

**IMPACT OF TEACHER TRAINING AND STUDENT'S
PERFORMANCE AMONG THE KENYAN SECONDARY SCHOOLS
A CASE STUDY OF NAROK COUNTY.**

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and Distance Learning, University Of Nairobi.**

OCTOBER, 2018

DECLARATION

This is to declare that this is my original work and has never been submitted to any institution for the award of degree in any university

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Approval

This is to approve that the above work has been submitted with my approval as the university supervisor.

Signed Date

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DEDICATION

I dedicate this work to my beloved parents my father Paul Kulo and my mother Mirriam Kirramatisho for their financial and moral support throughout my studies and my fiancée Mary.

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Thanks be to God the giver of life, knowledge and wisdom. His care, Love and grace has been sufficient throughout my academic journey.

I am in debt with the people who contributed to the success of my work. I would like to thank my parents for the financial, spiritual and moral support.

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Special regards to all of my respondents Narok County Secondary schools.

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ABBREVIATIONS AND ACRONYMS

K.C.S.E	-Kenya Certificate of Secondary Education
MoE	- Ministry of Education
UNESCO	-United Nations Educational, Educational, Scientific and Cultural Organization
UNICEF	- United Nations' Children's Education Fund

ABSTRACT

The current educational system is mainly theoretical and examinations oriented. The teaching and learning activities are geared towards making the learner able to respond to examinations and not necessarily creating solutions to problems that hail the nation. Teachers, on the other hand, are trained to deliver content on the basis of fixed syllabi and cannot deviate from the same. The syllabus is sometimes outdated and has things which are not important to the current generation of technology and innovation. Due to lack of in-service training, the teachers continue to deliver content in a disorganized manner, teacher-centered teaching and not able to link class teaching to the immediate environment so as the students can relate well. The effectiveness of teaching, availability of teaching resources, human resource availability, class size and the distance to nearby schools are also some of the factors that affect students' academic performance according to past studies.

Due to these disparities in teaching and learning, the students' academic performance in national examinations has been dwindling and always recording a negative deviation in many places all over the country. In this relation therefore, the study sought to establish the relationship between teacher training and academic performance among students in Kenyan secondary schools case study of Narok County. Many past researches have studied the relationship between attitude and performance, cultural practices and their effects in education, effects of technology and availability of basic school facilities. None of the studies was able to relate teacher training to students' performance in secondary schools in Kenya.

This study will be very important to educational institutions all over the country, county governments, Ministry of Education (MoE), educational policy makers, school boards of management, school heads, and teachers and also form a baseline for further research on the subject matter.

CHAPTER ONE: INTRODUCTION

1 Background to the study

There is emergence of the global need to change the educational curriculum to meet the demands and needs of attainment of vision 2030 and a sustainable education system. (Kavati, 2017). According to Kavali (2017) This pressure originates from the dynamics of technology, emergence of multiple trades and industries and a revolution in politics around the world. The Kenyan system of education, for instance, has mainly been examination oriented rather than skill based. This is partly resulted from the cumulative benefits the graduates get after education (UNESCO, 2005).

The government of Kenya has realized the importance of teachers' training not only as an employment prerequisite but also as an important aspect in the changing demand for education (GOK, 2011). In the backdrop of this, not only teachers require training but also the non-teaching staff. According to the report released by Government of Kenya (2009), school staff like the school bursar, watchmen, the cooks, school secretaries and drivers have not undergone any training whether in-service or pre-service since there exists no such training for them As a result, some are forced to cater for their own training in universities and colleges.

The essence of carrying out the study is to be able to ascertain the impact training has on general employee performance and how best such can be handled. It is not possible to separate training from performance since they go hand in hand and training improves service delivery and policy implementation. (Tim, 2012).

Douglas et al (2012) notes that this issue is exuberated in a way that selection of students to their various classes in not done randomly or formulated but rather using students' attributes which are sometimes not related to performance or the general students' characteristics.

