality offer an environment more suitable to learners' excellence and attainment. Watson (2002) says that if the school culture is not hospitable to learning then students' achievement can suffer.

Gruenert (2005) examined the interconnection between institutions of learning, general behaviour and learner progress in which he noticed important connection between different factors of a school's system of beliefs and customs, school environment, administration and learner academic performance. The culture controls operation of events and behaviour of the people (Gruenert, 2000). In this study school cultural aspects such as rituals, ceremonies, artefacts and others were examined to determine the extent to which they may impact on students' academic performance in high and low performing Public Secondary Schools in Machakos County, Kenya.

Deal and Peterson (1994) in Odongo (2013), asserts that all that happens in schools is determined directly by culture starting from dressing code and etiquette of the teaching staff, their opinions, their readiness to change, the practice of teaching and the enthusiasm shown on learners and department instruction. Secondary schools are essentially cultural facilities/creations full of exciting multitude of artefacts, practices, rituals of all that affect head-on on the manner in which their occupants circumvent the terms of their living inside the organisations (Jelagat, 2014). Schools being inherent cultural entities as asserted by Hemmings (2000), display their artefacts, rituals and rites through various discourses such as a school's academic achievement orientation, its cultural aspects and/or layers, shared ideology, collaborations, general school environment and leadership, all of which this study sought to examine and describe.

Change can be attained in school performance where there is a clear and shared focus of a school's vision and goals. Rosenholtz (1989) observes that collective emphasis in a learning institution shows the way and aim for tutor association and enhances surreality concerning instruction practice. Deal and Peterson (2009) in their study suggests that a healthy positive culture provides several beneficial functions which include: promoting effort and productivity, bettering collegial and collaborative activities that in the long-run enhance smooth communication and problem solving, aiding successful and advancement efforts, putting into place devotion to duty and enabling tutors and learners to identify with the school, increasing zealously and motivation of tutors and learners as well as paying attention to routine behaviour on what is important and cherished.

Kytle and Bogotch (2000) came up with six cultural basics of school culture, encompassing expertise values; an insistence on education which bring forth a scholarly society in which there emerges enthusiasm to expertise growth and higher results for learners, university education which enables tutors to make expertise decisions via the creation of supportive interpersonal connections, cooperation which involves intermingling between tutors in which knowledge is utilised by all on school learning issues and also involving teaching programs, collective planning which encompasses a shared process thus ensuring a foresight of institution is realized by logic planning and reformation by school principals who delegates authority and enacts a school reformation system that makes use of personal ability and involvement of instructors. Fink and Resnick (2001) reminded us that school principals are responsible for establishing a pervasive culture of teaching and learning in each school. Moloji (2007) observes that principals in South African schools are faced with many challenges in transforming schools and creating a sound school culture of teaching and learning where effective education can take place due to the segregated and divisive legacy of its apartheid past.

In Uganda according to Nsubuga (2009) unless head teachers are well equipped with knowledge and skills in management and leadership, they may not improve school performance significantly. The role of a principal with adequate managerial skills to foster a positive teaching and learning school culture cannot be over emphasised.

School leadership style is also a key variable in establishing and enhancing positive change. According to McNulty, Waters and Marzano (2005), they identified 21 leadership qualities that have optimistic impacts on learners' learning. Among these

qualities seven were specifically associated with enhancing the number two order change. This order change needs changes in outlooks, philosophies and standards that can adversely affect learners learning in contrary to the formal order change that is connected to organisational or structural changes that unlikely influence learners' studying.

According to Gaziel (1997), a school's accomplishment familiarization and education values are linked to academic performance and embodied in a school's culture. Some Studies in Kenya such as those done by Nyagosia, et al., (2013) and Musungu and Nasongo (2008) are among those that have directly linked good performance in school examinations to effective instructional leadership by head teachers. However, some scholars such as Witziers, et al., (2003) doubted whether instructional guidance is important, maintaining that there is inadequate evidence to boost the interconnection with performance.

Unlike a study by Mutuku, Felicita and Ogola (2017) that sought to explore the relationship of principals' leadership practices on learners' academic achievement in secondary school institutions in Machakos County, this study sought to examine the overall Implications of School Culture on Academic Performance in Selected Public Secondary in Machakos County, Kenya.

### **1.3 Statement of the Problem**

The study sought to examine specific school cultural aspects and their relationship to students' academic performance as evidenced by KCSE results in selected public

secondary schools in Machakos County, Kenya. According to the Kenya National Examinations Council (KNEC) rankings, schools in Machakos County were trailing with the best School ranking position 62 in 2020, position 65 in the year 2019, position 68 in the year 2018 and none among the best 100 Schools in the year 2017 KNEC Report (2020). The study was prompted by concerns raised by various stakeholders in the county over declining performance of schools in KCSE.

School culture is a very broad term that embodies almost everything that is found within a school setting. It includes school climate, environment and school leadership among others. Previous studies have shown that there exists a powerful connection between the standard of education performance and the standard of its management. Whereas some researchers maintain that there exists inadequate truth to back the relationship between school administration and learners' educational excellence, most of researches done on school administration have shown that learning institutions' administration standards directly impact the learning institution's progress, tutors' efficacy and learners' education capability.

However, there is a gap in relation to salient aspects of school culture that affect students' academic performance and this study sought to investigate those salient aspects in some selected Public Secondary schools in Machakos County. This study sought to address both students' and teachers' academic orientation culture and how it affects students' academic performance; thereby filling existing gaps available in most school culture studies previously done. Studies on the role of a shared ideology and teachers'

collaboration abound. Therefore, this study sought to explore the role of a school culture in academic performance achievement. The leadership style of the principals and its effects on fostering a learning and teaching culture was also examined in this study.

#### **1.4 Purpose of the Study**

The major aim of this research was to investigate the Implications of School Culture on Academic Performance in Selected Public Secondary Schools in Machakos County, Kenya.

##### **1.4.1 Objectives of the Study**

The study sought to;

- a) Investigate the effects of aspects of school culture on academic performance in selected Public Secondary Schools in Machakos County, Kenya.
- b) Examine the role of students' and teachers' achievement orientation culture and how it affects academic performance in selected Public Secondary Schools in Machakos County, Kenya.
- c) Establish how emphasis and practice of a school's shared ideology enables high academic performance in selected Public Secondary Schools in Machakos County, Kenya.
- d) Examine the effects of the central role of secondary school Principals' in fostering a learning and teaching culture which affects academic performance in selected Public Secondary Schools in Machakos County, Kenya.

### **1.4.2 Research Questions**

The Research Questions used in the study were: -

- a) What aspects of a school culture affect academic performance in selected Public Secondary Schools in Machakos County, Kenya?
- b) How do students' and teachers' achievement orientation culture affect academic performance in selected Public Secondary Schools in Machakos County, Kenya?
- c) How does emphasis and practice of a school's shared ideology enhance academic performance in selected Public Secondary Schools in Machakos County, Kenya?
- d) What is the effect of the central role of secondary school Principals in fostering learning and teaching culture which affects academic performance in selected Public Secondary Schools in Machakos County, Kenya?

### **1.5 Significance of the Study**

This research would be helpful to the various participants in academia in the following ways: -

The study would enable the Education Policy Makers to explore the possibilities of engaging functional exchanges of school culture aspects and their relationships with academic performance in public secondary schools.

The study would be useful to the Board of Management (BOM), principals, teachers, parents and students of all secondary schools by providing information on how school culture affects students' academic performance. This would enable them to make the

necessary adjustments to build on students' personal care, school's administration and management hence improving on students' academic performance.

The study results would document the influence of school culture on academic performances for the administrators, teachers, students and the community to read and have knowledge on them and apply them in their learning and teaching process.

In addition, this study would be beneficial to the teacher-counsellors and the administrators in secondary schools on better understanding of school culture and thereafter use this knowledge as a tool to manage teaching and learning process in schools.

### **1.6 Limitations of the Study**

According to Mugenda and Mugenda (2003) limitations are some aspects of a study that the researcher knows may negatively impact on the research that he/she has no control over. This study in schools involved in-depth study of various issues. This made some of the informants feel disclosure would affect the fame and reputation of their school. The investigator guaranteed them anonymity, high secrecy and confidentiality which made them feel relaxed to share information that made the study to collate adequate data to attain the aims of the study.

The teachers and students had a feeling that sharing information about their school may endanger their relationship with the school management and the principals. The study assured them that the findings were only to be utilised for education targets and their

responses would be handled with great secrecy. This enabled them to share relevant data which enabled the study to achieve its objectives.

### **1.7 Delimitations of the Study**

Delimitation is setting boundaries of the study to make it manageable Mugenda and Mugenda (2003). This study was conducted in Machakos County only. It was also delimited to public secondary schools because they share academic features that are different from private schools. As demonstrated by previous studies, students' academic performance was influenced by various factors such as school environment, Principals' style of management, school climate, school cultural aspects, among others. This study only focused on Implications of School Culture on Academic Performance in selected Public Secondary Schools in Machakos County, Kenya. However, although there are various distinct factors affecting students' academic performance in school, all are linked either directly or indirectly to school cultural aspects, as deduced from this study's findings.

The fact that academic performance entails many other factors like school climate, school environment, school leadership style and resources among others, this study was delimited to school culture aspects. However, the researcher attempted to control those other factors by selecting schools that shared and had similarities on those other variables so that school culture alone could be well be articulated.

The study was delimited in its choice of schools to be studied to only high and low performing selected public secondary schools in Machakos County as evidenced by KCSE results. However, Machakos County has 212 public Secondary schools, based on the KCSE results of 2017 and 2018 academic years. Proportionate sampling was adopted to ensure representativeness.

Besides the above, school culture is a broad area and hence, the study was delimited to only school cultural aspects, students' and teachers' academic orientation culture, shared ideology and the central role of school principals in fostering learning and teaching culture.

### **1.8 Assumptions of the Study**

It was assumed that:

- a) School culture affects academic performance in selected Public Secondary Schools in Machakos County, Kenya.
- b) Students' and Teachers' achievement orientation culture affects academic performance in selected Public Secondary Schools in Machakos County, Kenya.
- c) Emphasis and practice of a school's shared ideology enables high academic performance in selected Public Secondary Schools in Machakos County, Kenya.
- d) The role of a secondary school administration fosters learning and teaching culture which affects academic performance in selected Public Secondary Schools in Machakos County, Kenya.

## **1.9 Theoretical Framework of the Study**

The research was directed by a theory propounded by Vygotsky's referred to as Social Interactionism Theory. This theory courtesy of a psychologist from Russia by name Lev Vygotsky (1896-1934) was developed in the course of Russian radical political changes. Constructivism owes some of its foundation to Vygotsky's theory. It propounds three main themes: First is that people intermingling plays a significant part in the development of mental knowledge for them. Comparing Vygotsky (1978) with Jean Piaget's, he felt social learning precedes development contrary to Jean Piaget's understanding of child development and beliefs that development comes before education/learning. He states that "Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people, that is interpsychological and then inside the child, which is, intrapsychological", (Vygotsky, 1978).

The above tenet was relevant to the study's objective that sought to establish effects of cultural aspects to a student's academic performance. Through social interaction, students acquire acceptable cultural aspects at a social level that later affect their academic performance as individual students. The study sought to describe how school cultural aspects such as ceremonies, symbols, rituals, artefacts among others, practiced at a social level, affect a student's academic performance at an individual level. Paying attention on the relationship between people and the socio-cultural environment in which they operate and intermingle in common experiences, Vygotsky (1978), observed that learning occurred in this zone. People utilise tools that evolves from a cultural setup for example writing and speech to negotiate in the societal setup. In the early stages the young ones

develop these tools to act mainly as social activities and avenues to relay their wants. He was convinced that the grasping of these tools resulted to the realization of greater thinking capacities.

Social interactionism tenet guided this study in its pursuit of describing schools' cultural aspects such as symbols, artefacts and value system which play an important role in students' academic performance. Learning institutions have for a long time held a transitory or instructionists model in which parents, teachers and peer groups 'transmit' information, beliefs, values, customs and traditions to students which in effect has great bearing on what they are able to achieve. Social interaction tenet will be useful for this study in describing a schools' cultural aspects and their relationship to students'' academic performance by paying attention on relationship between people and the socio-cultural environment in which they operate and intermingle in common experiences, as conceived by Vygotsky (Crawford, 1996).

The second premise was on the More Knowledgeable Other (MKO). This abbreviation stands for anybody who is more knowledgeable or highly skilled than the students, in regard to a specific task, concept or process. The MKO is usually interpreted to entail trainers, tutors and senior adults, and it could also include peers, a junior person, or even computers. The second premise on the more knowledgeable others signifies the role of leaders such as the school Principal, teachers and parents in creating a conducive atmosphere for learning through shared vision and mission.

The above tenet was relevant to this study as it was useful in helping this study in its pursuit of determining the role of school administration in fostering positive culture that enhances learning excellence among high schools in Machakos County. The school Principal in this case is the Most Knowledgeable Other. Mwangi (2009) in a study entitled role of school administration in learners' attainment in Kenya' found out that the Head teachers' administration involvement portrayed dedication, sensitivity and attention on incessant innovation and transparency to knowledge and varying opinion seriously affecting learners' achievement.

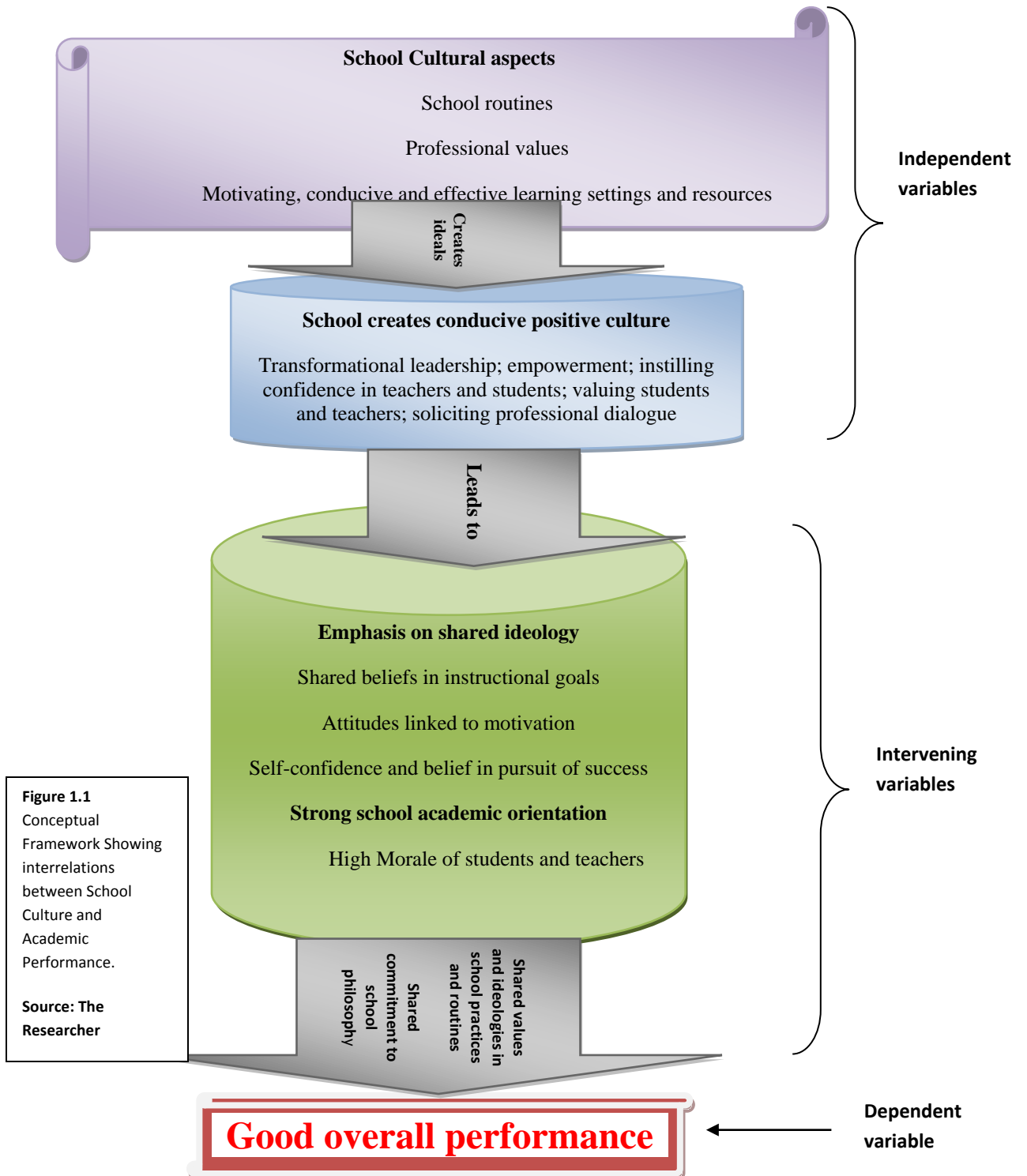
The third premise was Zone of Proximal Development. The ZPD is the interval separating a learners' ability to do an assignment under an adult direction and /or with fellow colleague cooperation and the learner's ability of tackling a query individually. This premise is relevant to the study's objective that seeks to determine how a schools shared ideology and collaboration affect students' academic performance. It is also relevant to the study's objective that sought to determine how a school's academic orientation affects students' academic performance. Through shared ideology and collaboration, students are guided to acquire positive cultural aspects that then assist them to individually on their own, face examinations in a school. Through these interactive processes, the Zone of Proximal Development (ZPD) is then achieved when students post good results in national exams.

The researcher is aware of the existence of other theories such as the Administrative Theory by Fayol (1949). This theory, in its principle of remuneration, states that the

efforts of the workers, that is, the teachers and support staff, should be rewarded by pay. In this case, the proponents of this theory recommend prize giving for the best performing students and teachers as an added advantage and a good initiative for enhancing academic performance. However, in spite of this awareness, the study focussed mainly on Vygotsky's Theory of Social Interactionism as most suitable in examining the implications of school culture on academic performance.

### 1.10 Conceptual Framework of the Study

In this study, a framework relating to implications of school culture on academic performance in public secondary schools was conceptualized as presented in Figure 1.1.



**Figure 1.1**  
Conceptual Framework Showing interrelations between School Culture and Academic Performance.  
  
Source: The Researcher

The conceptual framework in Figure 1.1 above helped in conceptualizing the research difficult and issuing a way to connect ideas and information in order that stronger relationship between elements and aspects of school culture and their relation to students' academic performance could be revealed. It helps in showing the link between literature review and the problem of the study and acts as a reference point from which to locate the research questions. The conceptual framework makes concepts of the research clearer by acting as a roadmap, organizing device as well as an abstract representation of the relationships between the study variables. A school's culture is the independent variable whose indicators includes: professional ethics, rituals, norms and values, ceremonies, shared ideologies, collaboration, a school's academic orientation and the central role of the school principal in fostering positive culture. The intervening variables include team work, shared values and ideologies in school practices and routines, self-confidence and belief in pursuit of success, high morale of students and teachers, shared beliefs in instructional goals and shared commitment to school philosophy. The dependent variable was good overall academic performance which is the end result of a positive school organizational culture.

### **1.10.1 The Relationship between the Conceptual Framework and the Theoretical Framework**

The conceptual framework links indicators and concepts of school culture to either high or low academic performance, where academic performance is the dependent variable for the study. The attributes of school culture considered in this study are prevalent in all schools in one form or the other. The conceptual framework shows variables that fall

within school cultural aspects that the study sought to investigate such as resources, symbols, behavioural regularities, beliefs and norms observed by all the members of the school community. Shared beliefs in instructional goals and practices, shared commitment to school philosophy, shared perception of belongingness and transformational leadership, are all indicators and constructs for measuring school culture. The framework demonstrates that presence, a focus and emphasis or absence, lack of emphasis on those constructs influenced either high or low KCSE students' academic performance in public secondary schools.

The Conceptual Framework is in tandem with the Theoretical Framework in the sense that they both articulate the effects of school culture on academic performance.

### **1.11 Definition of Operational Terms**

**Ceremonies** -Refers to special events organized by members of a school community (students, teachers, management) for various reasons, mostly to applaud success to transmit or further notice or value unique contributions of students or staff.

**Culture** -Refers to the total general mode of existence of members of a society comprising of the behaviours, beliefs, values, and symbols and other artefacts that are accepted, communicated and passed on, from one group to the other. (For School culture, see the definition below).

**Low-performing school** -Refers to schools posting KCSE results with half or more than half of the candidates scoring a mean grade of C- and below.

**Norm** -Refers to established behaviour pattern by members of a school, which guides them not only on what to do but also, on why and how to do it.

**Performing schools** -Refers to schools posting KCSE results with half or more than half of the candidates scoring a mean grade of C and above.