According to Cole (2002) employee training is vital since it unsure supply of staff that are competent, professional, and technically able to handle students' issues in relation to

their studies and help them achieve their goals. Training enables teachers to realize their full abilities and skills in order to reduce liabilities in the institution and operations cost. (Paullay, 1994).

Joshua Makundu Et Al (2017) the objective of employee training and teacher development is to improve knowledge of teachers, professional skills acquisition, teacher commitment to their work and ability to deliver content affectively and effectively to the learners so as to amuse them and incorporate the day-to-day environment in teaching. In-service Teacher Training promotes professionalism in teachers and classroom control abilities (Muzaffar, 2011). This study therefore aims at establishing the relationship between employee training and student performance in secondary schools in Kenya.

1.1 Statement of the problem

Teachers are important people at a school and effective teaching is an important aspect of schools and propellant to good results in the aftermath (Bakkum, 2013).

Sammons Et Al (2013) contents that the effectiveness of a teacher is vital to character formation of the students and classroom processes that promote better student outcomes. Bright (2008) asserts that teachers require training so as to be able to care about knowledge and skills, understand the curriculum, be able to cope with technological changes in space, understand developmental stages of the child and use learner motivation as a means of improving performance. According to a report presented by the ministry of education, science and technology (MOEST, 2005) the government of Kenya is committed and recognizes the importance of teacher education as one of the important scores of achieving attainment of education for all (EFA). It asserts that an effective teacher training program leads to an improved performance of students and subsequently, the level of skill acquisition. Organizational performance is also affected by attitude of the employee and his/her subjects, an employee with the right attitude will most likely give better results as compared to the later (Sharifirad, 2012)

However, despite the fact that teachers receive training in universities and also in-service training, student's performance has not improved amongst students in Narok County

Secondary Schools. It is against this realization that the study was carried out to establish the impact of teacher training and student's performance and identify the knowledge gap.

1.2 Purpose of the Study

The purpose of this study was to study the impacts of teachers' training and students' performance in secondary schools in Narok County. The outcome of the study will be significant in planning, control and enrollment of better teacher training that will lead to improved performance amongst secondary schools in Narok County.

1.3 Objectives of the Study

- (i) To establish the relationship between teacher training and student performance in secondary schools
- (ii) To determine the mediating effect of student attitude on the relationship between employee training and student performance in secondary schools
- (iii) To establish the joint effect of student attitude and teacher training on the performance of students in secondary schools.

1.4 Research questions

- (i) What is the relationship between teacher training and student performance in secondary schools?
- (ii) What is the mediating effect of student attitude on the relationship between employee training and student performance in secondary schools?
- (iii) What is the joint effect of student attitude and teacher training on the performance of students in secondary schools?

1.5 Hypothesis

- H1:** There is a significant relationship between employee training and students' academic performance in secondary schools
- H2:** There is a significant mediating effect of student attitude on the relationship between employee training and student performance in secondary schools

H3: There is a significant joint effect of student attitude and teacher training on the performance of students in secondary schools

1.6 Significance of the study

This study would contribute significantly to the existing knowledge as well as creating new knowledge that would bridge the knowledge gap in the world of academics and other researchers concerning the importance of employee training or in-service teacher training. It would help the Ministry of Education formulate policies that would ensure all employees in schools have professional training before they could be allowed to handle students in order to raise school performance and efficiency of systems.

The study would also be significant to educational policy makers and human resource managers to come with enhanced policies and strategies geared towards improving employee teachers and more specifically in-depth in-service teacher training. Would-be teachers would also find this information useful in effective content delivery to targeted learners and acknowledge a buildup of skills that would necessitate them to cope with the dynamics of education. Universities and colleges will also get significant information on the right teacher training, according to Meyer and Smith (2000) universities, colleges and vocational colleges need to develop the desired knowledge, skills and abilities to would-be employees and provide good environments for their students and ensure that they do the best of their abilities.

1.7 Delimitation of the study

The study targeted teachers and non-teaching staff who are employees in secondary schools in Narok County. The study was geographically delimited to schools that pose poor performance in the area and have untrained employees working as teachers, bursar, cooks, watchmen and secretaries.

1.8 Limitations of the study

The study was majorly focused on marginalized Kenya secondary schools in Narok County. A problem the study tried to overcome was the lack of willingness and availability of the respondents given the busy schedules in secondary schools in the area.

The researcher involved research assistants from respective secondary schools to enable adequate collection of data and good coverage of the area.

The consent of the respondents was sought after and respondent confidentiality guaranteed as they did not have to write their names on the questionnaires. This factor increased the willingness of the respondents to participate in the study.

1.9 Assumptions of the study

The study assumed that the respondents would be available to fill the questionnaires accurately and on time and that the data collected was a true representation of the whole population of secondary schools in Narok County.

1.10 Definition of significant terms

Teacher Training – refers to the process by which teachers are equipped with desirable knowledge, skills and content to enable them carry out their teaching roles professionally and effectively. (Wikipedia).

Academic Performance – is the level by which a student has been able to meet their goals and objectives in schools as a result of learning. (Wikipedia).

Learning – maybe defined as a change in behaviors, attitudes, or capabilities (Sean M., 2002)

Attitude – is behavior emanating from how a person feels towards another person or something else (Cambridge Oxford Dictionary)

Motivation- are factors that stimulate human desire to accomplish certain roles and responsibilities assigned to them. (Business Dictionary)

1.11 Summary

Training is a key role at induction of employees to organizations and lead to cost effective material utilization and contributes to changing staff attitudes and students behavior towards the schools and organizations. Employee performance in directly influenced by the training he received before joining the organization and empowers them to be

successful in their professionals, develop professionalism and improve their competencies.

Studies carried out reveal a powerful relationship between employee training and performance of students in secondary schools or organizations. Most studies reviewed have addressed employee training and organizational performance in foreign countries. None of the studies have focused on the secondary schools in Kenya and specifically the influence of teachers' training on student's performance. The current study focused on the impact of employee training on performance in Kenya secondary schools located in Narok County. This study focuses on independent variables such as employee training, students' attitude, and teachers' motivation on student's performance.

CHAPTER 2: LITERATURE REVIEW

2 INTRODUCTION

This chapter presents the literature on the impact of employee training, attitude of students and performance of students in secondary schools. It seeks to establish the relationship between the key study variables and relate them to learning theories, attitudes and the kind of trainings employees in secondary schools undergo.

2.1. Teacher Training

According to a research commissioned by UNESCO on the impact of teacher knowledge on teaching and learning process in 14 Sub-Saharan African Countries, Nardir, A. (2007) Assesses that the primary aim of training a teacher is to nurture his/her skills in education and prowess which have compatibility with education policies thus making teachers effective in delivery of content. He poses that teacher training and professional development is an important aspect that would significantly result to better academic performance of students. Teacher training is currently limited to its scope of professional development. Knoblauch, D and Chase, M. (2015) conducted studies on the impact of school setting, efficacy and benefits attributed to teacher training in Rural, Sub-Urban and Urban schools and found out that while some students have shown teacher training have no effect to general academic performance, others have shown it can improve grades when it is content focused and intensive. Teacher training is aimed at providing teachers with the knowledge needed teacher engagement to students and enable them perform better in terminal examinations(Wesh, 2006) and in this case (KCSE and KCPE)

2.1.1 Impact of Teacher Training on students' performance

Major studies carried out have compared teacher training concepts and students' academic performance in schools. According to a research conducted in Nigeria by the department of curriculum studies in the University of Port Harcourt about teachers' competence and students' academic performance, teacher competence both professional and personal should be very high to accompany the learner efforts in order to realize academic performance (Barikena, 2012). According to Barikena(2012), teacher

professionalism is both professional and pedagogical in the sense that a teacher should be able to handle their professional work well and fulfil the legal requirements for personal traits. Onyeachu (1996) in a research conducted in Nigeria on the relationship between teacher working conditions and the effectiveness of the teacher asserts that a teachers' success in the classroom depends very much on their preparedness for the instruction process which requires training. Studies done in Kenya, Rift Valley province on Teacher Training and development by Ngala F. and Orisky N. (2010) Reveals that teacher training increases knowledge on selection and application of the most improved teaching methods and thus leading to high performance by students.