**Rituals** - Refer to regular or occasional rites or performances done in a particular way or style to portray a school community's uniqueness and have a bonding effect and sacredness, as defined by the members. It embodies time to time meaning-filled relations that are vital to strengthening, refurbishing, and revitalizing specific aspects of their school culture.

**School culture** -This refers to acceptable attitudes, norms, perceptions, interactions and beliefs recorded and unrecorded rules and regulations that direct and affect

every facet of how a learning institution operates portrayed in their nature and way of interactions and relationships.

**Values** -Refers to generally acceptable tenets held by members of a school community based on what they conceive as right or wrong and is anchored on their common perception and way of life.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **2.1 Introduction**

This chapter attempts a thematic appraisal of studies linked to school culture and its influence of academic performance. The study was guided by themes from the research objectives. The chapter focuses on school culture studies particularly layers and aspects of school culture, shared goals, ideology and mission in school as well as school effectiveness studies. The role of school principals in developing and enhancing a school's culture, characteristics of high performing and low performing schools, school climate as well as school achievement orientation was also examined. The chapter is concluded with the gaps of knowledge that the study sought to fill.

#### **2.2 Aspects of School Culture and Students' Academic Performance**

##### **2.2.1 Layers of School Culture**

The substance of culture entails the understanding of simple assumptions, beliefs and values and also including artifacts of a culture common to entire school community. The substance is often defined by average of dimensions (Dellar & Cavanagh, 1998; Anderson & Johnson, Snyder, Johnson, 1996; Pang, 1996) or typologies of culture (Staessens, 1991; Aitkin & Handy, 1986). Culture can be viewed as 'goals oriented' or 'collaborative'. Different vocabularies with same meaning as content of culture include constituent of culture (Maslowski, 1996) the trend of culture (Serpa, Saxton & Kilmann, 1986) or cultural qualities (Scaffold, 1988).

According to Schein (1985) in Maslowski (2001), a school's culture can be classified at three levels, in other words called the cultural system of a learning institution. Maslowski (2001) deduces, with concern to cultural features in learning institutions, Schein (1985) in the area of education management grouping of cultural levels is embraced by many academicians. Schein's divisions have three stages that differ as concerns their conspicuousness in learning institutions and their alertness amongst teachers. In the lower stage in Schein's grouping exhibits of simple expectations, which according to his opinion consist the core of an association's culture. At a higher stage of alertness, transitional stage in Schein's grouping, ethics are present. In stage three there are customs and artefacts connecting to cultural appearances and morals arrangements of association adherents. The least tangible, deepest stage of culture comprises of simple expectations common to teaching staff, which make up the epicentre of school culture.

Assumptions are beliefs that employees take for granted (Schein,1985). Teachers are often unaware of the assumptions that underpin their everyday understanding of their responsibilities due to their taken-for-granted existence. These beliefs are likely to remain implicit until they are challenged by another member of staff, a learner, or a guardian (Stolp & Smith, 1995). Teaching staff will then show on their actions and become aware of the fundamental expectations that underpin their understanding of what they do. Values and norms make up the second level. Teachers' values apply to what they consider to be "healthy", "correct," or "acceptable." As a consequence, values should be treated as desirable standards; they represent what is deemed valuable to achieve or worthy of aspiring for in a learning institution. Tutors, for example, can value cooperation with

other teaching staff or read respect for others as significant. While teachers are not always aware of the principles that govern their actions, the majority can articulate their core values (Corbett, Rossman, & Firestone, 1988). Values like association or admiration are mostly turned into behavioural norms. These behavioural norms, for sure, are ‘non-recorded regulations’ and which the rest all are supposed to follow. Norms shows what teachers’ perceptions of other members of the staff are expressed in the norms. Norms represent what is not acceptable in school and what is seen as unwanted behaviour.

The number three level on Schein’s categorization scheme entails practices and artefacts. In addition, as concerns behavioural traits, this stage also encompasses procedures, rituals and customs. When these practices and behaviours are operationalized the underneath expectations, norms and values evolve. For every school unique behavioural pattern is cultivated. The substance of culture means cultural artefacts that are shared by school members and also refers to the meaning of simple assumptions, values and norms.

Cultural aspects that encompass a school’s culture also entail school rituals. Rituals are a series of actions that are performed in the same way, especially as part of a practice. These may include and not limited to rites and ceremonies, assemblies, prize giving days, music festivals, Management Board meetings, and sponsorship of a variety of extracurricular activities, pep and spirit rallies and formal social events such as the prom and the culminating rite of passage, which is the formal graduation ceremony at the end of four years. These rituals seek to provide for commonality of experience, mark

significant events in the life of the institutions and strengthen the bonds between members of the school community thereby increasing their points of engagements and sense of purpose. Additionally, tradition plays important roles in the formation of the parameters that serve to define an institution's culture.

Established traditions in secondary schools differ from one school to another and are part of a unique cultural aspect of the school. Traditions are important events that have a special place in time and meaning and happen in years consecutively and provide ample service to community members with a basis to whether difficulties, change and challenges. They entail activities meant to commemorate unique occasions and events that strengthen institutional rites and values.

### **2.2.2 High and Low Performing Schools**

The clamour for quality education and success, skills and attitude acquisition are a universal phenomenon as evidenced by various charters and aspirations such as Education for All (EFA) among others. It is the dream of every student, parent, teacher, school manager, the government and others to experience improvement in academic performance. Cheng'oli, Osman and Ongeti (2013) Quoting Cavanagh and Dellar (2003), observe that schools in Kenya are graded as 'performing' or 'non-performing' based on school average scores in national examinations. A disturbing recurrent question in the minds and debates of most Kenyans thus, is, why do we have some category of schools termed as 'performing' while others 'non-performing'? What then could be the possible differences or variables associated with 'performing' schools as opposed to 'non-

performing ones? Various studies have been carried out focusing on varied aspects but still, no clear answer is forthcoming. For instance, Shannon and Bylsma (2007) gives nine characteristics of high performing schools as: clear and shared focus, high standards and expectation for all students, effective school leadership, high levels of collaboration and communication, curriculum and instruction aligned with standards, frequent monitoring of teaching and learning, focussed professional development and high levels of community engagement. This study sought to compare the practice of the above variables which are found also in elements of culture in performing and non-performing public secondary schools located in Machakos County and describes their contributions to school academic performance within current operations of secondary schools in Machakos County, Kenya.

Kritek (1986) in Maslowski (2001) has talked about a school improvement case study in which four relatively successful and four relatively unsuccessful schools participated. Kritek found higher ratings of school spirit, frequent student monitoring and evaluation and more frequent teacher discussions in the successful schools. The case study further revealed that teachers in all four 'more successful' institutions of learning offered teachers more collaboration, a high degree of teachers interests and excitement, equal targets and agreement amongst teachers with concern to curriculum philosophy and policies as reasons for progress. Maslowski (2001) carried out a study on School Culture and School Performance where he looked into the beliefs and customs of learning institutions and on the connection between culture and academic excellence. Edmonds (1979) has discovered factors that portray schools' culture like unity and association

amongst members of staff, a common mission or philosophy and achievement orientation. Similar conclusions have been drawn from various school effectiveness studies (Lezotte & Levine, 1990; Hillman, Mortimore & Sammons, 1995).

Studies conducted by Lezotte and Levine (1990) discovered nine qualities of remarkably effective institutions of learning. In first line is learning school climate that is productive and beliefs system. The more specific and active schools are identified by proper and unique learning surroundings. Going by the opinion of these two researchers an orderly environment is somehow connected with individual-to-individual cooperation other than with controlling. They also identify discipline emerges from 'being related and being involved in doing rather than outside regulation and application of law.

Presenting outcomes from a country wide survey of greatly developed middle level schools ( Hackmann, Clark, Valentine & Petzko, 2004) in Valentine (2006), brought forth tangible understanding about effective collaborative school cultures greatly developed learning institution as follows; head teachers and other members of teaching staff were both governed by a similar core of beliefs and values that directed practices and programmes encompassing big hopes to all the learners, a holistic child education, the learners will be victorious, and commitment to an organised curriculum, learner centred teaching, and successful utilisation of formative and encouraging learners' data.

Head teachers considered themselves as cooperative leaders and similarly fellow teaching fraternity. They promoted collegiality as the chance for cooperative worker amongst

members of teaching staff curriculum teaching and evaluation. Members of teaching staff were equally dedicated to cooperation, achieving a holistic school rule as planners, coordinators of professional development and directors in the endeavours to boost classroom teaching in the entire institution.

Learners and aged people instruction was the target of the schools, with all grown up dedicated to a long-term learning for both learners and for their own behalf. Institutions structure like physical layout of learning rooms, adults and learners timetables/schedules were prepared in such a way that to encourage collaboration and interaction building among teachers-students, teachers-teachers and students-students.

Clark et al in Valentine (2006) also observed that Principals and teachers in highly successful schools denoted that establishing “relationships” amongst grownups was a significant principle in evolving their effective school cultures. In these schools, head teachers and members of teaching staff from time to time discussed the need of interactions and the role relationship play in the cumbersome planning as well as query-solving tasks that a department/teachers must confront.

## **2.3 School Achievement Orientation and Students’ Academic Performance**

### **2.3.1 School Achievement Orientation Culture**

Citing a survey in post primary schools learning institution in Hong Kong by Pang (1998), Maslowski, (2001) denotes that: Pang looked into official ways and cultural connection as well as close and loose combining of learning institution for it stands for

various approaches to directing and organizing teachers' undertakings. Close rank joining mean to 'coupling' instructing teachers applying vivid goals orientation and communication and agreement amongst teachers. Loose combining advocated for a professional staff independent. More bureaucratic connection portrayed formal ways of organisation, formality and official chain restriction and reasoning whereas cultural connection speaks about relaxed approaches like involvement and association, collegiality and accomplishment orientation. This study by Pang demonstrated that for the good schools in his sample "emphases on cultural linkage and loose coupling were the most consistent strategies.

According to Nadirova and Burger (2014) in a study on 'Assessing Student Orientation to School to Address Low Achievement and Dropping Out, Schools can effectively counteract adverse factors in students' lives by creating stable, safe, supportive, caring and engaging educational and social environments for all students. Experiencing positive relationships with adults and peers and having access to diversified supports, including essential guidance regarding future educational and career opportunities to inspire and focus on, is especially important for students from disadvantaged backgrounds, who often lack access to various forms of social capital (Croninger & Lee, 2001).

While education systems continue to focus on evaluating student academic and behavioural outcomes, including (observable) engagement, less attention has been directed at assessing non-cognitive motivators, antecedents or facilitators of these outcomes (Burger, Nadirova & Keefer, 2012). These, often not easily detectable

facilitators, encompass various aspects of student orientation to school including social contexts with interpersonal interactions, affective experiences, self-perceptions, a sense of comfort and belonging in school, and appraisals of personal strengths and competencies (Akey, 2006; Brew, Beatty, & Watt, 2004; Cleveland, 2011; Greene, 2008; Skinner & Pitzer, 2012; Stiggins, 2001). School-based services typically become available after risk factors manifest themselves (such as through noncompliant behaviour), (Richardson, 2008:24). Identifying and understanding potential facilitators of negative outcomes, such as poor attendance, lack of interest in social and academic pursuits, a low achievement or dropping out of school, would contribute to detecting emerging issues early and taking pro-active and preventive approaches through developing customized interventions. Therefore, decision-making directed at improving student outcomes would benefit from incorporating the antecedent motivational factors into systematically collected empirical evidence.

Deal and Peterson (2009) in Fisher (2012) believes that for 'school culture' to contribute to improve student learning, it requires: A focus on learning (students and teachers), A focus on collaboration, A focus on SMART goals and results and it needs timely and relevant information. For the above to take place, Fisher (2012) observes that there must be shared values, including: A willingness to acknowledge I don't know', being 'critical friends' can be helpful, both for teaching and curriculum development teams, admitting you need help is not a sign of weakness but an indication of self-awareness and growth, asking for help from a department head or team leader is ok, even expected, and will not be used against the teacher, a willingness to listen to all ideas, and contribute regardless

of acceptance of one's ideas or not, accepting responsibility for improving student learning and active research to decide how and what to improve, avoiding isolation.

### **2.3.2 Students' Own Individual Interest in Academic Activities**

Studies on school effectiveness have identified a number of important factors that can affect student achievement (Heck & Marcoulides, 1996; Lee & Croninger, 1994; Mortimore, 1991, 1993; Reynolds & Packer, 1992). In addition to student background and contextual influences, researchers have identified certain factors in secondary schools that can influence students' learning opportunities. These factors refer to the school's structural and organizational processes (e.g., size, course offerings and class formation procedures, grouping practices), resource allocations (teacher course assignment, funding particular programs), its academic focus (e.g., curriculum alignment and delivery, expectations of students, educational experiences, monitoring student progress) and social integration (e.g., how students interact with peers, teachers). Decisions on how a school is organized and operate how resources are allocated; how classrooms are formed, how students are taught and others all impact on student learning. How well the school staffs are able to organize and coordinate the work life of the school shapes not only the learning experiences and achievements of students, but also the environment in which this work is carried out (Heck, Larsen, & Marcoulides, 1990).

More recent studies have emphasized students' academic and social integration, as George A. Marcoulides, California State University at Fullerton, USA Ronald H. Heck, University of Hawaii at Manoa, Hawaii Constantinos Papanastasiou, University of

Cyprus, Cyprus this can be affected by the socio-curricular structure of the school (Friedkin & Thomas, 1997); For example, parent and student beliefs and values related to course selection, student participation the school's educational program, students' attitudes toward learning, student interactions with peers and teachers, and the school's overall academic climate, are influenced by the school's structure. Students' academic and social experiences, therefore, can be viewed as a sequence of encounters with various course offerings, teachers, and other students. The differentiated curriculum typically offered in secondary schools can also influence students' educational and social experiences in important ways. In general, students' experiences in relation to these school processes can all be seen as elements in a conceptual framework that suggests the importance of a school's cultural processes for example its climate, values, and educational experiences in determining students' educational outcomes. However, the current study aimed at investigating the Implications of School Culture on Academic Performance only.

## **2.4 Emphasis and Practice of School Shared Ideology and Students' Academic Performance**

### **2.4.1 Collaboration and Collective Working of School Community Members**

Collaboration and collective working of school community members is a key ingredient towards the achievement of school goals and mission. Various studies have documented benefits and outcomes of a schools collaborative culture, such as: In a study titled 'A Collaborative Culture for School Improvement: Significance, Definition, and Measurement, Valentine, (2006), provides significance of a positive school culture as one

with an effective learning culture that: Maintains the image of a professional community, similar to the fields of law, has a clear mission, encourages teachers to work collaboratively with each other and with the administration to teach students so they learn more and is a place where both teachers and students learn.

Collaboration can also be exercised in a school through sharing of duties and responsibilities such as shared leadership in school. Duignan et al. (2003 – SOLER Project) in Duignan (2006), advocate the need for an important shift in the meaning, perspective and scope, depth and breadth, of leadership in schools, in order to build organizational cultures that promote, nurture and support leadership and leaders. They refer to this change as, ‘Building a Culture of Shared Leadership’ in an organization.

Many educational leaders, especially principals, often find themselves isolated and alone, believing that they are, primarily, responsible for leadership in their schools. Such a stance constitutes a very narrow view of leadership. Principals, especially, need to be secure enough in their own identity to freely share and distribute leadership responsibilities among teachers and other key stakeholders. In this way, they are more likely to create school cultures where key stakeholders, especially teachers, students and parents, willingly take responsibility for the leadership of their school community. Such a shared approach to leadership in schools is receiving strong support in the literature on educational leadership.

According to Thompson (1984), teacher's beliefs are manifestations of unconsciously held views or expressions of verbal commitments to abstract ideas that may be thought of as part of a general ideology of teaching. In addition, teachers at the school level have or share some kind of teaching ideology that can be referred to as a collective belief which affects the collective belief and vice versa. As for Durkheim (2014), collective beliefs have a 'coercive' power that forces individual beliefs through shared knowledge. Fives and Gill (2014), stated that there are reasons to believe that tutors' beliefs concerning learner attainment influence their learners' achievement via the teacher's position, their attitudes toward education, and their views on non-educational issues.

#### **2.4.2 School Mentoring**

The National Mentoring Center (2008) provides The ABCs of School-Based Mentoring. It asserts that Both research and common sense leave little doubt that youth need caring and consistent relationships with adults in order to navigate their way through adolescence and beyond. For many youths, however, there is no adult who is naturally available to provide this kind of support. Evaluation results provide clear evidence that involvement in consistent, long term, well-supervised relationships with adults can yield a wide range of tangible benefits for youth, including improved grades and family relationships and decreased alcohol and drug use (Sipe, 1996; Tierney & Grossman, 2000).

According National Mentoring Center (2008), there is compelling evidence that school-based mentoring produces many positive outcomes for youth. Recent research into

school-based mentoring outcomes indicates that these programs can: Improve academic performance, in general, with significant improvements demonstrated in the subjects of science and written and oral language, Improve the quality of class work, Increase the number of homework and in-class assignments turned in, Reduce serious school infractions, such as disciplinary referrals, fighting, and suspensions, Increase students perceptions of scholastic competence, reduce skipping classes. This research also indicates that youth participating in school-based mentoring programs are more likely than non-mentored peers to report having a non-parental adult who they look up to and talk to about personal problems, who cares about what happens to them and influences the choices they make” (Herrera et al., 2007).

#### **2.4.3 Hindrances to Development of Positive School Culture**

School culture includes the symbols, behavioural regularities, beliefs and values that are common to members of a community like language policy, attitude towards specific subjects, admission of students, examinations pass mark, teacher’s guidance on careers, motivations, religion, sponsors, outings, available facilities, examination frequency, character building, methodology used in teaching and parents’ involvement in running of the school. Students, if they have negative attitude toward mathematics or any other subject, then it will gradually affect their performance in their final examination. In such circumstance, the school administrators opt to mediate in eliminating the menace. This can be achieved by first motivating the relevant teachers, example increments of teachers, improvement on working condition, good rapport among others. The motivation of these teachers will highly trigger the expected out come in motivating the students to achieve in

the subject. People will tend to work harder when they notice a reasonable opportunity to excel than when they notice a target which is an achievable (Atkinson, 1964). When school cultures are not handled appropriately, they will result to poor performance. In schools where the principal is aloof, impersonal and controlling the activities of the teachers, the group achievement is minimal, the teachers' morale is low, and the school goals are rarely achieved. According to Fopiono and Norris (2001) the distinguishing features of autonomous school climate is the freedom that the principal gives to the teachers to provide their own structures for interactions and find ways in which the teachers and the students can satisfy their needs. This climate leans more towards social needs satisfaction than the task achievements. In controlled school climate, little attention is issued to fulfilment of the individual members' social wants and emphasis is laid on achievements of the school goals. Fopiono and Norris (2001) argue that, familiar school environment is the outwardly cordial way in which the principal, teachers and students interact. The tutors and the learners' societal requirements fulfilment are very high and at the same time little effort is put to restrict or guide the group operations channelled towards achievements of school goals. Conversant environment describes a completely free atmosphere. The head teacher is pre-occupied with cultivating a suitable atmosphere neglecting the fulfilment of his duties. The cordial and close relationship between the head teacher and members of staff is great to an extent that administration and teaching are thwarted (Silver, 1983).

According to Hoy and Tarter (1997), unhealthy schools are discouraged in their mission and targets by both public and parental requirements. Unhealthy schools are short of

highly qualified leaders and the members of staff depicts unhappiness with their tasks and co-workers. To add on this, neither the teaching fraternity nor learners are educationally encouraged. In low performing schools, educational attainment is not highly appreciated. Healthy schools that promote high educational standards, suitable leadership and collegiality offer an environment more appropriate to learners' progress and attainment Hoy (1990). The vast majority of recent research on school environment have concentrated on instructor-leader teacher relationships and related issues of job fulfilment. According to Miller (1993) School environment has seldom been examined in relation to its impact on learners' attainment.

The primary goal of a school is to build and maintain a learning environment that is conducive to human learning (Barth, 2001). In order that culture has to be changed it therefore means that institutional administrators ought to be conversant with this culture, as things stand at the moment. To change culture requires that the instructional leaders become aware of the culture, the way things are here. What are your first impressions? Hear, and experience in the school? What don't you see and hear? What are the clues that reveals the school culture? What behaviour gets rewards and status here? Who gets to make decisions? Do parents experience welcome, suspicion, or rejection when they enter school? To change the culture or to attain hospital culture the leaders requires that desirable qualities replace the existing unhealthy elements. Collegiality experimentation, high aspirations, trust and confidence, tangible support, reaching out for knowledge bases, gratitude and acknowledgement, care and celebration and humour, participation in decision making, promotion of what is relevant, values, and truthful and open contact are

among the healthy cultural norms defined by educators Saphier and King (1985). These attributes have a major effect on a school's ability to develop and encourage learning.