In his studies on Mastery of English language, Atsenga (2002) asserts that effective teaching methods have a significantly high influence on learning. He further reveals that teachers training should be made mandatory throughout the country so that untrained individuals should not be allowed to teach in secondary schools. On elementary studies and classroom autonomy studies conducted in Pakistan, Sarwart, S and Muhammad, S. (2014) Agrees that training of teachers had an influence in the academic achievement of the student in connection to their learning environment. A highly trained teacher can guide the learning process of children and makes the learning relevant to the learners by stimulation and positivity (Keefer, 2011). Keefer (2011) further asserted that a teacher can impact knowledge and skills that would assist a student secure his/her educational rights, improve their understanding and their self-esteem for fair opportunities. In line with this assertions, effects of teacher training on academic performance become more visible when the focus gets into knowledge on the subject matter as opposed to mere certification.

2.1.2 The impact of Teacher Training on delivery of Content to enhance students' performance

Studies have also shown training teachers affects their content delivery capabilities and makes them able to control the classroom environment. Ruth Zuzovosky (2003), a study on Teachers Qualification done in Tel Aviv concludes that support policies and interventions aimed at creating more opportunities, trainings and incentives for participation in Content based training for professional development should be initiated

for teachers. This studies are supported by the findings made by Bizimana, B. and John, A. (2014) In a study that involved 619 respondents, 81 school administrators, 160 teachers and 378 students. The study was to determine the correlation between teacher training, resource availability and content delivery in Huye District Secondary schools. The research notes that teachers with very little or no training had too little knowledge of the subject matter and the subject they teach and therefore denying their students the most basic skills and attitudes required. Bizimana, B and John also concluded that teachers who used resources during content delivery were seen vividly presenting the subject matter with was understood well.

In relation to this studies, Lydia Et Al (2014) establishes that the overall effectiveness of an educational system in a country is squarely determined by the motivation and determination of its teachers, the extent of teacher education and the teacher training. This was in respect to a descriptive research on effectiveness of education system carried out in Thogoto Teachers college where 342 respondents gave their feedback. Teacher training affects content delivery of the teacher and statistically and quantitatively affect student achievement (Johannes, 2010). This researches are generally consistent in the indication that training of employee impacts significantly with the students' academic success.

2.2 Relationship between Students' attitude and Academic performance

Attitude is an organization of beliefs, objects, feelings and how people respond to this perceptions negatively of positively or favorably or unfavorably according to situations (Langat, 2015). A descriptive research done by U. Narmadha and Dr. Chamundeswari (2013) to ascertain the impact of students' attitude towards school and learning of science and mathematics among secondary school students revealed that attitude towards school and learning significantly predicts academic achievement. The study involve 422 students interviewed to assess the impacts of attitude, the study further implies that people get the right attitude by observing character, imitating peoples' views and modeling their behaviors.

Research done by Mwangi (2009) revealed that attitude affects learners socially, behaviorally, vicariously, and cognitively where positive attitude enhances learning while negative attitude inhibits learning. Muriithi, G., Karimi, V., and Barchok, H. (2015) That sought to establish the effects of attitude on academic performance among Meru County Students. The study enumerated possible factors that may affect learning through formation of attitude, some of this included the physical environment that enlists school infrastructure, dormitories, classrooms designs, furniture among others, the study also listed other factors that encompassed teaching and learning materials, teacher characteristics i.e. teacher being friendly, warm, welcoming and charming and children's physical traits i.e. children with special needs. This studies therefore portray that there is a significant correlation between the attitude of students towards their teachers, learning and the school environment to their academic performance in their terminal examinations. (KCSE and KCPE).