Without examining the ethos and organizational health of schools, systemic reforms to strengthen schools have largely failed (Sarason, 1996). Since student performance is affected by the school's culture and environment (Maslowski 2001; Hoy 1990, 2006), and the school principal has direct control over the culture and climate, (Hallinger and Heck, 1998; Leithwood (2004) the school principal and other administrators must take the responsibility to transform any elements of culture that doesn't promote healthy teaching and learning in a school.

## **2.5 The Role of School Principals and Academic Performance**

### **2.5.1 Central Role of a School Principal in Creating a Learning and Teaching**

#### **Culture**

There is considerable truth over the significance of management in developing excellent schools (Blase and Kirby, 2000; Donaldson, 2001; Freiberg, 1999; Sergiovanni, 2001; Snowden and Gorton, 2002). Finally, the interrelationship that mould the culture and environment of schools are heavily affected by the school head teachers and in institutions where academic progress was great and there was a vivid feeling of community, we realized always that the head teacher causes the distinction (Boyer, 1983:219). Heck and Hallinger (1998) suggested that the head teacher does not immediately influence learners' academic excellence, but to the contrary impacts on education by impacting on the environment of the learning institution. The climate

created by the principal can cause negative or positive impact to the teachers and the students, consequently affecting the performance of the students, for example; school staff, climate impacts their ability to make change, successful implementation of programs, depersonalization, emotional exhaustion, attrition and retention, relationships and trust, feelings of accomplishment, commitment to the profession and sense of efficacy (Grayson & Alvarez, 2008; Miller, 1999). Studies for students have shown that school climate impacts students learning, academic achievement, motivation, safety, absenteeism, group cohesion, stress, mutual trust and feelings of connectedness and attachment to school (Freiberg, 1999; Griffith, 1995).

This view point on indirect results also happens to more immediate and more complicated models for study into head teacher leadership. Direct contact is no longer suggested as causing a straight impact on learning results but as causing an indirect impact through the manner it has an impact on institutions of learning and schooling culture (Witziers, 2003). Contemporary survey has in addition proposed that the school administrator's power has no direct impact on education and is negotiated by their socialization with colleagues, locational functions and the societal and cultural principles of the schools (Leithwood, 2004; Hallinger and Heck, 1998 and Hoy, 2006).

Leithwood (1992) regarded head teachers as 'change agents' and proposed that they effect on the institution of learning through conversion of the institution of learning culture. Maslowki (2001) additionally says that cooperation ceases between

administration beliefs and behaviours and institution culture and also various institution cultures can be associated with varying results for learners' performances.

### **2.5.2 Studies on Principals' Leadership Styles and Students' Academic Performance**

Furthermore, research studies investigating the indirect impact of Head teacher leadership on learners' performance (Hallinger and Heck, 1998; Hoy, 2006, Leithwood, 2004) have indicated that educational leadership is linked to the school's structure and community, which is linked to learners' attainment. The performance of students can be dictated by the principal's leadership style, for example Ochieng (Ochieng, 2001), study on Influence of Leadership Styles on Academic Performance in Secondary Schools in Mombasa found out that poor academic performance in KCSE was exhibited by schools whose principals were rated as autocratic leaders (task-oriented behaviour). Autocratic leadership style may have a negative influence on the positive school climate as teachers have no say in how they should perform their work and they are expected to work hard to achieve the goals set by the school leadership. Even though school members overtly accept their responsibilities because of fear, they resist covertly.

Fairman and McLean (McLean, 1988), in their studies with magnitudes of structural health, they concluded that examining the shutting on health of learning institution so as to take advantage on already established managerial powers and to recognize enhancement significances, should be the target of every school Head teacher. Fairman and McLean (1988) described dimensions of organization health like Goal Focus, Communication Adequacy, Optimal Power Equalization, Resource Utilization,

Cohesiveness, morale, innovativeness, autonomy, adaptation and problem solving. For example, resource utilization means that the organization is able to maximize the use of its resources by effectively coordinating the efforts of the members of the work unit without straining the rest of the organization. Cohesiveness, an organization that displays cohesiveness has workers who want to become and remain active members of the organization by contributing their talents to influencing the growth of the organization.

Symbolic leadership, according to Deal and Peterson (Deal, 1999), is the capacity to identify and control the school's community. A school Headteacher who comes up with a culture that supports and inspires education like motivating the teachers to perform their level best in their duties by supporting them in their daily school activities, example offering financial supports for educational tours, symposiums, mathematics contest among others motivating students in their day to day activities like rewarding the best and encouraging the others to perform, character building among the teachers and student through mentorship programmers in school, is totally necessary so as to advance learners' attainment in schools (Sergiovanni, 2001; Freiberg, 1999).

Successful educational leaders have learnt to take a holistic view of their institution's world, including the impact of school culture and environment on learners' attainment. The definition of school culture provides school Head teachers with this broad perspective. It offers them with a wide structure for understanding challenging problems like the prevailing school culture which requires much attention and care to handle them and complex relationships within the school promoted by the teachers and students as a

result of the school culture (Freiberg, 199; Sergiovanni 2001). These successful leaders in education, deepening their understanding of school culture, they will be better equipped to shape the values, beliefs and attitudes necessary to promote a stable and nurturing learning environment which impacts student performance (Bossert, 1982). The connection between effective school cultures and leadership is supported by educational research (Sergiovanni, 2001; Hallinger and Heck, 1998; Leithwood and Jantzi, 1990; Leithwood, 1992; Freiberg, 1999; Leithwood, 2004).

In a study on the results of school culture and environment on learner attainment, Heck, and Hallinger 1998 in Macneil, Busch and Prater (2009) noticed that structural theorists reported long ago that observing culture is the most vital deed that a leader can achieve.

According to theories on the field of education, the Head teacher's influence on learning is influenced by the school's environment and community, rather than having a direct effect. While the findings of the above study are very relevant to this study, its focus was on school climate and culture and the study sought to describe the extent to which a school's culture influences performance. The study also sought to describe a school's culture in relation to a school's academic performance. It not only sought to establish how a leader [school principal] pays attention to culture, but the entire school community.

Mwangi (2009) in a study titled 'Role of School Leadership in Student Achievement in Kenya' found out that the student success is highly influenced by principals' leadership, involvement, demonstrated dedication, awareness and emphasis in quality improvement,

and access to knowledge and diverse viewpoints. While Mwangi's study is very informative to this study, the study's focus was on one aspect, that is, school leadership but this study when looking at implications of a school culture to academic performance, is holistic and seeks to study all that takes place in a school such as school ceremonies, rituals, values, traditions, climate, leadership, shared ideology and collaborative efforts.

Lambert (2000) depicts the Headteacher as the torch bearer for the school's aspiration, the core actor in instructional preparation, and a partner who rallies teaching staff and even guardians into conversations about the school's service in Academic Development Institute (2010). The Headteacher is the school's attention regulator, constantly stressing better student performance as the school's primary target. The principal creates an atmosphere of high standards for student success and ensures that teams work well together.

Habegger (2008) addresses the significance of a school's culture in a report entitled "The Head Teacher's Role in Good Schools: Developing a Positive School Culture. She looked at the various duties of Head teachers at the 3 schools, which included ensuring that instruction was consistent with state academic content requirements, maintaining quality improvement in the building, planning instruction for student achievement, establishing relationships with parents and the community, and cultivating a culture where each child felt respected. She learned what these Head teachers and their schools are doing inversely as a result of this. The solution is to be found in the school culture. Head teachers must cultivate a positive school culture that encourages learners and grownup to

study and participate. Yes, a school principal's other duties and obligations are crucial. However, a positive school culture is important. It is the Head teachers' studies conscious decisions to concentrate their time on building a positive school atmosphere that allows the other fields, designing instruction for student' success, to attain notable results as well. These school leaders understand that school culture is at the core of change and development. As they trained for attainment tests, pursued professional discussions and study, respected their learners and tutors, and sought support from guardian and society at large to increase the school's efficacy, the Head teachers of these high-achieving schools developed a culture that encouraged and inculcated trust in teachers. As a result, the headteacher's optimistic culture allowed for ontological improvement.

The Head teachers focused on developing optimistic school culture by participating in undertakings that strengthened both the learners' and grownup's ability for learning and achievement, for example, visiting each tutor before class began, welcoming learners as they get into the building, and offering shared preparation for teachers. The researcher also discovered two main types of undertakings that the Head teachers focused on and participated in to assist build an optimistic culture: fostering a sense of affiliation and offering clear guidance for all learners, tutors, guardians, and community members.

## **2.6 Summary of the Gaps of Knowledge that the Study Intended to Fill**

Review of related literature has revealed/identified the following gaps of knowledge that this study sought to fill.

First, existing knowledge from various literature surveyed show studies on school culture generally on areas such as role of school leadership and student academic performance, school climate and school environment among others. School culture is a very broad term that embodies almost everything that is found within a school setting, hence looking at only one aspect falls short in explaining the place of school culture on students' academic performance. To fill this gap, this study sought to investigate specific school cultural aspects and describe the extent to which they affect students' academic performance as evidenced by KCSE results in selected public secondary schools in Machakos County, Kenya.

Secondly, the study sought to unearth and address concerns raised by various stakeholders in Machakos County over declining performance of schools from the county and attempted to identify factors that exist in high performing and low performing schools. Unlike the existing studies that have only examined or stated such school culture aspects generally, this study sought to specifically describe some salient school culture aspects, compare them among high and low performing schools as well as examine the extent to which they affected students' academic performance.

Thirdly, most existing literature also shows knowledge on either, how students' academic orientation affects their academic performance or how teachers' academic orientation affects students' academic performance. This study sought to address both students' and teachers' academic orientation culture and how it affects students' academic

achievement, thereby filling existing gap available in most school culture studies previously done.

Fourthly, Studies on role of shared ideology and teachers' collaboration abound. However, a gap exists on the extent to which emphasis on shared ideology can result in differences in students' academic performance as evidenced by high and low performing public secondary schools in Machakos County, Kenya. Specific studies on school leadership and students' academic performance have been carried out. However, this study sought to examine the central role of school principal in fostering a learning and teaching culture in selected public secondary schools in Machakos County and how variations in this central role among secondary school principals, is manifested in either high or low students' academic performance in selected public secondary schools in Machakos county, though globally, studies on effective school leaders point to their ability to influence their type of school culture in their schools. This study sought to address this gap.

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the research methodology used in the study. It focuses on research design, location of the study, target population, sampling techniques and sample size, sampling procedures, research instruments, data collection procedure, piloting study, instruments' validity and reliability, data analysis and finally, ethical considerations.

#### **3.2 Research Design**

Trochim (2006) notes that research design is the method that a researcher uses to study, measure and analyse data and research problems. The study deployed a mixed methods research design which involved Quantitative and Qualitative approaches. This method was chosen since it enhanced the validity of findings in line with Almpanis (2016) who noted that no single design existed in isolation and hence the need to combine different designs.

In Quantitative Technique, the Study formulated questionnaires that were guided to the specific target groups with an allowance of closed ended and open- ended questions. These were later collected, analysed, tabulated and interpreted according to the study objectives. The Quantitative approach entailed the use of a descriptive survey study design which gives the researcher the opportunity to identify the attributes of a certain variable based on observation or correlation between variables.

The researcher used descriptive survey design in her research to obtain the research data on the magnitude of Implications of School Culture on Academic Performance in Selected Public Secondary Schools in Machakos County, Kenya. The qualitative technique deployed the use of Interviews that were descriptive in order to get an in-depth insight through elaborate answers from the respondents based on their actual (real-time) experiences. Accordingly, no attempt was made to change behaviour or conditions, the situations were reported as they appeared.

According to Lokesh (1984), this design helps to acquire consistent and accurate knowledge about the existing state of nature, and to derive as many general deductions as possible from the evidence found. This design cannot be experimented for they deal with the interactions amongst variables that cannot be manipulated. The researcher simply chooses the appropriate variable for the study of their interactions since the events or circumstances have already happened or exist (Best and Khan, 1993). The selection of this study design for the research was based on the truth that in this type of research, the researcher doesn't manipulate study variables. These techniques denote to the way in which information are amassed and analysed, and the kind of generalizations and illustrations resultant from the information. According to Myers (2009), the study method is a strategy of enquiry, which moves from the underlying assumptions to research design, and data collection.

Researchers in the social sciences developed qualitative analysis techniques to analyse social and cultural phenomena. Since qualitative research is naturalistic, it aims to

analyse the daily lives of various groups of people and cultures in their natural environment. According to Dooley (1984), the methodology of qualitative research includes the techniques of semi structured interviewing and participant observation in natural field settings. The study used Interview schedules for school principals and their deputies plus the County education officer. This method was chosen because it takes an interpretive, realistic approach to its subject matter, trying to make sense of or understand phenomena in terms of the meanings that people attribute to them (Denzin and Lincoln, 2003).

Quantitative research methods were also employed so as to enhance the study's objectivity, reliability and validity, representativeness and generalization of the study findings. Quantitative research methods seek to quantify relationships between variables. For this study, variables such as aspects of school culture and students' academic performance, emphasis on ideology and students' academic performance, academic orientation and students' academic performance, as well as central role of school principal were quantified on a scale of 1-10, so as to determine the extent they affected each other.

### **3.2.1 Variables**

The main independent variable was taken as school culture under which intervening variables included: School creates conducive and positive organizational culture, emphasis on shared ideology which entailed strong school academic orientation as well

as shared values and school philosophy. The dependent variable of the study was students' academic performance.

### **3.3 Location of the Study**

The study was carried out in selected Public Secondary Schools in Machakos County, Kenya. Machakos county is one of the 47 counties in Kenya found in lower Eastern region of Kenya and is mostly occupied by the Bantu people known as Kamba community. Empirical Studies and Literature Reviews have shown little focus on Machakos County in matters of Academic Performance. Many Authors have delved on Kiambu County, Nairobi County and even Homabay County but not yet done so in Machakos County.

Omusunga, Kasadi and Indoshi (2008) focussed on the Influence of School culture on French as a Subject but did not consider other Subjects as well as other aspects of culture on overall performances of students with respect to school culture. They did not mention Machakos County. Ouma (2011) established a strong relationship between school culture and pupil's performance in KCPE but it neither touched on KCSE performance nor Machakos County. Nyambuoro (2012) did a study in Matungulu and its neighbouring Kathiani area of Machakos County but lacked objectivity by not looking at the entire Machakos County.

Machakos County has a population of 1,421,932 according to 2019 population data from Wikipedia (2019). The county was chosen due to concerns raised by various stakeholders

on the declining performance of schools from the county. During a Jamhuri day fete on 12 December 2017, the County Commissioner called on leaders to take action on the declining performance of schools from the county, a move that was backed by the County Deputy Governor who promised to convene a stakeholder's meeting to chart the way forward for the sector (Google.weblight.com). The county has 8 sub-counties namely: Masinga, Yatta, Kangundo, Matungulu, Kathiani, Mavoko, Machakos Town and Mwala. The County is bordered on the west by Nairobi and Kiambu Counties, the North by Embu County, the East by Kitui County, and the South by Makueni County. To the South west, it shares a boundary with Kajiado County, and to the North West, Murang'a County and Kirinyaga. The study was carried out in 21 public secondary schools out of 212 public secondary schools in the County, with a sample size of 268 respondents, comprising of teachers, students, principals and key informants. Previous studies had shown that students' academic performance was influenced by various factors such as school environment, Principals' style of management, school climate, and school cultural aspects among others. This study only focused on Implications of school culture on students' academic performance in 21 selected Public Secondary Schools in Machakos County, Kenya.

The researcher chose to undertake her research in Machakos County because it was within her access and familiarity as observed by Singleton (1993) who explains that the ideal setting for any study should be one which is easily accessible to the researcher. This choice helped the researcher to save on time and cost.

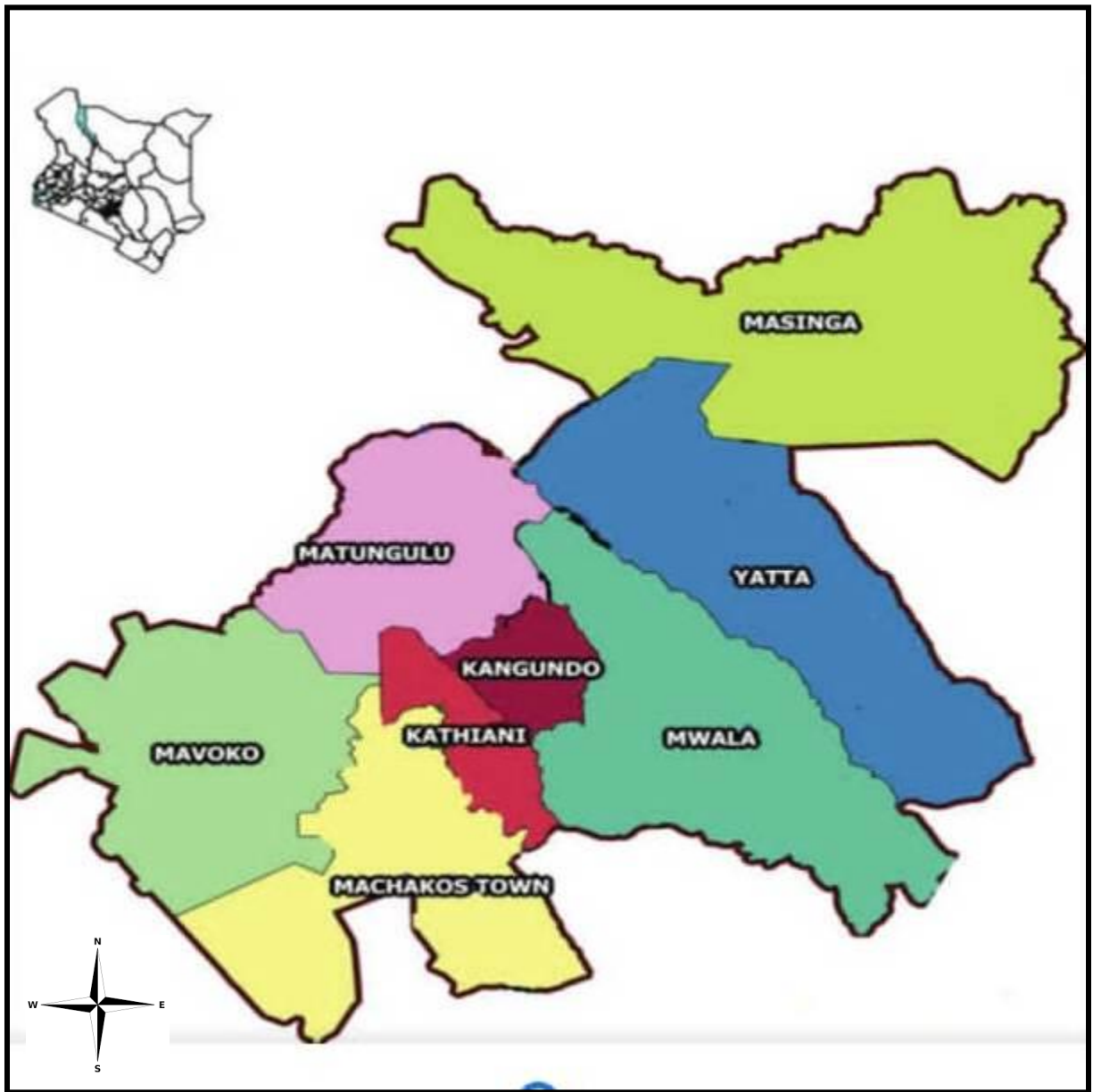


Figure 3.1 A Map of Machakos County Showing the Eight Sub-Counties

### 3.4 Target Population

The study was carried out in 21 public secondary schools out of 212 public secondary schools in Machakos County, Kenya with a student population of 84 800. This was a study to establish whether school culture had any strong relationship and remarkable

influence on students' academic performance, as seen in performing and non performing schools. The study was also undertaken in only high and low performing schools which were purposively selected. The target population of the study comprised of 2000 students, 212 principals, 212 deputy principals, 800 teachers and one County Education Officer from Machakos County, Kenya.

### **3.5 Sampling Techniques**

These are methods employed to obtain data as well as the sample size to be studied. Sampling technique is a method or procedure for specifying how the researcher obtains a sample taken from a population (Campbell et al, 1995). The researcher applied both probability and non-probability sampling methods and techniques to collect quantitative and quantitative data. Stratified random sampling technique was used to get a study sample of 21 schools from a total of 212 public secondary schools where schools were stratified according to type, for example, girls, boys or mixed school. The aim of using stratified sampling was to achieve a desired 10 percent representation from various sub groups from the population (Mugenda and Mugenda, 2013).

The study choice of Machakos County was arrived at purposively due to the growing concern of parents and education stakeholders on an increasing trend of poor performance of most secondary schools in Machakos County, Kenya. Selection of public secondary schools and not primary schools was therefore purposive. Drawn from sampling frame of 212 public secondary schools located in Machakos County, Kenya, stratified sampling technique was used to categorize the schools in three strata of High

performing schools (7), average (7) and low performing schools (7) as evidenced by KCSE Exam results in the years 2017 and 2018 were purposively selected for the study. The stratified sampling frame of schools is presented in table 3.1.

**Table 3.1 Stratified Sampling of Schools**

<b>Stratified random sampling of schools</b>	<b>Mixed</b>	<b>Boys</b>	<b>Girls</b>	<b>Total</b>
High performance	1	3	3	7
Average performance	1	3	3	7
Low performance	1	3	3	7
<b>Total</b>	<b>3</b>	<b>9</b>	<b>9</b>	<b>21</b>

### **3.6 Sample Size**

The sample frame for the study was 212 public secondary schools in Machakos County, Kenya. Stratified sampling was then employed to categorize these schools into 3 strata of: High, average and low performing schools based on 2017 and 2018 KCSE results. These results were obtained from Machakos County education office located in Machakos town. Purposive sampling was then employed to pick only high and low performing schools for the study, based on a school mean score of Grade C+ and above and grade D+ and below were treated as high and low performing respectively. Grade C- and C plain was treated as average. Determination of high, average or low was based on a school having half or more than half of its candidates falling within those levels. A sample of 200 students was drawn from the 21 schools selected; 21 principals and 21 deputy principals; 21 teachers

and 1 County Education Officer from Machakos County office. The sample size is presented in table 3.2

**Table 3.2 Sampling Frame of Informants**

Respondents	Sample size			Percentage
	Male	Female	Total	
County Education Officer	0	1	1	100
School principals	10	11	21	10
Deputy principals	11	10	21	10
Teachers	12	13	25	10
Students	100	100	200	10
<b>Total</b>	<b>133</b>	<b>135</b>	<b>268</b>	

### 3.7 Data Collection Procedure

Before the researcher proceeded to conduct the study an introductory letter was obtained from the graduate school of Kenyatta University. This letter was presented to the National Commission for Science Technology and Innovation (NACOSTI) for permission to carry out the study. The researcher visited the County Director of Education (CDE) Machakos County and explained the intention to carry out the study. The researcher coordinated the study through visiting the identified schools and with permission from the principals she established rapport with the teachers, the Deputy principals who were filling the questionnaires assisted by two research assistants. The teachers were expected to fill their questionnaires and give their students their questionnaires to fill. The questionnaires were collected from the respective schools one week after. The interview schedules were used for the Principals and the County Quality

Assurance and Standards Officer and the researcher interviewed them personally after confirming their availability and recorded down their responses.

### **3.8 Research Instruments**

A Research Instrument is a tool designed to collect or obtain data on a topic of interest from research subjects. This study used questionnaires, interview schedules and Focus Group Discussions. The logic of using many tools for data collection was to strengthen evidence since weakness of one tool was corrected by strength of another tool. Triangulation of findings was done to enable credibility of the findings of the study. Apart from closed-ended questionnaires, Likert Scale rating was also used because it is considered appropriate in measuring perceptions of the respondents.

#### **3.8.1 School Culture Survey (SCS)**

The first tool was the School Culture Survey (SCS), a six factor, with thirty-five items that was completed by teachers about their school's culture. The tool was used since it was valid and reliable. Valentine and Gruenert (2006) states that this accurate and reliable instrument collects data on important cultural variables such as collaborative leadership, tutor cooperation, professional growth, collegial support, unity of intent, and learning relationship based on the common perception of the faculty.

#### **3.8.2 School Culture Typology (SCT)**

The School Culture Typology is the second method created by the Middle Level Leadership Center staff and used in all Center school improvement projects. This

approach was being used because it is a self-reflective tool with activities intended to define a community-wide view on the "culture" that occurs in that school. The typology tool was first created in 1997 as a hands-on realistic method of identifying a school's stage or form of culture for discussion purposes based on the work of Fullan and Hargreaves (1996). The practice was significantly revised in 2006, based on recent work by Deal and Peterson (1999). From a list of statements reflecting twelve aspects of school culture, Tutors were asked to allocate point values to statements that best represented their school. Learner attainment, collegial understanding, mutual beliefs, decision-making, risk-taking, confidence, transparency, parent relationships, leadership, communication, and socialization, as well as the history of the organization, are among these components.

Following the completion of individual worksheets by students, the activity's facilitators led the community in a consensus discussion before compiling the individual worksheets into a mathematical description of the teachers' responses. This practice was important because it resulted in a composite image of the school's prevailing community. The Typology activity was used since it also builds a good understanding of school culture from the perspective of the norms, the behaviours, the assumptions and the beliefs that undergird a school's culture.

### **3.8.3 Interview Schedule for Principals, Deputy Principals and Key Informants**

The study adopted items from school culture survey and school culture typology and developed an interview schedule, incorporating the 12 elements of school culture stated

above to collect data from Principals and their deputies as well as key informants. The study's choice of adopting items from School Culture Survey and School Culture Typology was due to the fact that the tools have been tested and used in various previous school culture studies. Expert opinion from the university supervisors also helped to ensure that the interview schedules were appropriate.

### **3.8.4 Interview Guide for the County Education Administrator and School**

#### **Principals**

The interview schedule was thematic to capture all issues raised by the study's research objectives. It was used to collect data from the County Quality Assurance and Standards Officer and school Principals and the aim was to seek their views or understanding of school culture and its impact on school performance. The interview guide helped to collect data on general and specific academic performance of Public Secondary Schools in Machakos County, Kenya. The data also provided a frame of reference for high and low performing schools in Machakos County as evidenced by KCSE results for 2017 and 2018. The respondents gave a concrete report on the study based on the study objectives. The informants were chosen because they had the capacity to provide adequate data and information on the implications of school culture on academic performance. The principals are in charge of day today running of an institution assisted by the Deputy Principals who are in charge of discipline and curriculum implementation in the school. Teachers and students work hand in hand to ensure that the aspects of school culture are upheld within the school. The County Quality Assurance and Standards Officer is the overall overseer of quality assurance and standards in all schools in the entire County

### **3.8.5 Questionnaire for Students**

The study used a thematic questionnaire to collect data from students. The tool assigned point values to statements that were “most descriptive” of their school from a series of statements representing twelve elements of school culture. Students were polled using this questionnaire on; commitment to attending classes and what hinders them to achieving their dreams in the school and how they understood the term culture and how it affects them in the learning process. The questionnaire had themes from the study’s research objectives.

### **3.8.6 Questionnaires for Teachers**

Teachers also filled a thematic questionnaire. The tool had questions related to teaching besides addressing factors such as collaborative leadership, teacher collaboration, professional development, collegial support, unity of purpose, and learning partnerships.

### **3.8.7 Focus Group Discussions for Teachers**

A Focus Group Discussion (FGD) is a qualitative approach used to gain an in-depth understanding of social issues. It aims to obtain data from a purposively selected group of individuals. This tool was employed to a different set of teachers who had not filled the questionnaire.

### **3.8.8 Document Analysis**

Document analysis was based on analysed examination records, staff meetings records, memos, school calendar among others were observed from the principals’ offices and

examination deans' offices. KCSE examination records were also obtained from the County Quality Assurance and Standards Officer for the years 2017 and 2018. The main purpose of examining these documents was to establish the trend of performance in the schools and identify the low performing schools and high performing schools.

The information gathered was basically made to supplement, counter check and examine the consistency of data collected using questionnaires and interviews and data gathered from the School Culture Survey (SCS) and School Culture Typology (SCT) instruments. This helped the Researcher in enhancing validity as well as reliability of the data collected from the informants.

### **3.9 Piloting Study**

A pilot analysis was performed by the researcher prior to the actual study. The pilot study was carried out at two schools, one high performing and the other, low performing school, drawn from the sampling frame of 212 public secondary schools from Machakos County. This pilot study also helped in testing reliability and assessment of the validity of the instruments that were used. Questions that were not well understood by respondents were then redrafted before the actual study. Piloting is necessary because according to Mugenda and Mugenda (1999), it ensures validity, reliability and consistency of the tools.

### **3.9.1 Validity of Research Instruments**

Validity, according to Kumar (2005), refers to the accuracy of data collection instruments or procedures that enable the instrument to measure what it claims to measure. This study employed data collection instruments that are accurate and had been tested and used in various studies dealing with school culture and students' academic performance. Content validity was also ascertained by having the Supervisors scrutinizing the content in the questionnaires and ascertaining they had been correctly developed and had the right content. The researcher carried out a pilot study to remove any ambiguity and ascertain that the research instruments elicited what they were intended for hence enhancing validity. According to Valentine and Gruenert (2006) two forms of evaluation instruments for gathering data useful in faculty research and reflection on school culture have evolved. The School Culture Survey (SCS) and School Culture Typology, a self-reflective tool and related practice designed to define a school-wide perspective on the form of culture that occurs in a school, were other tools that the researcher employed to enhance validity. Based on the work of Fullan and Hargreaves (1996), the typology tool was first created in 1997 so it had been used and tested for many years by the time the researcher was using it.

### **3.9.2 Reliability of Research Instruments**

According to Mugenda and Mugenda (2003) reliability of an instrument is the measure of the degree to which a research instrument yields consistent results or data after repeated trials. To measure reliability of the research instruments, Split-half method which according to Oregon Department of Education (2010) is a commonly used method of

determining the reliability of a test was used, where the two sets of questionnaires, for teachers and students, were split into two halves and numbered as odd and even numbers and administered to five individuals in each set of the pilot groups in the pilot schools. The responses given in the two questionnaire sets were scored and scores on one half correlated with those of the other using Pearson's Product-Moment correlation coefficient to determine the correlation. A correlation coefficient of 0.75 was obtained and the correlation between the two split halves was stepped up to the full test length using the Spearman-Brown prediction formula which relates psychometric reliability to test length. Psychometricians use this formula to predict the reliability of a test after changing the test length. In this Formula, the predicted reliability is estimated as given below:

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$

Where:

n = number of pairs of scores

$\sum xy$  = sum of the products of the paired scores

$\sum x$  = sum of x scores

$\sum y$  = sum of y scores

$\sum x^2$  = sum of square x scores

$\sum y^2$  = sum of square y scores

Test-retest technique of reliability testing was used as well mixed-method approach, using the three methods of perception survey, descriptive reflection, and naturalistic observation, not only enhanced reliability but also validity. Data collected from School

Culture Typology study was compared with the perceptions collected from that of the School Culture Survey findings. This was undertaken to enhance reliability.

### **3.10 Data Analysis**

Both qualitative and quantitative data was collected in the field and before analysing it the researcher physically checked how the questionnaires had been answered and if they had been completely filled with accurate answers. The researcher also checked on the uniformity of the interpretations of the questions answered and this helped in the compilation and coding of the data for analysis (Smith, 2012).

The data was edited, coded and interpreted according to themes which emanated from the research objectives and questions in line with what Mugenda and Mugenda (2003) says that such data must be cleansed, coded, key punched into a computer and analysed. The Quantitative approach of data analysis was first done by organising data into themes corresponding to study objectives which were analysed using the Statistics Package for Social Sciences (SPSS), which was used to generate frequencies, percentages and descriptive statistics. Qualitative data from questionnaires, interviews, Focus Group Discussions was sorted and transcribed to identify themes using the research questions and some of the information collected was presented using direct quotes and in a narrative form which were used to answer the research questions. To make tabulation and analysis simpler, quantitative data was edited to remove contradictions, summarized, and coded for easy classification. Descriptive statistics were used to describe the survey data so that the average respondent could be depicted and the general response pattern could

be revealed. Open-ended questions that elicited qualitative data were analysed by themes based on the research objectives, questions and goals, distinctions were made, and then inferences and conclusions were made.

Observation was also used at all levels besides documentary analysis. Means, standard deviations and chi-square test was performed on scores obtained to ascertain the relationship and confirm findings obtained. Themes from qualitative data obtained through interview schedules and Focus Group Discussions related to the study objectives were also obtained and subjected to cross referencing from previous study findings. A checklist was used in helping the researcher to analyse relevant school documents such as staff meetings records, memos, school calendar and analysed K.C.S.E. results. This helped the researcher to counter check and examine consistency of data gathered from School Culture Survey and School Culture Typology instruments.

Eventually a narrative and interpretive report on the themes was written to show the Implications of School Culture on Academic Performance in Selected Public Secondary Schools in Machakos County, Kenya.

### **3.11 Logistical and Ethical Considerations**

In research concern for the welfare of the respondents is very vital. This makes the research process smooth (Mwinzi, 2012). This section entails logistical as well as ethical considerations that the researcher observed.

The study deployed informed consent by explaining to the respondents the intended study but also affirming the essence of anonymity for each respondent.

### **3.11.1 Logistical Considerations**

In order not to gravely interfere with normal school activities, prior arrangements were solicited from schools studied which involved school principals, teachers and students. An arrangement was made with the school principals to ensure minimal learning disruptions by utilizing time allocated for students' own study and preps time. This gave teachers time to participate in both the School Culture Survey as well as the School Typology activities. The researcher hired assistants in order to reach all the respondents within the stipulated time. The researcher wisely introduced cost-saving measures like use of e-mails and WhatsApp calls to communicate across the selected schools. Before the researcher began collecting data arrangements were made for faster and efficient means of accessing the selected areas.

### **3.11.2 Ethical Considerations**

The dignity of human beings must be protected at all times and there should be no embarrassment or emotional hurt as research is being carried out. The study deployed informed voluntary consent by explaining to the respondents about the intended study and its importance to the education system in Kenya, but also affirmed the essence of anonymity for each respondent. Voluntary consent means allowing the respondents to participate in the research without being coerced, forced or bribed (Bull & Lindegger, 2011).

The researcher sought consent of each respondent after explaining the true nature and purpose of the research study. A commitment was made on the confidentiality and

anonymity of the involved people and the assurance that the data collected was only for the purpose of the proposed study. The researcher assured confidentiality and anonymity of the respondents by using Pseudo names to hide their real names. According to Goh, Lee and Salleh (2020) anonymity ensures and guarantees the participating respondents' privacy. The privacy and protection of the data was kept and ensured by the researcher keeping records in writing and in computer software. According to Kombo and Tromp (2006) data obtained from respondents must be secure and well kept.

## **CHAPTER FOUR**

### **DATA ANALYSIS, PRESENTATION AND DISCUSSIONS**

#### **4.1 Introduction**

This chapter discusses findings obtained from research instruments, presents characteristics of respondents, their opinions and views in relation to their school cultural aspects such as school ceremonies, symbols, rituals and artefacts practiced at a social level and their effects to students' academic performance in Machakos County.

The study sought to examine the Implications of School Culture on Academic Performance in selected Public Secondary Schools in Machakos County. Objectives of the study were to;

- i) Investigate the effects of aspects of school culture on academic performance in selected Public Secondary Schools in Machakos County, Kenya.
- ii) Examine the role of students' and teachers' achievement orientation culture and how it affects academic performance in selected Public Secondary Schools in Machakos County, Kenya.
- iii) Establish how emphasis and practice of a school's shared ideology enables high academic performance in selected Public Secondary Schools in Machakos County, Kenya.
- iv) Examine the effects of the role of a secondary school administration in fostering a learning and teaching culture in selected Public Secondary Schools in Machakos County, Kenya.

## 4.2 General and Demographic Information

The general information includes the questionnaire return rate and demographic data include types of sampling units, categories of respondents and their gender.

### 4.2.1 General Information

Out of 200 questionnaires given to students, 180 were duly filled and returned. Each of the selected school was given 40 questionnaires. The 180 duly filled questionnaires amounted to a response rate of 90%, which is within what Thornhill (2012) prescribed as a significant response rate for statistical analysis established at a minimal value of 50%, as indicated in table 4.1.

Table 4.1 below shows questionnaire return rate from a total of 21 schools given 200 questionnaires, those duly filled and returned were 90%.

**Table 4.1: The Questionnaire Return Rate by Students**

<b>Secondary Schools</b>	<b>No. of questionnaires</b>	<b>Total Response</b>	<b>Percentage return %</b>
21	200	180	90

### 4.2.2. Demographic Information

The sampling units for this study was 21 schools targeting 200 students drawn from 21 schools selected from 212 sampling frame of public secondary schools in Machakos County, Kenya. However, 180 students dully completed and returned questionnaires. 21 Principals and 21 Deputy Principals, 25 teachers, 1 County Quality and Standards Officer from Machakos County formed the study population.

The gender of sample population was inclusive. The findings are presented in table 4.2

**Table 4.2: Gender of Study informants**

<b>Informants</b>	<b>Gender:</b>	<b>Male</b>	<b>Female</b>	<b>%</b>
Students		100(50)	100(50)	100
Principals		11(52.38)	10(47.619)	100
Deputy principals		10(47.619)	11(52.38)	100
Teachers		12(48)	13(52)	100
Education officers		0	1(100)	100
<b>TOTAL</b>		<b>133</b>	<b>135</b>	<b>100</b>

**NB: Number Parentheses are Percentage**

The findings in table 4.2 above shows that gender parity was maintained in study informants. The findings show that both men and women were selected for the study. This shows that the gender perspective was observed and maintained in the study. This was important to capture the views and feelings of each gender in the study findings.

**4.3 The Effects of Salient Aspects of School Culture on Academic Performance in Selected Public Secondary Schools in Machakos County**

The first objective of the study was to investigate the effects of aspects of school culture on academic performance in selected Public Secondary Schools in Machakos County. The student’s informants were asked to describe salient aspects of a school culture, in selected public secondary schools in Machakos County and how they affected academic

performance of students. First, informants had to identify categories of salient cultural aspects found in their schools. The findings are presented in table 4.3.

**Table 4.3. Categories of School Cultural Aspects in Coded Groups of Selected Public Secondary Schools in Machakos County**

School cultural aspects and attached meaning	Scores On Scale 1-10					F	%
	A	B	C	D	E	F	%
Symbols	7	7	9	8	5	36	10.1
Rituals	5	3	8	4	2	22	6.2
Ceremonies	8	3	7	4	3	25	7.0
Customs	9	6	8	6	6	35	9.8
Level of students' values	8	6	8	4	5	31	8.7
Level of teacher values	8	5	7	5	6	31	8.7
Number of shared norms by teachers	9	5	8	6	4	32	8.9
Number of shared norms by students	6	7	8	5	5	31	8.7
<b>Nature of reality and truth:</b>							
(i)Counts of facts	5	4	7	4	5	25	7.0
(ii)Counts of rumours	3	10	4	8	8	33	9.3
<b>Nature of human relationships:</b>							
(i)Good incidences in school	7	5	8	5	6	31	8.7
(ii)Bad incidences in school	2	8	1	6	7	24	6.7
<b>Totals</b>	<b>77</b>	<b>69</b>	<b>83</b>	<b>65</b>	<b>62</b>	<b>356</b>	<b>100</b>

The findings in table 4.3 above suggests some of the common aspects of school culture that are used to communicate in meanings among students and teachers. The common school culture means of communication were symbols 10.1% (36), customs 9.8% (35),

and ceremonies 8.7% (31). The findings suggest that symbols, rites, rituals, ceremonies, myths and audible behaviour patterns and customs were manifested in day-to-day way of doing things in schools. The symbols were used as basic assumptions that shared by teachers about the nature of reality, relationships, life, dreams about career aspirations and how to use opportunities in school to achieve one's dreams in life.

The findings in table 4.3 also show that cultural features were rated on a scale of 1-10, with 1 being lowest level value and 10, highest level value, respectively.

Column [A], shows schools with 3 highest cultural features where school customs and number of shared norms by teachers, rated highest at 9 respectively while school ceremonies, level of teacher and student values tied with 8 scores each at positions 3, 4 and 5 respectively.

In [A] schools therefore, the three most predominant school cultural features were School customs, number of shared norms by teachers and school ceremonies. The cultural features included values and norms, where values referred to what teachers and students believed was 'good', 'right' or 'desirable' which then was translated into norms for their daily behaviour.

A form three female student when asked to talk about her perception on the school's salient cultural aspects had this to say:

*“My school has her own unique school cultural practices that include school symbols, rituals and ceremonies, that we practice annually which give both learners and teachers, motivation. For example, our school badge, motto and vision, all show ‘hard work rewards’. Our daily activities are guided by this and a class that performs excellently are usually taken to Mombasa together with their teachers; to set new targets, while enjoying themselves and having a conducive environment. Annually, a prize giving ceremony see well performed top students go to college with a new laptop, smart phone and a dairy cow. These annual rituals and ceremonies motivate other students to work hard and also gain materially”, (Kamurembo, a form 3 student,2019).*

This observation confirms the vital role of school culture in nurturing conducive school climate and environment for academic performance and good discipline for stable career and productive employment in future. It shows that good character and conduct are offshoot of good school climate. The finding seems to underscore the need for good school climate that nurtures young boys and girls to be good role models of the youth in contemporary society.