2.3 Theoretical framework

The current study is based on the foundations of learning theories which include Behaviorism Theory of Learning, Cognitive theory of Learning, Constructivism Theory of Learning and Multiple intelligence Theory of Learning. Learning is a relatively permanent change of behavior potentially, which occurs because of reinforced practice (Mc Goech, 1952). According to Maria, H. and Jose, V. (2012) Learning theories are a set of organized principles in a manner in which people are able to recall certain concepts. They are Conceptual elaborations explaining how information and knowledge gets into the brain or absorbed in the process of learning (Hull, 1946). Chris, J. and Luk, W. (1993) Rolled out a study that involved three experiments to investigate the use of conditioning procedures to a conditioned stimulus in a study to establish the influence of classical conditioning. The study established that cognitive, environmental and emotional influence also acts in a critical role in skills applied.

Behaviorism Theory of Learning

Behaviorism originates from the findings of B. F Skinner and operant conditioning concepts. According to Skinner, knowledge exists independently outside people. They view the learner as a blank slate who must be provided the experience. In an attempt to answer critics of behaviorism techniques, Dave, P. (2005) Contents that learning occurs when new behaviors or change in behaviors are acquired through associations between stimuli and responses which is in line with Skinners theory of Learning. From this studies, association leads to change of behavior and are proponents to the two types of conditioning namely Classical Conditioning and Operant Conditioning.

2.3.1.1 Classical Conditioning

Classical conditioning was discovered by Ivan Pavlov. He observed that if dogs comes to associate the delivery of food with ringing of bell, they will produce saliva even when there is no sight of food or smell of food (Barikena, 2012). He regarded this type of learning to be the same whether in dogs or humans. According to a study conducted by Katana, G. (1940) On behavior change in animals, he regarded behavior change as an association between an involuntary response and a stimulus. He linked classical conditioning to learner characteristics like the ability of the learner to reflect past experiences, ability to participate in group discussions, practice skills and participation in written discussions. Classical conditioning involves no incentives or rewards and is passive on the part of the learner since it involves lesser learner contributions (Fraudsen, 1961).

2.3.1.2 Operant Conditioning

Operant conditioning reinforces behavior with a reward or punishment. A reward increases the likelihood of the behavior recurring while a punishment decreases the likelihood (Cronbach, 1960). Operant conditioning works under various principles; shaping behavior, reinforcement, extinction, spontaneous recovery, number of trials among others. Victor G. Laties (1978) in his studies on how animals can be trained and make possible the learning of sophisticated assessment of sensory functioning asserts that reinforcement should be made on more closely approximate the behavior we wish to eventually produce on the animals. He used substances that produced effects only after

prolonged exposure. O. Austine and T.A Omomia carried out a series of descriptive researches in Yaba College of Technology, Nigeria on behavior management systems and how they have been incorporated in academic or schools systems to tame bad behavior. O. Austine and T. A Omomia had interviewed 243 schools staff from different schools in Lagos in bid to make assertions about the relevance of Skinner's Theory of reinforcement. The study revealed that the use of selective reinforcement can shape behavior of an organism or human.

2.3.1.3 Cognitivism Theory of Learning

Cognitivism learning theories are credited to Jean Piaget and grew out of the Gestalt psychology (Hull C.L, 2003). According to Hull, Cognitive learning theorists believe that learning occurs through internal processing information. Suzanne M. Wilson and Penepole L. Peterson (L., 2006) in their findings on contemporary ideas towards learning identifies that learning is a process of active constructivism involves reorganization of experiences, either by attaining new insights or changing old ones. Thus, in support of Cognitivism, learning is a change in knowledge which is stored memory, and not just a change in behavior. Studies focus on the mental processes connecting symbols in a meaningful and memorable way. Cognitive theory of learning attempts to classify and chunk information, linking concepts, provide structure, analogies and mnemonics that lead to processing of information. In relation to this studies, Dr. Bada and Steve Olesgun studied how teachers teach and how teachers learn to teach. In their findings, teachers cannot transmit knowledge to students but information. Students learn by fitting new ideas with the knowledge they already have. Further, constructivism carries with it many academic and fundamental implications, it insists on the need for active involvement of learners in constructing knowledge for themselves rather than teachers imposing ideas on them and therefore the students cannot apply them in real life situations (Olosegun., 2011) as opposed to Cognitivism where knowledge is single sourced and the student is supposed to learn, recall and reproduce the knowledge religiously , they do not know the background and need of the information (Martin, 2009).