As indicated in table 4.3, for schools B, 3 most predominant school cultural features were, Nature of reality and truth with Counts of facts being the highest, followed by nature of human relations particularly bad incidences in school and symbols.

Several Qualitative statements from students concurred with the preceding findings. A form four female student had this to say:

*“Students in our school have many symbols and signs only understood by them. Rumours and bad incidences among students are very high, leading to increased conflicts, sometimes over nothing important or related to academics”, (Kasoka a form four female student in school B, 2019).*

The findings suggest that in some schools, school culture and climate is not well nurtured. This shows some schools may not be having a school climate that nurtures talents for productive efforts in academic performance and good school discipline. It shows students in such school may get poor results in academic performance, poor self-discipline and poor character that may reduce their productivity in future careers in society.

In [C] Schools, symbols were the highest with 9 scores, followed by rituals, level of student values, customs, and number of shared norms among students and teachers as well as nature of human relationships with good incidences in school, all with 8 scores respectively. This indicates that in [C] schools 3 most predominant school cultural features were symbols, rituals and level of student values.

A male form three student from school C, while talking of salient school cultural aspects, had this to say:

*“My school has many good symbols, placed in strategic places like notice boards, that really inspire us, students. There are relatively many positive values such as respect, hard work, among others, that are religiously observed by all members of the school community”, (Kababa, a male form three student, 2019).*

These observations suggest that effective communication using correct mix of symbols that are understood by teachers and student may lead to conducive school culture that communicates the aspirations of the school. These aspirations contain values that inspire a culture of hard work, diligence and a passion for excellence as the values in the school’s motto, vision and mission enable student to have good dreams that they strive to

achieve. This is ideal school climate that inspires good academic performance and good discipline in a school setting. This is a versatile matrix that nurtures academic prowess and good character development that makes social purpose of education feasible.

In [D] schools, school symbols and nature of reality and truth, particularly rumours, were the highest with 8 scores each, followed by customs, number of shared norms by teachers and nature of human relationships, particularly bad incidences, tied with 6 scores each. This indicates that 3 predominant school cultural features for school D were school symbols, rumours and bad incidences in school.

While in school D, a form two student, had this to say:

*“In this school, there are a lot of bad incidences among students, inside and outside class. Teachers seem to have given up and those male teachers, who are easily distracted, get trapped to students’ rumours as well as female students’ romance triangle and become powerless. Our school culture is more inclined to sports than academics”, (Kasupuu, a form two student, 2019).*

This observation suggests that in some schools there is lack of a conducive school culture and climate that may nurture talents and ability of students to focus on academic performance. This leads to loss of hope and dims expectations of students which may create negative energy that may ruin academic and discipline of the school. This does not augur well for a school.

Lastly, in school E, nature of reality and truth particularly counts of facts was highest with 8 scores, followed by nature of human relations particularly bad incidences in school having 7 scores. School customs, number of shared norms among teachers and nature of

human relationships particularly good incidences in school, all tied with 6 scores each.

This indicates that 3 predominant school cultural features in school E were:

First, nature of reality and truth particularly counts of facts, followed by nature of human relations particularly bad incidences in school and school customs.

It was notable in documentary analysis for the selected schools on KCSE mean score for 2017 showed a stable pattern with school A leading with a 7.3 KCSE mean score, followed by school C with 7.2, school B with 5.6 and school D 6.1 and school E with 4.3. Further, in 2018, school C led with a 7.5 mean score followed by school A with 7.2 and school D with 5.8 mean score, school B with 5.2 and last was school E with 4.2.

Qualitative statements from students also concurred with the preceding quantitative finding. A form four student in school E asserted:

*“I wonder why my school, unlike our neighbouring schools, has very few school ceremonies, rituals as well as positive customs. Most daily customary practices are generally, negative oriented, with little value to academics. Rumours and bad incidences, theft and sneaking out, is the order of the day among most students!”*  
(Mutongoi, a form four student, 2019).

Overall findings for twenty-one schools revealed 3 predominant school cultural aspects that had high scores as: school symbols, school customs and nature of human relationships, particularly rumours. These cultural aspects influenced students’ academic performance either positively or negatively as demonstrated from the preceding findings.

Qualitative statements from various students support the preceding observations. A form three student, talking about salient school cultural aspects in her school, had this to say:

*“My school has her own unique school cultural practices that include school symbols, rituals and ceremonies, that we practice annually which give both learners and teachers, motivation. Our school badge, motto and vision, all show `hard work rewards and our daily activities are guided by this”, (Kamurembo, form 3 student, 2019).*

These observations suggest that schools that have effective school climate have values, symbols and ideals that inspire them to have students and teachers energized to focus on specific goals that improve their self-discipline and academic performance. This is important to motivate and synergize their efforts with focus and foresight.

In contrast to the preceding qualitative findings, a form four student asserted:

*“I wonder why my school, unlike our neighbouring schools, has very few school ceremonies, rituals as well as positive customs. Most daily customary practices are generally, negative oriented, with little value to academics. Rumours and bad incidences, theft and sneaking out, is the order of the day among most students!” (Mutongoi, a form four student, 2019).*

In converse, this finding suggests that where there are no actual and common symbols, ideals and values that psyche students and teachers to focus on clear vision, mission and motto that is specified in school culture, focus on academic excellence and good discipline may not be possible.

The preceding findings show that school cultural aspects greatly influence students’ academic performance, as confirmed by documentary analysis of KCSE results for 2017

and 2018. Results indicate a consistent higher mean score for [C]schools as compared to the other schools studied.

The study findings concur with Schein (1985) classification of a school's culture, classified at three levels, also referred to as the cultural system of a school. In Schein's classification, the underlying level consists of simple assumptions, which he believes are the essence of a company's culture. Values are discovered at a higher level of understanding, the intermediate level of Schein's classification, are artefacts and behaviours relating to cultural manifestations and organizational members' behaviour patterns are found at the third level.

Assumptions refer to taken-for granted beliefs which staff members perceive to be true and underlie their daily interpretation of their duties. The second level consists of values and norms. As a consequence, values should be treated as necessary standards; they represent what is deemed valuable to achieve or worth striving for in a school, while norms reflect what is deemed unacceptable conduct.

#### **4.3.1 Effects of a School's Cultural Systems on Academic Performance**

The study further sought to explore positive and negative aspects of school culture that influenced students' academic achievements, in the five groups of coded public secondary schools and correlated to each school's KCSE mean scores for 2017 and 2018, as shown in table 4.4.

**Table 4.4 Effects of Schools’ Cultural Systems on Academic Performance-Positive and Negative Aspects (scale 1-5)**

<b>POSITIVE ASPECTS</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>%</b>
Number of Ceremonies in a year	8	3	6	4	3	24	9.9
Teachers positive Assumptions on academic performance	7	6	8	5	6	32	13.2
Students positive Assumptions on academic performance	8	4	7	8	5	32	13.2
Positive customs	9	5	8	4	5	31	12.8
<b>Nature of human relationships:</b>							
Good incidences among teachers	8	6	7	5	6	32	13.2
Good incidences among students	7	3	8	4	6	28	11.5
Number of positive shared norms by students	9	4	7	6	5	31	12.8
Number of positive shared norms by teachers	10	5	8	4	6	33	13.6
<b>TOTAL</b>	<b>66</b>	<b>36</b>	<b>59</b>	<b>40</b>	<b>42</b>	<b>243</b>	<b>100</b>
<b>NEGATIVE ASPECTS</b>							
Bad incidences among students	3	8	4	7	5	27	19.6
Bad incidences among teachers	1	5	2	6	7	21	8.6
Counts of rumours among students	3	8	4	8	9	32	23.2
Counts of rumours among teachers	4	10	2	7	8	31	22.5
Negative shared norms	2	8	2	6	9	27	19.6
<b>TOTAL</b>	<b>13</b>	<b>39</b>	<b>14</b>	<b>34</b>	<b>38</b>	<b>138</b>	<b>100</b>
<b>ACADEMIC PERFORMANCE</b>							
KCSE RESULTS MEAN SCORE 2017	7.3	5.6	7.2	6.1	4.3	24.5	100
KCSE RESULTS MEAN SCORE 2018	7.2	5.2	7.5	5.8	4.2	21.9	100

The third level in Schein's classification scheme consists of artefacts and practice related to behavioural aspects, such as customs, rituals and procedures where in each school develops its own set of behavioural patterns.

The researcher further, examined the school's cultural systems and student's academic performance, based on 2 categories; positive meaning that they add value to students' academic performance, while negative reduce value to students' academic performance, as presented in table 4.4. The sum and mean of each were calculated as well as variance and standard deviation sought. On positive aspect in the 21 schools, number of positive shared norms by teachers was highest with 13.6% (33), followed by teachers' positive assumptions on academic performance and good incidences among teachers, tied at 13.2% (32) respectively.

As indicated in Table 4.4 above, shared norms by teachers, positive assumptions on academic performance of students and good incidences among teachers, were the 3 most predominant positive cultural aspects in the 21 selected schools. On negative aspects, counts of rumours among students was the highest with 23.2% (32), followed by counts of rumours among teachers at 22.5% (31) and bad incidences among students and negative shared norms tied with 19.6% (27) each.

Findings revealed that the 3 most predominant negative aspects in the 21 schools were; rumours among students, rumours among teachers and bad incidences among students.

In addition to the preceding observations, a form four female student, when asked to talk about the extent to which the unhealthy/healthy school cultural aspects found in their school, affected her academic performance, had this to say:

*“I don’t want to sound so negative, but our way of doing things in this school doesn’t make sense. Emphasis is placed on some routines that don’t make sense ... When you look around, students are expected to run, whenever outside class, just in the name of being time conscious, only to get into class and start chatting, talk about strict teachers and prefects and do romance. Everyone seems to pursue their own interest, which unfortunately doesn’t enhance learning, no wonder our schools have consistent poor performance in KCSE”, (Kasoka, a form four female student, 2019).*

However, a form two female student said this:

*“We have a lot of unhealthy and negative school cultural aspects that have become our school culture. With all this, unless something is done, students’ academic performance will continue dwindling”, (Kelitu, a form two female student, 2019).*

The preceding observations suggest that there is proliferation of unhealthy school cultures that tend to be counterproductive to good intentions of the schools. These retrogressive school cultures tend to take away students’ synergies that could be used to improve academic performances and lead to poor learning outcomes.

The preceding observations demonstrate that predominant school cultural aspects found in a school influence students’ academic performance, with schools with predominant unhealthy aspects, performing poorly as compared to schools with predominant healthy aspects.

Secondly, school cultural artefacts and aspects such as school vision, mission, motto, ceremonies, rituals, among others, can be used to influence students' academic performance, as demonstrated by the preceding findings, particularly as demonstrated by schools in A and C.

The findings concur with what Deal and Peterson (1999), who observed that traditions in school are ceremonies marking special occasions, activities that affirm institutional traditions, and rites are examples of important events that have a special history and purpose that occur year after year to provide community members with a base to weather obstacles, difficulties, and transitions. Furthermore, it captures Schein's (1985) cultural level classification, which consists of three layers that vary in terms of their visibility within schools and awareness among teaching staff. They are made up of fundamental assumptions, which he believes are the essence of an organization's cultures, an intermediate level where values are contained, and a third level that includes artefacts and behaviours relating to organizational members' cultural manifestations and behaviour patterns.

Besides, a key informant, Principal, observed that school culture embodies everything that happens in the school on day-to-day basis. She noted:

*“School culture is very important since it includes the behavioural regularities, values and beliefs that are shared by all members of a school community. It entails small but vital aspects such as the kind of language used, attitudes towards specific subjects and teachers' guidance on careers, motivations and even outings. School cultural aspects are key in character building for students and even teachers as well as methodology used in teaching, cooperation and commitment in the school”, (Kanono, Principal, 2019).*

#### 4.4. Role of Students' and Teachers' Achievement Orientation Culture in Academic Performance

The second objective of the study was to examine the role of students' and teachers' achievement orientation culture and how it affects academic performance in selected Public Secondary Schools in Machakos County. Informants, both students and teachers, were asked to show kinds of tasks that demonstrated their academic achievement orientation culture. Table 4.5 shows students' and teachers' academic achievement culture, measured on a scale of 1-10, with 1 being the least and 10 the highest.

**Table 4.5 Comparison of Students' and Teachers' Academic Orientation Culture**

School objective realization	(ON A SCALE 1-10)					F	%
	A	B	C	D	E		
<b>Students' achievement orientation culture:</b>							
Attention to tasks given by teachers	7	6	8	5	6	32	20.4
Motivation for academic achievement	8	5	8	4	5	30	19.1
Students' discipline and focus	9	5	9	5	5	33	21.0
Acceptance and practice of school ethos	8	4	7	6	4	29	18.5
Involvement & commitment in learning	9	5	8	6	5	33	21.0
<b>Cumulative scores</b>	<b>41</b>	<b>25</b>	<b>40</b>	<b>26</b>	<b>25</b>	<b>157</b>	<b>100</b>
<b>Teachers' achievement orientation culture:</b>							
Level of structured and well-regulated teaching	9	5	9	6	4	33	16.6
High expectations for student achievement	9	7	10	8	6	40	20.1
Commitment of staff members in instructional process	8	6	8	5	5	32	16.1
Recognizing positive performance/ student motivation	7	5	8	5	3	28	14.1
Level of unity of purpose among the teaching staff	9	5	9	5	5	33	16.6
Level of staff enthusiasm	8	5	8	6	6	33	16.6
<b>Total</b>	<b>50</b>	<b>33</b>	<b>52</b>	<b>35</b>	<b>29</b>	<b>199</b>	<b>100</b>

On teachers' orientation culture, as shown in table 4.5 above, high expectations for students' achievement was highest with 20.1% (40), followed with level of structured and well regulated teaching, level of unity of purpose among staff and level of staff enthusiasm, all tied with 16.6% (33) each, commitment of staff members to instructional process at 16.1 % (32) and recognizing positive performance and student motivation at 14.1% (28).

Findings revealed that 3 predominant aspects on teacher's orientation culture as: High expectations for student achievement, level of structured and well-regulated teaching as well as level of staff enthusiasm.

The researcher sought to find out the extent at which students and teachers achievement orientation culture affected academic performance, as presented in table 4.4. In order to establish whether there was a relationship between students' and teachers' achievement orientation culture and academic performance, the researcher examined predominant students' and teachers' orientation culture in each school, and compared them with each of the five schools KCSE mean grades for 2017 and 2018.

The researcher first examined students' orientation culture in each of the 21 schools. Variables for Students' orientation culture comprised of the following: Students' attention to tasks given by teachers, students' concern and motivation for academic achievement at school, students discipline and focus, acceptance and practice of school ethos, student involvement and commitment in learning process.

On students' achievement orientation culture, as shown in table 4.4: Students discipline as well as focus and student involvement and commitment in learning process were the highest, at 21% (33) each, followed by students' attention to tasks given by teachers at 20.4% (32), student concern and motivation for academic achievements at 19.1% (30) and students acceptance and practice of school ethos at 18.5 % (29).

In School A, a form four lady informant, had this to say:

*“Our school provides us with a good learning environment and supportive systems that can help us excel. I use my time for reading, attending to teachers' lessons and asking questions in class where I need clarification. I also actively involve myself in group discussions, consulting teachers...”, (Kaseo, a lady student, 2019).”*

This observation underscores the need for a school to nurture a culture of hard work to improve academic performance and school discipline for self and social good of school fraternity that is working together to improve the image of the school. Ideally this is what team work and team spirit ought to achieve. Creation of team spirit, unity, dialogue, open communication and regular consultation among members of school community are the lifeblood of a school culture that not only nurtures but grows talents and gifts of her fraternity to achieve the social purpose of education in a contemporary society.

A male student in form one, had this to say:

*“Students in my school have little attention to tasks given by teachers. The level of values among most students and even teachers is really wanting. Something needs to be done about this situation, urgently! (Mauti, a male student in form one, 2019).”*

A male student had this to say:

*“Am proud of my school since I have learned a lot while here. Before I joined this school, I had challenges in waking up early as well as managing my time. However, my four years in this school has*

*transformed me. Everything in our school is programmed, with both students and teachers having a sense of what they ought to do. We have school ethos that are respected by all and hence nobody pushes you around to do what is needful. While in school, just like most of my friends, I attend to teacher's lessons, do assignments, group discussions, consulting teachers and helping each other accomplish tasks", (Kamwana, a male student, 2019).*

In contrast to the preceding observation, a form three male student had this to say:

*"I sometimes wonder when I see my fellow students being punished because of just assignment submission. It is a pity that some students in our school don't care much about learning. I feel something needs to be done to enhance the learning culture in students in this school", (Maimo, a form three male student, 2019)."*

The preceding observation shows students appreciate the need for commitment and personal focus on studies to develop their talent which is a product of individual input and commitment in doing assignments and homework and submitting it in time. It shows a student who is also mindful of a culture of obeying guidelines and advice from teachers to improve self and a culture of minding welfare of other students who may not be doing very well to improve academic performance and obey teachers. This is critical in a culture of working together for self and social good of the school and the community.

A form two female student observed:

*"Am proud of my school in games and athletics but not academics. We are netball and basketball provincial champions. However, in academics, we are at the bottom. Everyone in our school, right from students and teachers, are obsessed with games and sports trophies than academics. I sometimes imagine our school should have been turned into a youth sports academy rather than a secondary school since our general school orientation glorifies sports than academics. Nobody seems to care or seriously interrogate our school's consistent poor performance in KCSE. True to what many students and teachers in our school say, "you can't be perfect in everything", we are all happy with our sports*

*achievements and performance”, (Kaninikaseo, a form two student, 2019).”*

These findings indicate that students’ discipline as well as focus, student involvement and commitment in the learning process and students’ attention to tasks given by teachers, were the 3 most predominant aspects cited, for influencing students’ achievement orientation culture in the schools sampled.

These findings concur with Deal and Peterson (2009) who believes that a focus on learning, for both students and teachers, a focus on teamwork, a focus on SMART goals and outcomes, timely and appropriate knowledge are all important for ‘school culture’ to lead to better student learning. The mean for students and teacher’s orientation scores was 32.4, with a variance of 1.9 and a standard deviation of 14.

Among individual schools, findings of the study as shown in table 4.4 indicated that schools A and C had the highest scores of 41 and 40 respectively on students’ achievement orientation culture. Schools B, D and E had 25, 26 and 25 respectively, measured on a scale of 1- 10.

In order to establish the relationship between students’ academic achievement orientation culture and academic performance, the researcher carried out a correlation test. The above scores were correlated with mean score of 2018 which were as follows; school A had a mean of 7.2, school B 5.2, school C had 7.5, school D & E had 5.8 & 4.2 respectively. The correlation figure result was 1, meaning that there was a strong positive

relationship between students' and teachers' academic orientation and students' academic performance. The correlation was done as shown below, using the formula;

$$r = \frac{n \sum (xy) - (\sum x) (\sum y)}{\sqrt{(n \sum x^2 - (\sum x)^2) (n \sum y^2 - (\sum y)^2)}}$$

Where:

n = number of pairs of scores

$\sum xy$  = sum of the products of the paired scores

$\sum x$  = sum of x scores

$\sum y$  = sum of y scores

$\sum x^2$  = sum of square x scores

$\sum y^2$  = sum of square y scores

As shown from the observations from students, it is clear that there are gaps in teachers' and students' academic achievement orientations. A look at KCSE mean scores for 2017 and 2018 seems to show some correlation between the students' observations, with their schools mean grade achievements School B, has consistently had the lowest mean scores.

The study found out that schools that had a strong students' and teachers' academic orientation had also higher mean score in KCSE than those with a weak achievement orientation culture. The findings show that there is a strong relationship between students' and teachers' achievement orientation culture and students' academic performance.

Besides the above, an informant in Machakos county noted that:

*“For a school to ensure enhanced students' academic performance, a culture that encourages and motivates students as well as teachers to define for themselves their 'ideal' place in academic sphere should be developed. A culture of high*

*expectations and not just mediocre culture should be cultivated. Motivation, appreciation and support should be given to both teachers and students. This will enhance their esteem and instil a winner's attitude in them which through commitment, will enable them achieve more. (Lady QASO, Machakos County, 2019)."*

This observation suggests that schools need to develop and nurture a culture of motivation students and teachers and enable them to appreciate their roles and potential in academic work and good discipline that will enable them to nurture a culture of hard work, commitment and focus to succeed in academic activities. This is in line with Fives and Gill (2014), who stated that there are reasons to believe that tutors' beliefs concerning learner attainment influence their learners' achievement via the teacher's position, their attitudes toward education, and their views on non-educational issues.

These observations suggest that school culture has significant contribution to academic achievement of the students. Positive school culture has inherent motivational effects to the students which enable them to have high self-esteem and high expectations which may enable them to work hard to measure to the expectations of the school. Indeed, continued achievement orientation motivated by school culture results in good performance in academic endeavours.