2.3.1.4 Multiple Intelligences Theory of Learning

It was proposed by Howard Gardner, a psychologist who posed that different kinds of intelligence exist in humans. His theory, however, lacks empirical evidence and this cited as an example of pseudoscience (Aloo, 2003). The theory grew out of constructivism and is poised to enable students develop their strengths and purposefully target their weak areas and develop them. It has been criticized for lack of substantial evidence, and that it uses a curricular and methodological approach may not have a discerning impact on learning.

2.4 Conceptual Framework

The study sought to find out the impact of Teacher Training on Performance of Students in Secondary school in Kenya case study of Narok County.

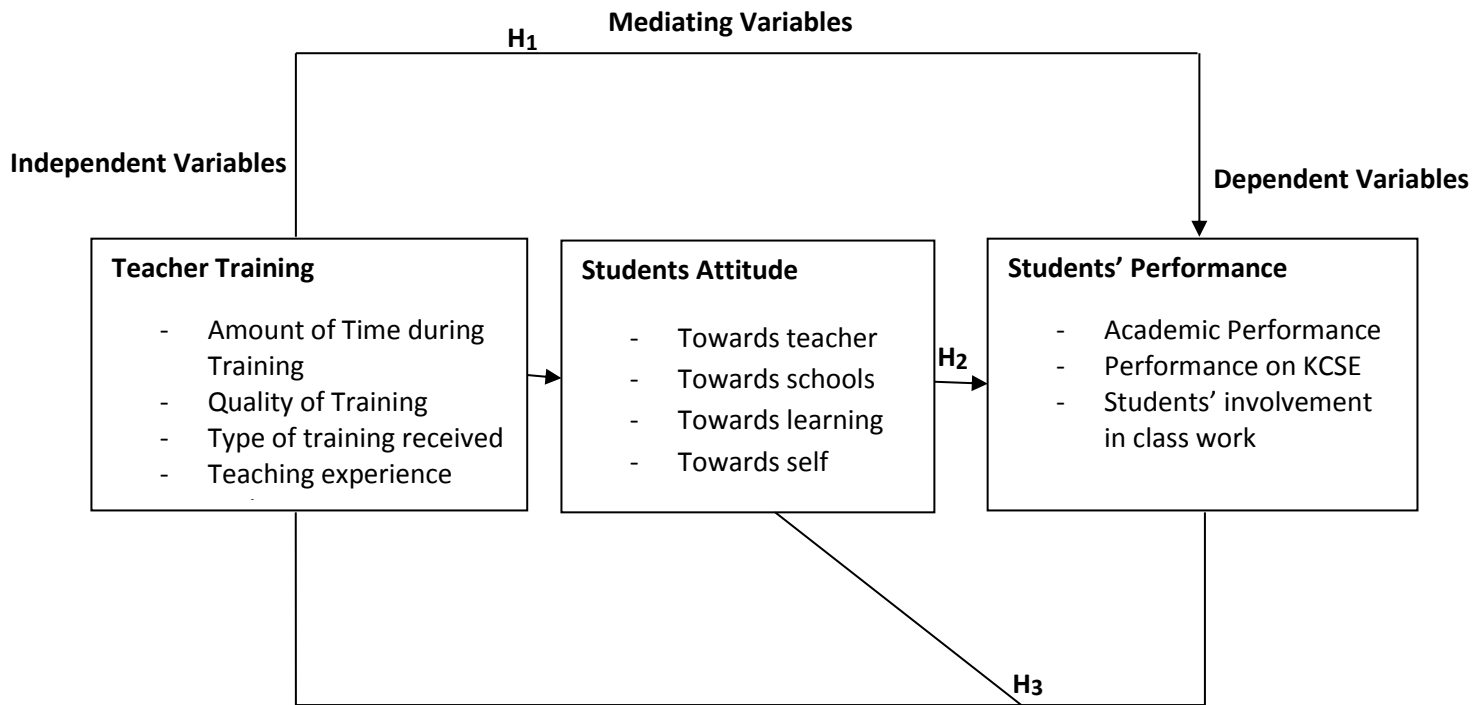


Figure 1: self-generated model

CHAPTER THREE: RESEARCH METHODOLOGY

3 Introduction

This chapter highlights how research would be carried out to obtain information necessary for the objectives and is organized as establishing the research design, identifying the location of the study, illustrating the sampling design, listing down the sampling procedures, validation of research instruments and finding out other factors which also include ethical issues.

3.1 Research Design

A descriptive research design will be used in the study due to its suitability in bringing out the aims of the research and help provide a general understanding of the research purpose as opposed to other methods since the current issues have several studies associated with it. According to Samar Rahi (R., 2017) in an International Journal of Economics and management Sciences, a descriptive design is used to find answers to the questions generated from the statement of the problem. The study which was conducted in Eastern Malaysia further states that a descriptive survey can be used for preliminary and expository studies that pave way to the researcher to collect information, summarize it, present and interpret the data. A descriptive design seeks to find out answers to questions by analyzing variables of the study (Myers M.D, 2002). This study, therefore, seeks to analyze variables that relate to teacher training factors, students attitude and their effect to general academic performance of the students. The study will embrace qualitative studies of study variables and also quantitative analysis of the variables in relation to the target population. According to a study done by Krishnawami (2011) on the impact of descriptive variables of social sciences in a school setup, a descriptive design is a fact finding study and involves collection of data directly from the population and therefore the study is done in a setting that would require direct responses from the respondents in the study while investigating variables without manipulating them