#### **4.5 Emphasis and Practice of a School's Shared Ideology and Academic Performance**

The third objective of the study sought to establish how emphasis and practice of a school's shared ideology enables high academic performance in selected public secondary

schools in Machakos County. As shown in table 4.6, informants were asked to rate, on a scale of 1-10, the extent to which emphasis and practice of a schools shared ideology enhances academic performance in selected public secondary schools in Machakos County. On this scale, 1 was the least while 10, the highest. The study sought not only students' views but also the teaching staff as well as key informants. The researcher sought to establish the extent to which emphasis and practice of a school's shared ideology, enhanced academic performance in selected secondary schools in Machakos County. Emphasis of shared ideology was examined based on daily reference to school vision and motto by school community members as presented in table 4.6.

**Table 4.6: Emphasis and Practice of a School's Shared Ideology**

Emphasis and practice of shared ideology	On a scale 1-10					F	%
	A	B	C	D	E		
<b>a) Emphasis of shared Ideology</b>							
Daily reference to school vision and motto by:							
i. Management	9	5	9	8	6	37	11.7
ii. Teachers	8	6	9	9	7	39	12.3
iii. Students	8	5	7	6	7	33	10.5
<b>b) Practice of shared ideology:</b>							
Teacher cooperation and collaboration	9	6	9	5	5	34	10.8
Level of adherence to school vision and motto	9	5	9	6	6	35	11.1
Level of contribution by teachers on shared school vision	8	4	9	5	6	32	10.2
Level of contribution by students on shared School vision	9	6	9	7	6	37	11.7
Shared attitudes on student academic achievements	10	5	9	6	6	36	11.4
Uniformity of goals	9	4	9	5	5	32	10.2
<b>TOTAL</b>	<b>79</b>	<b>46</b>	<b>79</b>	<b>57</b>	<b>54</b>	<b>315</b>	<b>100</b>

A comparison of findings in table 4.6 as shown above, was done based on 3 categories of: management, teachers and students. Emphasis on shared ideology in school was found highest among the teachers with 12.3% (39), followed by management with 11.7 % (37) and students at 10.5% (33).

The observations in table 4.6 show that daily emphasis and reference to the school's shared ideology was highest among teachers, followed by school principal and lastly students.

However, comparison among schools indicated that daily emphasis and reference on shared ideology was highest among school management in schools and was high among teachers.

On daily practice of shared ideology, the following indicators were used to measure it: Level of adherence to school vision and motto, level of contribution by teachers on shared school vision, level of contribution by students on shared school vision, shared attitudes on student academic achievements, teacher cooperation and collaboration as well as uniformity of goals.

On daily practice of shared ideology, as shown in table 4.6, level of contribution by students on shared school vision was the highest at 11.7% (37), followed by shared attitudes on student academic achievements at 11.4% (36), level of student adherence to school vision and motto at 11.1% (35), level of contribution by teachers on shared vision and uniformity of goals had 10.2 % (32) each.

Findings on emphasis and practice of school shared ideology and academic achievements showed that: Emphasis of shared ideology was found to be highest among teachers than management and students. Secondly, on daily practice of shared ideology in school, level of contribution by students was highest, followed by shared attitudes on students' academic achievements. The mean for shared ideology variables was 47.1, with a variance of 12.1 and a standard deviation of positive 3.5.

Comparison of schools on practice of shared ideology revealed the following:

Some schools had highest score on shared attitudes and teacher cooperation while others had highest score on level of contribution by teachers on shared school vision as well as level of contribution by students on shared vision. School C also had the highest score on uniformity of goals. A comparison of KCSE 2018 results also revealed that schools had the highest mean scores.

Besides, data obtained from Focus Group Discussions from teachers who never filled questionnaires revealed the following themes:

A male teacher from school B, which incidentally posted the lowest mean score in 2018

KCSE results had the following to say on shared ideology:

*“Emphasis of ideology such as school motto, vision and values was one thing, and putting in practice what is embodied in it is another. Here, most of us preach water and we drink wine. The school management should lead by example, followed by teachers and students. Here, most of us do what we feel is ok and there is little cooperation, leave alone collaboration among the teaching staff since everyone is a boss and does what they like. The school management seems to listen to students and rumours more than staff, something that kills our morale. There*

*is no uniformity in our goals leave alone shared attitudes on students' achievement. For me, this individual and isolated working culture is the main cause of the poor performance of our students and no one seems to care". (Mundumuthuku, A male teacher 2019).*

The preceding observation show that students appreciate the need for a school culture that enables members of school fraternity to work together as a team to direct and consolidate their energies for academic performance and optimum school discipline. It also shows that if team work does not exist then a culture of hopelessness may make the school not to achieve her vision, mission and motto in terms of academic and discipline achievements which are core in any academic institution. Based on these it is self-evident that the school administration and by extension the principal and teachers need to listen to each other and appreciate the need for professionalism, honesty, unity, team work, cooperation and a spirit of democracy and respect for each other to enable good culture of unity and commitment to achieve the vision, motto and mission of the school. This creates a culture of success in a school.

One Female teacher from school E, had this to say:

*"When asked to describe how their school's shared ideologies contribute or don't contribute to students' academic achievements in the school: A well-conceived results based, accepted and practiced school ideology enhances both students' and teacher's cooperation in the instructional process. However, here, there is nothing like cooperation among the teaching staff, instead, there is competition. Not competing to improve students mean scores, but individual personality competition. We compete over everything, including tea and snacks, it is a pity. Most teachers compete to get the attention of the principal and will give fake reasons for students' poor performance and because they have her confidence, no real solution can be found. Our students know our staff weakness and take advantage to intimidate and*

*falsely accuse those teachers who try to be strict and committed, thereby creating fear and demoralization. Without students', teaching staff and school administrations cooperation, how can we post good KCSE results? Something needs to be done and done urgently", (Kadogo, Female teacher, 2019).*

The preceding observation underscores the need for honest and positive competition based on integrity and honesty. It also shows that when a school Principal does not check and listen to each person in a school fraternity and follow up to establish the real situation in the school, then issues of competition can be abused and the school may not achieve the benefits of using the synergies of students and staff to create a school culture that nurtures competition for improvement in academic performance and school discipline. It shows the need to take stock and re-evaluate the need for honesty and sincerity between staff and students. It may require evaluation of values and mission of the school and the role of each person to improve the school image, academic and discipline for social good of everyone in the school. This may rekindle a school culture that nurtures talents and provides opportunities to improve academic and discipline of the school.

Still on shared ideology and students' academic performance, a female Principal had this to say:

*"Every individual in school, be it a teacher or student holds certain beliefs acquired through socialization. However, it is the work of the school management, to ensure that these diverse, individual beliefs are integrated into a common, acceptable collective belief that revolves around a common purpose. Students' academic achievements rely much on both students' and teachers' attitudes towards performance. As a head of the school, I try to ensure there are shared attitudes among students and teachers on academic performance, with set goals and targets. Once this has been done, I supervise, monitor, guide, encourage and provide necessary support to*

*both teachers and students, ensuring uniformity in terms of goal attainment”, (Kasuku, Principal, 2019).*

The preceding findings concur with what various studies have observed on relevance of shared ideology and academic performance of students, such as Thompson (1984), who holds that teachers' convictions are the unspoken manifestations of verbal contributions to abstract concepts that can be considered part of a broader teaching philosophy. Furthermore, tutors at the school level have or share a teaching philosophy, which is known as a general belief, which affects the collective belief and vice versa.

Further, findings also concur with Durkheim (2014), who asserts that collective beliefs have an individual conviction if coerced by arbitrary force based on mutual information. This is in line with Fives and Gill (2014), who stated that there are reasons to believe that tutors' beliefs concerning learner attainment influence their learners' achievement via the teachers' position, their attitudes toward education, and their views on non-educational issues.

#### **4.6 The Central Role of a School Principal in Fostering a Learning and Teaching Culture in Selected Public Secondary Schools in Machakos County**

The fourth objective of the study sought to examine the effects the central role of a secondary school Principal in fostering a learning and teaching culture in public secondary schools in Machakos County. Informants were asked to rate the central role of their school Principal in fostering a learning and teaching culture, based on the following variables: where the school Principal facilitates teachers and students working together,

school principal reinforcing sharing of ideas on academic matters, Principal values teachers and students ideas, builds trust and confidence among students and staff, supports and rewards risk-taking as well as innovative ideas, guides and directs objective realization and engage staff in decision making. The variables were rated on a scale of 1-10, with 1 being the least and 10 the highest.

**Table 4.7 Role of a School Principal in Fostering a Learning and Teaching Culture**

Role of school principal in creating a teaching and learning culture	On a scale 1-10					F	%
	A	B	C	D	E		
Guides and directs school objectives realization	8	6	7	5	5	31	12.7
Principal values teachers' and students' ideas	9	5	9	6	6	35	14.3
Engage staff in decision making	8	4	9	5	5	31	12.7
Builds trust and confidence among students and staff	9	6	8	6	6	35	14.3
Reinforces the sharing of ideas on academic matters	8	7	8	7	7	37	15.2
Facilitates teachers and students working together	9	7	9	8	7	40	16.4
Supports and rewards risk-taking and innovative ideas	9	5	10	6	5	35	14.3
<b>TOTAL</b>	<b>60</b>	<b>40</b>	<b>60</b>	<b>43</b>	<b>41</b>	<b>244</b>	<b>100</b>

Three predominant aspects on the role of a school principal in fostering a learning and teaching culture is presented in table 4.7 where the highest rated was where the school principal facilitates teachers and students working together with 16.4% (40), followed by school principal reinforcing sharing of ideas on academic matters with 15.2% (37), where principal values teachers and students ideas, builds trust and confidence among students

and staff, supports and rewards risk-taking as well as innovative ideas, all tied with 14.3% (35) each, guides and directs objective realization and engage staff in decision making, both at 12.7 % (31) each.

The preceding observations on the role of the school principal in fostering a learning and teaching culture indicated that: School principals' role in facilitating teachers and students working together, reinforcing sharing of ideas on academic matters as well as valuing teachers' and students' ideas, were central roles identified by the study.

A comparison on individual schools' cumulative scores on central role of the school principal in fostering a learning and teaching culture, as shown in table 4.7, indicated that two had the highest scores of 60 respectively, while several schools had 40, 43 and 41 respectively. In order to establish the central role of school principal, in fostering a learning and teaching culture and students' performance, a chi-square test was performed based on these scores. The researcher used KCSE mean score of 2018 as a measure for students' academic performance. For the null hypothesis, the investigator hypothesized that there is no significant association between the role of school principal and learners' academic performance. In order to calculate the expected frequencies, the researcher used the following formula:

$$f_e = f_r \times f_c.$$

The study was tested at 0.05 confidence level. The calculated value was 13.596 while the critical value was 7.815. This confirmed the findings of the study scores, indicating that

there was significant association between the role of a school principal and students' academic performance.

These findings concur with Mwangi (2009), whose study titled 'Role of School Administration in Learners Attainment in Kenya' found out that the headteachers' administration involvement portrayed dedication, sensitivity and attention on incessant innovation and transparency to knowledge and varying opinion seriously affecting learners' achievement.

Besides the preceding quantitative findings, the themes generated from teachers who never filled questionnaires in Focus Group Discussions confirmed the preceding findings. A female teacher from school C, for example, when asked to briefly summarize the roles played by the school Principal in fostering a learning and teaching culture in the school, had this to say:

*“It is important for the school principal to value teachers' and students' ideas. Nobody has a monopoly of ideas in this world, especially in knowledge provision or acquisition. You may have a good idea but someone else may have a better one. I am happy that in this school, our Principal values everyone's ideas, be it students, teachers and even subordinate staff. This makes us feel part and parcel of the school. It feels good when you see your logical ideas being accepted since it motivates you even to work harder. I think that this is one major reason, among many, that has influenced good performance of our students, since madam Principal joined this school 3 years ago. Before then, it used to be `one man's show', we could only take orders. Not only does our Principal engage staff members in decision making, she reinforces the sharing of ideas on academic matters among both staff and students. There is a good working environment in the school, since the*

*Principal facilitates students and teachers working together”,  
(Kamueni, a female teacher, 2019).*

This observation attests to the power of active participation in decision making and how effective consultation unites a school to pursue a common goal and purpose to improve discipline and academic performance. It shows that when a school fraternity is talking with each to promote a sense of team spirit and team work, performance in academic work and discipline improves since a sense of responsibility and a sense of belonging is created and nurtured. Dialogue creates good relationships between staff and students and makes them pursue a common goal.

A male teacher and director of studies observed that:

*“Teachers and student’s active involvement in decision making process was key in enhancing ownership and commitment in the learning and teaching processes. This has provided us with an environment where there is a relatively high level of cooperation among staff, school management and students. There is collegial support as well as unity of purpose in our instructional processes, thanks to our able principal”,  
(Mtush, a male teacher and director of studies, 2019).*

This observation suggests that active and effective communication promotes unity and focus especially when teachers and students are involved in decision making on issues that touch on academics and discipline. Indeed, this commitment creates a culture of unity and purpose in pursuit of school ethos of good discipline and academic performance.

A key informant from Machakos County who was a Quality Assurance and Standards Officer of education had this to say:

*“A school principal is like a mother in a family in whom everything depends on. She observed further that, the principal has to create a positive culture in the school by engaging students and teachers working together, facilitates partnerships and cooperation not only among the school community but also parents and the wider community. The principal facilitates instructional planning, sets and monitors standards and maintains continuous improvement and must have good problem-solving skills and nurtures a culture where everyone feels valued”, (CQASO, Machakos County, 2019).*

It is notable from the preceding observations that it is evident that the school principal has various roles to play in school which if done well, they influence students’ academic performance, as demonstrated by several informants. Documentary analysis of KCSE mean grades for 2017 and 2018 for the schools, support the same. As given by informants, central roles for school principal in establishing a learning and teaching environment includes: Creating a positive culture that enhances teamwork, involve students and staff in decision making, values their ideas, supports innovative ideas and facilitates all school community members to work together. In short, defines the school culture and guides and helps all in school to practice it on a daily basis.

These findings concur with Habegger (2008) whose study titled, *The Principal’s Role in Successful Schools: Creating a Positive School Culture*, talks about the impact of a school’s culture on students’ academic achievements. She looked at the various duties of Headteachers at the 3 schools, which included ensuring that instruction was consistent with state academic content requirements, maintaining quality improvement in the buildings, planning instruction for student achievement, establishing relationships with parents and the community, and cultivating a culture where each child felt respected.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents a summary of findings from Chapter Four. The findings are based on data collected and analysed in order to answer the study research questions. The chapter further presents conclusions drawn from the findings and gives recommendations. It also provides suggestions for further research.

#### **5.2 Summary of the Findings Based on Each Study Objective**

##### **5.2.1 Effects of Aspects of School Culture and their Influence on Academic Performance**

The first objective was to investigate the effects of aspects of school culture on academic performance in selected public secondary schools in Machakos County, Kenya. The findings under this objective were;

Findings for five schools revealed that 3 most salient school cultural aspects that affected student's academic performance were school symbols, school customs and nature of human relationships particularly rumours.

The researcher further examined the schools' cultural systems and students' performance based on 2 categories, that is positive and negative school cultural aspects. Findings therefore showed that shared norms by teachers, positive assumptions on academic

performance of students and good incidences among teachers, were the 3 most predominant positive cultural aspects in schools.

On negative aspects, findings revealed that the 3 most predominant negative aspects in schools were; rumours among students, rumours among teachers and bad incidences among students.

Overall findings revealed 3 predominant school cultural aspects that had high scores as: School symbols, school customs and nature of human relationships, particularly rumours. These cultural aspects influenced students' academic performance either positively or negatively as demonstrated from the preceding findings.

### **5.2.2 Implications of Students' and Teachers' Achievement Orientation Culture on Academic Performance**

The second objective of the study sought to examine the extent to which students' and teachers' achievement orientation culture affected student's academic performance. In order to establish whether there was a relationship between students' and teachers' achievement orientation culture and academic performance, the researcher examined indicators of predominant students' and teachers' orientation culture in each school, and compared them with each of the five schools' KCSE mean grades for 2017 and 2018.

Findings indicated that students' discipline as well as focus, student involvement and commitment in the learning process and students' attention to tasks given by teachers,

were the 3 most predominant aspects cited for influencing students' achievement orientation culture in secondary schools.

Findings revealed that 3 predominant aspects on teachers' orientation culture were: High expectations for student achievement, level of structured and well-regulated teaching as well as level of staff enthusiasm.

The study found out that schools that had a strong students' and teachers' academic orientation had also higher mean score in KCSE than those with a weak achievement orientation culture. The findings show that there is a strong relationship between students' and teachers' achievement orientation culture and students' academic performance. The study found out that school culture had great influence on academic performance of students when they acquire confidence and self-esteem which energized their passion for success.

### **5.2.3 The Role of a School's Shared Ideology on Academic Performance**

The third objective of the study was to establish how emphasis and practice of a school's shared ideology enables high academic performance of students. The researcher sought to establish the extent to which emphasis and practice of a school's Shared ideology, enhanced academic performance in selected public secondary schools in Machakos County.

First, the study examined level of emphasis of school ideology among staff, management and students. Findings on emphasis and practice of school's shared ideology and academic performance showed first that emphasis of shared ideology was highest among teachers than management and students.

Secondly, on daily practice of shared ideology in school, the level of contribution by students was highest, followed by shared attitudes on students' academic performance.

Comparison of schools on practice of shared ideology revealed the following: Schools had highest shared attitudes and teacher cooperation while some schools had highest score on level of contribution by teachers on shared school vision as well as level of contribution by students on shared vision. One school had the highest score on uniformity of goals.

It was notable that shared ideology encouraged team work among students which motivated their commitment to academic work and commitment to success. These were important energizers that flared the students' commitment to success and achievement in academic and self-discipline to studies instead of wasting valuable academic time.

#### **5.2.4 Implications of School Principal's role in Fostering a Learning and Teaching Culture on Academic Performance**

The fourth objective of the study was to examine the effects of the central role of a secondary school principal in fostering a learning and teaching culture in a school. Findings on the role of the school principal's role in fostering a learning and teaching

culture indicated that school principal's role in facilitating teachers and students working together, reinforcing sharing of ideas on academic matters as well as valuing teachers' and students' ideas, were central roles identified by the study.

Based on the observations from the study, it is evident that a school principal has various roles to play in a school which if done well, they influence students' academic performance. Documentary analysis of KCSE mean grades for 2017 and 2018 for the schools support the same. As given by informants, central roles for school principals in establishing a learning and teaching environment can not be underestimated.

The findings of the study attest that a principal is instrumental in creating a positive culture that enhances teamwork, involve students and staff in decision making, values their ideas, supports innovative ideas and facilitates all school community members to work together. In addition, a principal is key in defining the school culture and guiding and helping the school to practice it on daily basis and this enhances academic performance.

### **5.3 Conclusions of the Study**

Social interaction tenet guided this study in its pursuit of describing schools' cultural aspects such as symbols, artefacts and value systems which play an important role in students' academic performance.

First, although there are various school cultural aspects that affect students' academic performance, shared norms by teachers, positive assumptions on academic performance of students and good incidences among teachers, are 3 most predominant positive cultural aspects in schools that enhanced students' academic performance.

Secondly, a high expectation for student achievement among teacher's orientation culture was the most predominant factor in the selected schools.

Thirdly, it was also found that emphasis of shared ideology was highest among teachers than management and students. Schools with high emphasis of shared ideology were also found to have higher mean scores in KCSE hence; emphasis of shared ideology had a relationship with student's academic performance.

Fourthly, the study established that School principal's central role was in facilitating teachers and students in working together.

The study therefore concluded that school cultural aspects, had significant influence on students' academic achievements based on the preceding observations. Positive school culture has inherent motivational effects to the students which enable them to have high self-esteem and high expectations which may enable them to work hard to measure to the expectations of the school. Indeed, continued achievement orientation motivated by school culture, shared ideology and supportive school leadership, results in good achievement in academic endeavours.

## **5.4 Recommendations of the Study**

The following recommendations can be made based on the findings of the study: -

### **5.4.1 Policy Recommendations**

The study recommends schools to carry out a School Culture Typology which is a self-reflective tool and has school related activities designed to identify a school-wide perspective of the “type” of culture that exists in a school. The school typology tool will help all school community members define, implement and monitor acceptable and collective ethos that positively influence students’ academic performance.

Development of school ethos and routines should be participatory so that it can be owned, respected and not done for fear or just as a formality, if at all it has to influence students’ academic performance.

### **5.4.2 Recommendations Related to Practices**

- i) Students should be actively involved in their overall school activities to enhance their school’s corporate image and identity and focus on their academic pursuit to enhance their academic performance.
- ii) Efforts should be made to enhance staff collegiality and collaboration in instructional process which in turn enhances student’s academic performance.
- iii) The school Principal should facilitate students and staff to work together on academic matters with a more open and participatory approach and create a

conducive environment for learning and teaching which will in turn lead to high academic performance.