3.2 Target Population

Johns H. and Freya S. (S., 2012) In their studies of material efficacy and accuracy in the Bloomberg School of Public health defined a population as a group of elements, objects, individuals or items which have some common characteristics and from which samples

can be taken for measurement of variable. The target population is the larger group to which the study seeks to generate findings from (Kombo, 2006). The current study targets 10 secondary schools in Narok County, the principals in the aforementioned schools, 50 trained and untrained teachers and 384 students. The principals and teachers are chosen because they have school experiences in terms of the teaching and learning process and administrative work. The students are also involved since they are the receivers of service and are targeted for performance. The target population sample will therefore provide a general representation of the total number of schools in Narok County, teachers and learners in the area.

3.3 Sampling Procedure

Stratified random sampling will be employed to stratify the 47 counties and simple random sampling applied to select one county of study as a representative of the whole population (Counties in Kenya), in this case, Narok County. All secondary schools in Narok County will be identified and a common formulae used to establish the number of students to be used in the study. Since the number of students in Narok County secondary schools is above 10, 000 the following procedure will be used to estimate the sample size: (Sighh, 2014)

$$n = \frac{p(1-p)Z^2}{d^2}$$

n= describes the desirable sample size to be included in the study

Z= this is the standard normal variable set for the study and normally at 1.96 which corresponds to a 95% confidence level required in this survey study

q = (1-p) this is the target population or a proportion that do not have certain particular characteristics. There is a reasonable estimate use of 50% (0.5) for this study

d = this is degree of accuracy/freedom required, in this case is set at 0.05 level

Thus, the sample size of this study will be 384.

All the schools in Narok were grouped into three (3) strata: mixed secondary schools, Girls secondary schools and Boys secondary schools. The schools in each strata were organized in ascending order according to the population of student in the schools. Systematic random sampling was used to select three schools from each stratum. The number of students from each strata was later established by picking the 15th count of students from each form as the Kth value. The names of schools selected and population of students per school is shown in APPENDIX IV.