#### **5.4.3 Recommendations for Further Research**

The study found interesting revelations on school routines, customs and values that may positively or negatively influence students' academic performance. It therefore recommends a detailed study to establish the level at which school customs and ethos influence students' academic performance in public secondary schools.

Secondly, a study can be done to explore various school leadership styles and their influence on students' academic performance in secondary schools in Kenya.

Lastly, a detailed study can be done to establish the influence of social relationships and its effect on students' academic performance in secondary schools.

## REFERENCES

- A, H. (2000). The Hidden Corridor Curriculum. *High School Journal*, 83(2) 1-10.
- A.F., Y. (2012). Influence of Principal's Leadership Styles on Students' Academic Achievements in Secondary Schools. *Journal of Innovative Research in Management and Humanities*, 3(1), 113-121.
- Almpanis, T. (2016). Using a mixed methods study design in a study investigating the 'Heads of e-Learning' perspective towards technology enhanced learning. *Electronic Journal of e-Learning*, 14(5), 301-311.
- B, J. (2014). *Influence of School Culture on KCSE Performance of Public Schools in Makadara District*. Nairobi: University of Nairobi.
- Brown S. Dayer, D. R. (1982). The Instrumental role of the principal. *Educational Administrative Quarterly*, 18(3), 34-64.
- C.A., O. (2011). *Effects of School Culture on Pupils' Performance in KCPE in Public Schools in Teso South District, Kenya*. Nairobi: University of Nairobi.
- Campbell M. Julius S. and Altman D. (1995). Estimating Sample sizes for binary conflicts. *Journal of Educational Administration and Foundations*, 13(2), 27-53.
- Cavanagh R F & Dellar, G.B. (1998, April 13th -17th). The Development Maintenance and Transformation of School Culture. *Paper Presented at the Annual Meeting of American Educational Research Association*.
- Centre, N. M. (2007). *The ABC of School Mentoring*. Washington D.C.
- Chengoli Ousman & Ongeti. (2013). *School Culture: Implications to School Improvement and performance in National Examinations in Kenya*. Nairobi: University of Nairobi.
- CM, K. (2015). *The Impact of Community Involvement in Public Secondary Schools' Management: A case of Machakos County, Kenya*. Nairobi: Kenyatta University.
- Coleman J. S & Offer T. (1987). *Public and Private High Schools: The impact of Communities*. New York: Basic Books.
- Coleman JS Campel E, Hobson C MC Partland J Mood A Wayne Shield F & York R. (1996). *Equality of Educational Opportunity*. Washing DC: US Government Printing Office.
- D, F. (2012). School Culture Creating a Unified Culture of Learning in a Multi-Cultural Setting. *IB Regional Conference*.

- Deal TE and Kennedy AA. (1983). Culture and School Performance. *Educational Leadership*, 40(5) 14-15.
- E, B. (1983). *A Report on Secondary School in America*. New York: Harper and Row.
- Ethem, B. I. (1994). *Effects of School Culture on Academic Achievement*. Pegem: Pegem A Yaycimik.
- F.N, K. (2003). *Foundations of Behavioral Research*. Harcourt Brace: Jovanovich.
- Faireman M & MC Lean L. (2003). *Enhancing Leadership Effectiveness*. Lenexa K.S: Joshua Publishing.
- Fink, E and Resnick, L.B (2001) Developing Principals as Instructional Leaders. Phi Delta Kappan 82, 598-606.
- Friedkin N and Thomas S.L. (1997). Social Positions in Schooling. *Sociology of Education*, 70, 239-255.
- Fullan, M (2007): *The New Meaning of Educational change*, Routledge. New York
- Gay, L. Mills, G & Arisia (2009). *Educational Research: Competencies for Analysis and Application*. Geneva. Blackwell Publishing LTD.
- GB, D. (1995). *School Cultural Elements Questionnaire Scales (Internal Documents)*. Perth: Curtin University.
- Gelestirme, A. B. (2011). *Effects of School Culture on Academic Performance*. Pegem: Pegem A. Yayialik.
- Gelistirme, A. B. (2011). *Effects of School Culture on Academic Performance*. Kuram: Pegem A Yayicilik.
- Goh, J. W., Lee, O.K., & Salleh, H.(2010). Self-rating and respondent anonymity. *Educational Research*, 52(3), 229-2465.
- H.H, G. (1997). Impact of School Culture on Effectiveness of Secondary Schools with Disadvantaged Studenyts. *Journal of Educational Research*, 90(5), 310-318.
- Hallinger P & Heck R>H. (1998). Exploring the Priciples' Contribution to School Effectiveness 1980-1995. *School Effectiveness and School Improvement*, 9(2), 157-191.
- Heck R.H & Marcoulides GA. (1996). School Culture and Performance. *Testing the Invariance of an Organizational Model School Effectiveness and School Improvement*, 7(1) 76-95.

- HJ, F. (1999). *School Climate: Measuring, Improving and Sustaining Healthy Learning Environments*.
- Hoy W.K & Tarter C.J. (1997). *The Road to open and Healthy Schools: A Handbook of Change \_Elementary and Middle School Edition*. California, Corwin: Thousand Oaks.
- I.E, K. A. (2000). Measuring Reculturing in National Reform Models. *Journal of School Principalship*, 10 131-157.
- J.M, O. T. (2008). Relationships between School culture and Student Performance in French in selected Schools. *The Journal of Language, Technologies & Enterprises in Africa -African Journal Online*.
- K, L. (1984). *Methodology of Educational Research*. New Delhi: Vary Educational Books.
- K., L. (1984). *Methodology of Educational Research*. New Delhi: Vary Educational Books.
- K., M. S. (1993). *School Climate (Reston, VA: National Association of Secondary School Principals*.
- Karaduman, A. B. (2021). The effects of School Culture on Students' Academic Achievements. *Shanlax International Journal of Education*, 99-109 Vol 9.
- KNEC. (2020). Top 100 Schools Rankings in KNEC Exams. *Advance Africa Journal of Academics*, Rankings.
- Kombo, D. K., & Tromp, D. L. (2006b). *Proposal and thesis writing. An introduction*. Nairobi. Pauline's Publication Africa.
- Leithwood, K. (1992). The move toward Transformational Leadership. *Educational Leadership*, 49(5) 8-12.
- Levine D U & Lezote L W. (1990). *Unusually Effective Schools: A Review and Analysis of Reasearch and Practice*. New York: Madison, W I National Centre for Effective Schools Research and Development.
- M, N. D. (2005). Measuring Reculturing in National Reform Models. *Journal of School Principalship*, 10, 131-157.
- M.O, N. (2012). *Influence of Schools' Culture on Students' Performance in KCSE in Homanbay County*. Nairobi: University of Nairobi.

- Macneil, J, Rater and Busch, S. (2009). The Effects of School Culture and Climate on Student Achievement. *Internation Journal of Leadership in Education*, Vol. 12 No. 1, 73-84.
- Miller, T., Birch, M. Mauthner, M., & Jessop, J. (Eds.). (2012). *Ethics in Qualitative Research*. Sage Publications.
- Mugenda, O.M. & Mugenda, A.G. (2003). *Research Methods Quantitative and Qualitative Approaches*. Nairobi: ACTS Press.
- Mugenda, A.G. & Mugenda, O.M. (2012). *Research methods dictionary*. Nairobi, Kenya: Applied Research & Training Services.
- Mugenda, O.M and Mugenda, A.G. (2013). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: Acts Press.
- Mustafa, C. (2006). *Culture and Teacher Metaphors used in Educational System*. Soysal: Soysal Bilimler Entusu Dergisi.
- Mutuku, P. M. and Felicita, N. and Ogola, M. (2017). Relationship between Head Teachers' Instructional Leadership practices and the Academic Performance of Students in Machakos County, Kenya. *European Journal of Education Studies Vol 3*.
- Mwangi, R. (2009). *The Role of School Leadership in Student Achievement in Kenya*. Nairobi: WSM.
- Mwinzi, J.M (2012). *Integrating Philosophy of Education and the Goals of Education in Education Practice at Kenyan High Schools*. Doctoral Dissertation, South Eastern Kenya University.
- Odongo, Z. O. (2013). *Influence of Positive Sch ool Culture on Performance atKenya Certificate of Secondary Schools in Public Secondary Schools in Rongo District, Kenya*.
- Oregon Department of Edu (2010). *Using split Half Reliability with Tests*. Salem: Department of Education.
- R, D. (2006). *Building a Capacity for Shared Leadership in Schools: Teachers as Leaders of Educational Change*. Wallongong: University of Wallongong.
- R, K. (2005). *Research Methodology: A step by stepguide for beginners 2nd Edition*. Nairobi: Masola Publishers.

- R., M. (2001). *School Culture and School Performance. An Explorative Study into the Organizational. Culture of Secondary Schools and their Effects*. Enschede, Netherlands: Twente University Press.
- S, H. (2018). The Principals' Role in Successful Schools. *Creating a Positive School Culture*, [www.naesp.org](http://www.naesp.org).
- Saphier, J.& King M. (1995). *Good Seeds Grow in Strong Cultures*. Educational Leadership.
- Schein, E. (1985). *Organizational Culture and Leadership. A Dynamic View*. San Francisco, California: CA:Jossey -Bass.
- Sergiovanni, T. (2001). *The Principleship: A Reflective Practice perspective*,. Needham Heights, MD: Allyn and Bacon.
- Sergon, D (2005, October 6). *School Success Depends on the Head Teacher's Ability*. Nairobi: The Standard Group.
- Smith, A.M. (2012). Research Methodology: A Step-by-step Guide for Beginners. *Nurse Education in Practice*. doi:10.106/j.nepr.2011.11.008.
- Standards, C. B. (2019). Population of Machakos County. *Population* , [en.m.wikipeedia.org](http://en.m.wikipeedia.org).
- Trochim, W.M. (2006). *Qualitative Measures. Study Measures Knowledge Base*, 361: 2-16
- Vygotsky, L. (1978). *Mind in the Society*,. MA: Harvard University Press.
- Wayne, H. (2006 ). Academic Optimism of Schools: A forcr for Student Achievement. *American Educational Research*, 425-446 Vol 43 No. 3.
- Watson, N. (2001). *Promising practices: what does it really take to make a difference?* Education Canada, 40 (4), 4-6.
- Witziers, B.Bosker R.J and Kruger, M, M.L. (2003). Educational Leadership and Student Achievement: The elusive search for an Association. *Educational Administration Quarterly*, , 39(3), 398-425.

## APPENDICES

### APPENDIX A: QUESTIONNAIRE FOR STUDENTS

#### Dear Respondent,

My name is Magdalene Mbula Ngumuta from Kenyatta University. I am carrying out research on “*School cultural aspects and their relationships on students’ academic performance in selected secondary schools in Machakos County, Kenya*”. This research is in partial fulfilment to the requirements of the award of Master’s degree in education of Kenyatta University. The purpose of this research is to gauge students’ opinions about how school culture (the way we do things in our school every day) and how it influences academic performance. Your personal information will be protected. I hope that the information gathered will help teachers and the school management in future to understand and enhance a culture that is good and supportive relationship with students and fellow teachers in order to effectively help you in your academic performance. Honestly answer the questions on this questionnaire and with correct responses. Your information will be held under wraps and only used for this research. You do not need to write your name. Your cooperation is highly appreciated.

#### Instructions

Kindly rate the following aspects in this school based on your observation. Each item can be answered SA (strongly agree), A (agree), NS (Not sure), D (disagree), or SD (strongly disagree). Put a tick on the appropriate response or write your response in the spaces provided.

#### Welcome

#### SECTION I

##### Personal information

1. Name of school.....
2. Gender  
i) male:  
ii) Female:
3. Age.....
4. Class/Form.....
5. Type of school:(Tick one).  
i) Girls:  
ii) Boys:  
iii) Mixed:

#### SECTION II

This section is aimed at describing the effects of aspects of school culture on Academic Performance. (The way things are done in our school and how it affects academic performance of students).

1. In your view, the Quality of interpersonal and professional relationships between teachers and students in this school is excellent:  
SA    A    NS    D    SD
2. School management effectively communicates with different role groups (teachers and students).

- SA    A    NS    D    SD
3. School management sets high expectations for performance of students.  
SA    A    NS    D    SD
4. Most Teachers take time to attend to individual students' academic needs.  
i) Always:  
ii) Sometimes:  
iii) Never:
5. A) There is effectiveness in use of classroom time by:  
i) Teachers:        SA    A    NS    D    SD  
ii) Students:    SA    A    NS    D    SD  
There is satisfactory monitoring and evaluation of instructional practice (teaching and learning): SA    A    NS    D    SD  
iii) List five healthy (positive aspects found in your school that are helpful towards your academic performance.  
.....  
.....  
.....  
.....  
.....  
iv) List five unhealthy (negative aspects found in your school that are a barrier towards your academic performance.  
.....  
.....  
.....  
.....  
.....  
v) To what extent do the unhealthy/ healthy aspects found in school, affect your academic performance?  
.....  
.....  
.....  
.....  
.....
- b) Use; VH (Very High), H (High), A(Average), L (Low), VL (Very Low) to answer to the following statements that relate to what you see and hear while in school.
- i. The level of gossips and rumours among students is:  
VH ( ), H ( ), A ( ), L ( ), VL ( )
  - ii. The level of gossip and rumours among teachers is:  
VH ( ), H ( ), A ( ), L ( ), VL ( )
  - iii. The level of conflicts among students is:  
VH ( ), H ( ), A ( ), L ( ), VL ( )
  - iv. The level of between teachers and students in this school is:  
VH ( ), H ( ), A ( ), L ( ), VL ( )
  - v. The level of between students and school management in this school is:  
VH ( ), H ( ), A ( ), L ( ), VL ( )

- vi. The level of conflict between students and subordinate staff is:  
VH ( ), H ( ), A ( ), L ( ), VL ( )
- vii. The level of conflict among teachers in this school is:  
VH ( ), H ( ), A ( ), L ( ), VL ( )
- viii. The level of conflict between teachers and school management is:  
VH ( ), H ( ), A ( ), L ( ), VL ( )

**SECTION III:**

**This section aims to measure contributions of school’s achievement orientation culture to Academic performance.**

- 1. Student attention to tasks given by teachers is excellent:  
SA    A    NS    D    SD
- 2. Students concern and motivation for academic achievement at school is excellent:  
SA    A    NS    D    SD
- 3. Students’ discipline and focus is excellent: SA    A    NS    D    SD
- 4. We receive common and acceptable attention and assistance by teachers academically: SA    A    NS    D    SD
- 5. Briefly describe generally students’ perception and attitude towards academic performance:.....  
.....  
.....
- 6. In this school how committed and motivated are students towards academic achievements?  
a. ....  
b. ....

**Ideology and collaboration that determine academic performance.**

- 1. Teachers and school administrators are guided by school vision and motto always:  
SA    A    NS    D    SD
- 2. Teachers will have one-on-one meetings, schedule lessons, and discuss grades and subject success with individual students: SA    A    NS    D    SD
- 3. Teachers collaborate to create and review student activities and initiatives:  
SA    A    NS    D    SD
- 4. Teachers in our school discuss and solve academic issues together related to academic:  
SA    A    NS    D    SD
- 5. Teachers embrace, talk and are guided by school vision in their practice:  
SA    A    NS    D    SD

**The role of a school Principal in fostering positive culture that enhances Academic Performance**

- 1. The school Principal value teachers’ and students’ ideas, seeks input, engages staff in decision-making and trust the professional judgment of the staff:  
SA    A    NS    D    SD

2. The school Principal supports and rewards risk-taking and innovative ideas designed to improve education for the students: SA      A      NS      D  
SD
3. The school Principal reinforces the sharing of ideas and effective practices among all staff and even students: SA      A      NS      D      SD
4. The school Principal in our school facilitates teachers and students working together:  
SA      A      NS      D      SD
5. The school Principal gives room for students to freely give their ideas on matters academic:  
SA      A      NS      D      SD

**Strategies to Improve Academic performance**

1. In your view, what can be done to enhance students' academic performance in this school?
  - i. ....
  - ii. ....
  - iii. ....
2. What makes most students in this school perform well or not well in academics?
  - i. ....
  - ii. ....
  - iii. ....

**Kindly list 5 Things/Activities teachers and students like doing while at school.**

- 1) 5 things students like doing most while in class:
  - i. ....      iv. ....
  - ii. ....      v. ....
  - iii. ....
- 2) Things students like doing most when outside class:
  - a. ....
  - b. ....
  - c. ....
- 3) 5 things Teachers do often that help students to learn and perform well in this school:
  - a. .... b. .... c. .... d. .... e. ....
- 4) 5 things Teachers do often that prevent/ affect students to learn and perform well in this school:
  - a. .... b. .... c. .... d. .... e. ....
- 5) 5 things students do often that help them to learn and perform well in this school:
  - a. .... b. .... c. .... d. .... e. ....
- 6) 5 things Students do often that prevent/affect them to learn and perform well in this school:



## APPENDIX B: QUESTIONNAIRE FOR TEACHERS

### Dear Informant,

My name is Magdalene Ngumuta from Kenyatta University. I am carrying out a research on *'School cultural aspects and their relationships on academic performance in selected secondary schools in Machakos County, Kenya'*. This research is in partial fulfilment to the requirements of the award of the master of Education degree of Kenyatta University. The purpose of this research is to investigate to what extent a school's culture as seen from day-to-day way of doing things, communicating and working, affect students' academic performance. Your personal information will be protected. It is hoped that the information gathered will help teachers, students and school management, to embrace a school culture that can enhance students' academic achievements in secondary schools in Machakos County. I kindly request you to assist me in answering questions in this interview schedule to enable me get answers to my research questions. Your honest and correct responses will be of great confidentiality and will be only used for this research purpose. You do not need to write your name. Your cooperation is highly appreciated.

**Instructions:** Tick or write the correct information in the blank spaces provided and explain where necessary.

### SECTION I: -Background information

Name of the school: .....

1. Sex: i) Male ( )  
          ii) Female ( ) -√ Tick one
2. Age.....
3. Type of school .....
4. Education qualifications Level.....
5. Which classes do you teach? .....
6. What is your teaching experience in terms of years? .....

### SECTION II

**This section aims at identifying the effect of various aspects of school culture on Academic performance.**

1. Describe briefly, predominant (salient) behavioural aspects found in your school culture that affect (Influences or hampers) students' academic performance. Ones held and practised by various school members. The way things are here? What do you see? Hear, and experience in the school? What don't you see and hear? What behaviour gets rewards and status here? Who gets to make decisions?
  - a. The general status of students' academic performance in this school is:  
          i).Excellent ( ). ii). Good ( ). iii). Fair ( ). iv). Below average ( )
  - b. What I see, hear and experience in this school related to students' academic performance is.....
  - c. What I don't see, hear and experience in this school related to students' academic performance is.....
- d. The behaviour that gets rewards and status in this school among students is.....

- e. The behaviour that gets rewards and status in this school from the school management is.....
- f. The behaviour that gets rewards and status in this school among Teachers is.....
- g. The behaviour that gets rewards and status in this school among subordinate staff is.....
- h. Decision making process- who decides what, who does what, where and when (instructional management structure) .....
- i. Monitoring and evaluation systems on goals and objectives; standards and quality control systems in place and their contributions to students' academic performance.....
- j. Briefly explain various customs held and practiced by the following members, that influence (positively or negatively) students' academic performance:  
 i)Students..... ii).....  
 iii)Subordinate staff..... v). School management.....
- k. In which ways do you think classroom interaction in the subject you teach, affect students learning outcomes? .....
- Briefly Explain.....
- l. Read the following statements about what happens in the school and answer appropriately. Kindly rate the following aspects in this school based on your observation. Each item can be answered SA (Strongly Agree) A (Agree) NS (Not Sure), D (Disagree) or SD (Strongly Disagree). **Kindly tick your answer.**
- i. In most cases, students in this school do whatever they want no matter what you say.  
 SA ( ), A ( ), NS ( ), D ( ), SD ( )
- ii. As for the teachers, they care less because there is little one can do to help students here.  
 SA ( ), A ( ), NS ( ), D ( ), SD ( )
- iii. I find students and teachers in this school working together with a sense of purpose  
 SA ( ), A ( ), NS ( ), D ( ), SD ( )
- m. We have our own way of doing things in this school. Do you agree?  
 If yes, kindly explain.....If no, kindly state what happens .....
- n. Describe aspects of school culture below, and briefly explain the extent to which each influence or does not influence, students' academic performance in this school. Include in your answer, the kind of influence, whether positive or negative.
- i. School ceremonies.....
- ii. School artefacts.....
- iii. Norms in school.....
- iv. Values in: a) students.....  
 b) In and among teachers.....  
 c) Values by the school management.....  
 d) Parents/guardians.....

- o. Kind of personal Beliefs held by both students and teachers.....
- p. Most predominant classroom verbal interaction pattern that you employ most, in your teaching.....
- q. Rank the most three predominant methods of teaching by most teachers in this school  
a)..... b)..... c).....
- r. In your view, what are the 3 most significant school culture aspects that impact most, student's academic achievements? Briefly describe the extent to which each affects (hinders or influences) students' academic achievements.....
- s. What others factors, besides school culture, do you say, have a significant impact on student's academic achievements in this school? .....
- t. From a scale of 1-10, rank 5 important factors that have a significant impact on students' academic achievements, alongside school culture  
1.....2.....3.....4.....5.....6  
.....7.....8.....9.....10.....
- u. Implications of non-instructional factors on student's academic achievements. They are divided into 2 major categories: school culture related factors and other factors (school environment, climate, learning and teaching facilities and resources). Rate and rank the factors on the extent to which each impacts student's academic achievements.

<b>Comparison of Non-instructional factors and their impact on students' academic performance</b>		
<b>SCHOOL CULTURE FACTORS</b>	Predominance rating of Practice/use (scale 1-10).NO.10 highest & 1 lowest practiced in school	Their positive and negative implications on students' academic performance in this school
Students' personal belief and philosophy		
Students' personal values		
Students' feelings and assumptions		
Students' expectations		
Students' and teacher motivations, appreciation and recognitions		
Students' and teachers' attitudes/inclination towards academic performance		
Helping culture, counselling, guiding and psychosocial support		
School customary interactions pattern and styles		
Students' and teachers' norms and communication channels		

School Traditions, rituals and symbols		
Students' and teachers' collaborations		
Shared planning		
Collegial support		
Unity of purpose among teachers and students		
Trust and confidence level in students		
Level of gossips, rumours, school propaganda and malice among: Students to students Students to teachers Students to subordinate staff Students to school management		
Level of conflicts between: Students and students Students and teachers Students and subordinate staff Students and management Teachers and fellow teachers/staff Teachers and school management Most 3 common indiscipline cases among students		
Teamwork spirit and support systems		
<b>OTHER FACTORS</b>		
School climate		
School leadership		
School environment		
School facilities		
School resources		
Teacher professional development opportunities		
Religious support		
Other general factors		

<p><b>Conclusion:</b></p> <p>1. What is your observed view of the extent to which school culture aspects influence students' academic performance, compared to other school factors?</p> <p>2. To what extent, does a school culture salient aspects impact on students' academic performance in your school?</p>	
---	--

### SECTION III

This section aims to measure **Contributions of School's Achievement Orientation Culture to Students' Academic Performance.**

Kindly rate the following aspects by answering: SA (Strongly Agree), A (Agree), NS (Not Sure), D (Disagree), or SD (Strongly Disagree). Put a tick on the appropriate response or write your response in the spaces provided.

- a. In your view, the Quality of interpersonal and professional relationships between teachers and students in this school is excellent: SA ( ), A ( ), NS ( ), D ( ), SD ( )
- b. The school management effectively communicates with different role groups: SA ( ), A ( ), NS ( ), D ( ), SD ( )
- c. The school management sets high expectations for performance for teachers and students in this school: SA ( ), A ( ), NS ( ), D ( ), SD ( )
- d. Teachers and students embrace the high expectations for performance set by the school management in their daily ways of doing things: SA ( ), A ( ), NS ( ), D ( ), SD ( )
- e. There is Efficiency of teacher classroom organization for majority of teachers in this school: SA ( ), A ( ), NS ( ), D ( ), SD ( )
- f. There is effectiveness in use of classroom time by teachers: SA ( ), A ( ), NS ( ), D ( ), SD ( )
- g. There is effective use of classroom time by most students in this school: SA ( ), A ( ), NS ( ), D ( ), SD ( )
- h. There is satisfactory monitoring and evaluation of instructional practice: SA ( ), A ( ), NS ( ), D ( ), SD ( )
- i. There is a strong emphasis on students' academic achievements in our school-by-school community members (students and staff): SA ( ), A ( ), NS ( ), D ( ), SD ( )
- j. In this school, Most Students attention to tasks is excellent: SA ( ), A ( ), NS ( ), D ( ), SD ( )
  - a. D ( ), SD ( )
- k. Most Students concern for academic achievement at school is excellent: SA ( ), A ( ), NS ( ), D ( ), SD ( )
- l. Students discipline and focus is excellent: SA ( ), A ( ), NS ( ), D ( ), SD ( )

- m. We provide common and acceptable attention and assistance to students academically: SA ( ), A ( ), NS ( ), D ( ), SD ( )

**Conclusion:** To what extent, does students and teachers achievement orientation culture, affect students' academic performance in your school?.....  
 .....

**SECTION IV**

**This section aims to establish the extent to which emphasis and practice of a schools shared ideology and collaboration, enables high academic performance.** Kindly rate the following aspects on a scale of 1-9, assigning number 9 to the most predominant aspect and number 1, to the least practiced aspect in your school.

- 1) Describe positive and negative contributions to students' academic achievement.....
- 2) Briefly describes the students' roles and type of tasks they do that demonstrates their embracement/lack of embracement of shared ideology on academic achievement....
- 3) Briefly describe examples of students' and teachers' behaviour that demonstrate lack of cooperation towards a school's shared ideologies. (vision, mission, objectives and motto). How does it affect students' academic performance?  
 .....  
 .....
- 4) To what extent has the school culture been affected by students' and teachers' socio-cultural backgrounds? How does it affect students learning outcomes in this school? Cite a few cases you can remember.....

**Teacher Collaboration:**

Rate teacher collaboration and collegial support on a scale of 1-9, assigning number 9 to the most predominant aspect and number 1, to the least practiced aspect in your school. Describe how they contribute or don't contribute to students' academic achievements in your school.

Teacher collaboration and collegial support towards students' academic achievement.	Predominance rating of Practice/use ( 1-9 scale).No. 9 highest & 1 lowest practiced in school	Examples of activities, or behaviours, attitudes	Positive and negative contributions to students' academic achievement /lack of achievements
Across grades and subjects, instructors provide opportunities for discussion and preparation.			

Teachers collaborate to create and review student activities and initiatives.			
Teachers in our school discuss teaching practices together and share experiences/ challenges			
Teachers embrace, talk and are guided by school vision in their practice			
Most teachers have passion and commitment towards students' academic outcomes			
Teachers work together effectively			
Teachers trust each other			
Teachers value each other's ideas			
Teachers are willing to help out whenever there is a problem			

**Conclusion:** Considering all the above aspects of shared ideologies and collaboration, to what extent, does students and teachers' achievement orientation culture, impact on students' academic performance in your school? .....

.....

**SECTION V**

**This section aims to examine the role of secondary school Principals in fostering a learning and teaching culture.** Kindly rate the following aspects by: Answering SA (Strongly Agree), A (Agree), NS (Not Sure), D (Disagree), or SD (Strongly Disagree). Put a tick on the appropriate response or write your response in the spaces provided

**Collaborative Leadership:**

- a. The school administration values teacher feedback, seeks input, involves staff in decision-making, and trusts the staff's' professional judgment.SA ( ), A ( ), NS ( ), D ( ), SD ( )

- b. Risk-taking and creative ideas aimed at improving education for students are encouraged and rewarded by school administration. SA ( ), A ( ), NS ( ), D ( ), SD ( )
- c. School management reinforces the sharing of ideas and effective practices among all staff. SA ( ), A ( ), NS ( ), D ( ), SD ( )
- d. School management in our school facilitate teachers working together SA ( ), A ( ), NS ( ), D ( ), SD ( )

**Professional Development:**

- a. Teachers utilize professional networks to obtain information and resources for classroom instruction. SA ( ), A ( ), NS ( ), D ( ), SD ( )
- b. Professional development is valued by the faculty. SA ( ), A ( ), NS ( ), D ( ), SD ( )
- c. Teachers possess current knowledge, particularly about instructional practices SA ( ), A ( ), NS ( ), D ( ), SD ( )

**Learning Partnership:**

- A. In this school, parents and teachers communicate frequently about students' performance. SA ( ), A ( ), NS ( ), D ( ), SD ( )
  - a. *Teachers and parents have common expectations for student performance* SA ( ), A ( ), NS ( ), D ( ), SD ( )
  - b. *Parents trust teachers' professional judgments.*
  - c. SA ( ), A ( ), NS ( ), D ( ), SD ( )
  - d. *Students generally accept responsibility for their schooling.* SA ( ), A ( ), NS ( ), D ( ), SD ( )
- B. Briefly summarize the roles played by the school Principal in fostering a learning and teaching culture in your school.....

**End of questions**  
**Thanks for your time**



3. Comment on decision making process in this school related to instructional management.....
4. Describe monitoring and evaluation systems on goals and objectives; standards and quality control systems in place and their contributions to students' academic performance.....
5. Briefly explain various customs held and practiced by the following members, that influence (positively or negatively) students' academic performance:
  - i) Students.....
  - ii) Teachers.....
  - iii) Subordinate staff.....
  - iv) School management.....
6. Describe the nature of classroom interaction patterns and predominant teaching methods employed by your teachers and how they affect students' learning outcomes.....
7. Comment on the general behaviour of students, teachers and how they relate during instructional process in this school.....
8. Describe aspects of school culture below, and briefly explain the extent to which each influence or does not influence, students' academic performance in this school. Include in your answer, the kind of influence, whether positive or negative.
  - a. School ceremonies.....
  - b. School artefacts.....
  - c. Norms in school.....
  - d. Values in:
    - i. students.....
    - ii. In and among teachers.....
    - iii. Values by the school management.....
    - iv. Values held by parents/guardians.....
9. Kind of personal Beliefs held by both students and teachers.....

**Comment on the:**

This school has a high standard of interpersonal and professional associations between tutors and learners. ....

1. Comment on the level of operational standards and expectations for performance for both teachers and students in this school as well as effectiveness in use of classroom time by teachers and students.....
2. Kindly comment on monitoring and evaluation of instructional practice in this school.....

3. Briefly describe various school cultural aspects (the way we do things here) that enhance students' academic achievements in this school?  
.....
4. Briefly describe various school cultural aspects, activities/things we do in school, consciously or unconsciously that affect or hinder students' academic achievements?.....
5. In your view, what are the 3 most significant school culture aspects that impact most, students' academic achievements? Briefly describe the extent to which each affects (hinders or influences) students' academic.....  
achievements.....
6. What other factors, besides school culture, do you say affect students' academic achievements in this school.....

From a scale of 1-10, rank 5 important factors that affect students' academic achievements, alongside school culture.....

## SECTION II

**This section aims to find out the extent to which emphasis and practice of a school's shared ideology and collaboration, enables high academic performance.**

- I. Comment on emphasis on students' academic achievements in your school by school community members (students and staff).....
  - a. Rate the following aspects on a scale of 1-9, assigning number 9 to the most predominant aspect and number 1, to the least practiced aspect in your school. Describe how they contribute to student's achievement inclinations and orientation:

School culture shared ideologies and aspects (common beliefs & practices)	Predominance rating of Practice/use (1-9 scale). N0 9 highest & 1 lowest practiced in school	Examples of activities, or behaviours, attitudes	Effects to students' achievement inclination & orientation ( +ve and -ve )
Shared philosophies			
Shared ideologies			
Shared beliefs			
Shared feelings			
Assumptions			
Shared expectations			
Shared/ common attitudes			
Shared norms			
Shared values			

- A. Briefly describe the: students’ roles and type of tasks they do that demonstrates their embracement/ lack of embracement of shared ideology on academic achievements.....
- B. Briefly describe examples of students’ and teachers’ behaviour that demonstrate lack of cooperation towards school’s shared ideologies. (vision, mission, objectives and motto). How does it affect students’ academic performance?  
.....
- C. Comment on students’ attention to tasks, concern for academic achievement as well as discipline.....
- D. To what extent, has the school culture been affected by students and teachers socio-cultural background? How does it affect students learning outcomes?  
 a. ....  
 b. ....  
 c. ....

**Teacher Collaboration:**

Rate teacher collaboration and collegial support on a scale of 1-9, assigning number 9 to the most predominant aspect and number 1, to the least practiced aspect in your school. Describe how they contribute or don’t contribute to students’ academic achievements in your school.

Teacher collaboration and collegial support towards students’ academic performance.	Predominance rating of Practice/use ( 1-9 scale).N0 9 highest & 1 lowest practiced in school	Examples of activities, or behaviours, attitudes	Kind of Relationship to students’ academic achievement ( +ve and –ve )
Across grades and subjects, teachers have the opportunity to collaborate and prepare.			
Students' activities and initiatives are developed and evaluated collaboratively by teachers.			
Teachers in our school discuss teaching practices together and share experiences/ challenges			
Teachers embrace, talk and are guided by school vision in their practice			

Most teachers have passion and commitment towards students' academic outcomes			
Successful collaboration between teachers			
Teachers trust each other			
Teachers respect each other's views.			
When a concern occurs, teachers are ready to assist.			

**SECTION IV**

**This segment focuses on the secondary school principal's role in promoting a learning and teaching community.**

**Collaborative Leadership:**

- a) Comment on your level in: valuing instructors' ideas, seeking guidance, involving staff in decision-making, and trusting the staff's professional judgment
- b) Comment on your role in the following:
  - a. Risk-taking and creative ideas aimed at enhancing student education should be promoted and rewarded. ....
    - i. All workers share thoughts and efficient methods.  
.....
- c) *Facilitation of tutors working together*.....
  - i. Professional Development of teachers.....

**End of questions.  
Thanks for your time.**

#### APPENDIX D: PSEUDO NAMES OF INFORMANTS

<b>s/no</b>	<b>Pseudo name</b>	<b>Gender</b>	<b>Designation</b>	<b>Venue</b>	<b>Date</b>
1.	Kamurembo	Female	Form 3 student	school A	2019
2.	Kasoka	Female	Form four female student	School B	2019
3.	Kanono	Female	Principal	School A	2019
4.	Kaseo	Female	Student	School A	2019
5.	Kamwana	Male	Form 2 student	School C	2019
6.	Kaninikaseo	Female	Form 2 student	School E	2019
7.	QASO	Male	Machakos County	Machakos	2019
8.	Mundumuthuku,	Male	Teacher	School B	2019
9.	Kadogo	Female	Teacher	School E	2019
10.	Kamueni	Female	Teacher	School C	2019
11.	Mutush	Male	Teacher	School A	2019
12.	Lady CQASO	Female	County Quality Assurance &Standards Officer	Machakos	2019
13.	Kababa	Male	Form 3 student	School C	2019
14.	Mutongoi	Male	Form 4 student	School E	2019
15.	Kelitu	Female	Form 2 student	School D	2019
16.	Mauti	Male	Form 1 student	School B	2019
17.	Maimu	Female	Form 3 student	School D	2019
18.	Kasupuu	Female	Form 2 student	School D	2019

## APPENDIX G: AUTHORIZATION LETTER – KU GRADUATE SCHOOL



### KENYATTA UNIVERSITY GRADUATE SCHOOL

E-mail: [dean-graduate@ku.ac.ke](mailto:dean-graduate@ku.ac.ke)

Website: [www.ku.ac.ke](http://www.ku.ac.ke)

P.O. Box 43844, 00100  
NAIROBI, KENYA  
Tel. 020-8704150

**Our Ref: E55/7160/2002**

**DATE: 29<sup>th</sup> April, 2019**

Director General,  
National Commission for Science, Technology  
and Innovation  
P.O. Box 30623-00100  
**NAIROBI**

Dear Sir/Madam,

**RE: RESEARCH AUTHORIZATION FOR MS. MAGDALENE MBULA  
NGUMUTA – REG. NO. E55/7160/02**

I write to introduce Ms. Magdalene Mbula Ngumuta who is a Postgraduate Student of this University. She is registered for M.Ed. degree programme in the Department of Educational Foundations.

Ms. Ngumuta intends to conduct research for a M.Ed. thesis Proposal entitled, "School Cultural Aspects and their Relationship to Student Academic Performance in Selected Secondary Schools in Machakos County, Kenya."

Any assistance given will be highly appreciated.

Yours faithfully,

  
**PROF. ELISHIBA KIMANI  
DEAN, GRADUATE SCHOOL**

JG/eww

## APPENDIX H: RESEARCH AUTHORIZATION LETTER - NACOSTI



### NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,  
2241349, 3310571, 2219420  
Fax: +254-20-318245, 318249  
Email: dg@nacosti.go.ke  
Website: www.nacosti.go.ke  
When replying please quote

NACOSTI, Upper Kabete  
Off Waiyaki Way  
P.O. Box 30623-00100  
NAIROBI-KENYA

Ref. No. **NACOSTI/P/19/56192/30298**

Date: **24<sup>th</sup> June, 2019.**

Magdalene Mbula Ngumuta  
Kenyatta University  
P.O. Box 43844-00100  
**NAIROBI.**

#### **RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on *“School cultural aspects and their relationship to student academic performance in selected secondary schools in Machakos County, Kenya.”* I am pleased to inform you that you have been authorized to undertake research in **Machakos County** for the period ending **24<sup>th</sup> June, 2020.**

You are advised to report to **the County Commissioner, and the County Director of Education, Machakos County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

  
**BONIFACE WANYAMA**  
**FOR: DIRECTOR-GENERAL/CEO**

Copy to:


The County Commissioner  
Machakos County.

The County Director of Education  
Machakos County.


*National Commission for Science, Technology and Innovation is ISO9001:2008 Certified*

**APPENDIX I: AUTHORIZATION LETTER – NACOSTI CERTIFICATE**

THIS IS TO CERTIFY THAT: **Permit No. : NACOSTI/P/19/56192/30298**  
**MISS. MAGDALENE MBULA NGUMUTA** **Date Of Issue : 24th June,2019**  
**of KENYATTA UNIVERSITY, 83-70101** **Fee Recieved :Ksh 1000**  
**HOLA,has been permitted to conduct**  
**research in Machakos County**  
**on the topic: "SCHOOL CULTURAL**  
**ASPECTS AND THEIR RELATIONSHIP TO**  
**STUDENT ACADEMIC PERFORMANCE IN**  
**SELECTED SECONDARY SCHOOLS IN**  
**MACHAKOS COUNTY, KENYA"**  
**for the period ending:**  
**24th June,2020**



.....  
**Applicant's**  
**Signature**



**Director General**  
**National Commission for Science,**  
**Technology & Innovation**

## APPENDIX J: AUTHORIZATION LETTER – NACOSTI GUIDELINES

### **THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013**

The Grant of Research Licenses is guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014.

### **CONDITIONS**

1. The License is valid for the proposed research, location and specified period.
2. The License and any rights thereunder are non-transferable.
3. The Licensee shall inform the County Governor before commencement of the research.
4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
5. The License does not give authority to transfer research materials.
6. NACOSTI may monitor and evaluate the licensed research project.
7. The Licensee shall submit one hard copy and upload a soft copy of their final report within one year of completion of the research.
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice.

National Commission for Science, Technology and innovation  
P.O. Box 30623 - 00100, Nairobi, Kenya

TEL: 020 400 7000, 0713 788787, 0735 404245

Email: [dg@nacosti.go.ke](mailto:dg@nacosti.go.ke), [registry@nacosti.go.ke](mailto:registry@nacosti.go.ke)

Website: [www.nacosti.go.ke](http://www.nacosti.go.ke)



**REPUBLIC OF KENYA**



**National Commission for Science,  
Technology and Innovation**

**RESEARCH LICENSE**

**Serial No.A 25404**

**CONDITIONS: see back page**

**APPENDIX K: AUTHORIZATION LETTER - MACHAKOS COUNTY**

**MINISTRY OF EDUCATION  
STATE DEPARTMENT OF EARLY LEARNING  
AND BASIC EDUCATION**

Telegrams: **"SCHOOLING"** Machakos  
Telephone: Machakos (  
Fax: Machakos  
Email -[cdemachakos@yahoo.com](mailto:cdemachakos@yahoo.com)  
**When replying please quote**



OFFICE OF THE  
COUNTY DIRECTOR OF  
EDUCATION  
P.O. BOX 2666-90100,  
**MACHAKOS**

**MKS/ED/CDE/R/4/VOL.3/109**

**Date:** 27<sup>th</sup> August, 2019

Magdalene Mbula Ngumuta  
Kenyatta University  
P.O. Box 43844-00100  
**NAIROBI**

**RE: RESEARCH AUTHORIZATION**

Reference is made to the letter from National Commission for Science, Technology and Innovation Ref: NACOSTI/P/19/5619298 dated 24<sup>th</sup> June, 2019.

You are hereby authorized to carry out your research on, "School cultural aspects and their relationship to student academic performance in selected Secondary Schools in Machakos County, Kenya." for a period ending 24<sup>th</sup> June, 2020.



**NANCY AFANDI  
FOR: COUNTY DIRECTOR OF EDUCATION  
MACHAKOS**