3.4 Methods of Data Collection

The study will rely on primary data collected from 50 trained and untrained teachers, 10 principals and 384 students in secondary schools in Narok County and nonteaching staff. The primary data will be collected by the questionnaires attached. The permission to seek response from the employees will be sought for and confidentiality of the respondents guaranteed and counter signed in the appendices of this study. The respondents will be given both open ended and closed questions in questionnaires and given three (3) days at most to fill in the questionnaires and submit to the researcher. Raw data will be collected through the questionnaires issued to respondents and analyzed both qualitatively and quantitatively. The analysis will first be done by grouping the main factors of the respondents theme and using descriptive techniques. The targeted teachers are both trained and untrained in order to ascertain the impacts of training teachers in secondary schools situated in Narok Secondary schools, Narok County. Secondary data from performance data banks in the schools' examination departments, QSASO offices on the KCSE performance over the past years and general performance of students in other activities will be captured in data formats.

Performance of the target teachers would be measured by the mean grades of students' performance in their respective subjects in the respective schools in Narok County. The questionnaires would have spaces that would indicate the kind of training undergone by the teachers, the number of years in the service and the amount of time(in years) spent by the teachers in training if trained. Observations will also be employed in the study since they can produce qualitative and quantitative information (George, 2011) and therefore act as a good source of providing additional information about particular special groups

of teachers and students in the selected secondary schools in Narok. Observation also allow for the study of dynamics of the population.

3.5 Validity and Reliability

Validity is the accuracy and meaningfulness of inferences drawn from the findings of the researcher (Chenbacher, 2011). Haradhan, M (2017) carried out a study meant to identify the most important and fundamental features of research and evaluation in measurement instruments and tools for good study. Through the study, Haradhan, M. concluded that Validity and Reliability measures the transparency of research and decreases the chances of biasness in quality research. The assessment of reliability and validity of research involve an appraisal of methods used to collect data to ascertain the accuracy of study. According to Kentucky Institute of Education Research (1997), validity is the degree of to which results obtained from data analysis is a true representation of the phenomena under study. In this study, validity was taken to mean the extent to which data collection instruments cover the specific objectives. Reliability of the study it taken to mean the ability of an instrument to give consistent results after a number of repeated trials. The reliability of this study will be guaranteed by carrying out a pilot study to ascertain the reliability of the questionnaires presented to respondents.

3.6 Operational Definitions of Variables.

The study considers mainly three variables, employee training as the independent variables and in this case teacher training, student's performance in secondary schools as the dependent variables and student attitude as the intervening variables. The independent variables will compare academic performance of students taught by trained teachers against students' performance of students taught by trained teachers in Narok County Secondary Schools. The names of trained teachers and their consecutive three year performance would be obtained in the schools' academic offices and also the KCSE performances will be obtained in the Sub County Educational Offices (SCDEs).

3.7 Methods of Data Analysis

Data analysis procedures that will be employed using both qualitative means and also quantitative. In this case qualitative data is analyzed by use of content analysis and also

grouping the main areas pointed out by respondents. Quantitative data on the other hand will be analyzed by use of frequency distribution tables, percentage tables and later on presented using pie charts and bar charts for easy interpretation. According to a study conducted by the United Nations Children's Fund (UNICEF) in an overview in Florence, Italy on the impacts of data evaluation (UNICEF, 2014), the responses got can then be analyzed by quantitative methods that involve assigning numerals to Likert type scales. The numerical values collected through observations, interviews and other data collection avenues can therefore be analyzed as quantitatively by bar charts, pie charts, percentages and frequency distribution tables.

3.8 Summary

The research methodology was intended to investigate the methods and extend to which the impact of employee training which is the independent variable, student attitude and students' performance which are mediating variables and the dependent variables respectively would be analyzed. The reviewed methodologies indicate the target population, sampling procedures, methods of data collection, validity and reliability of the research instruments, operational definition of variables and methods of data analysis.

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4 Introduction

This study investigated the impact of teacher training on students' academic performance in secondary schools a case study Narok County. The study specifically investigated the influence of teacher training, students' attitude to their subjects, teacher professional qualifications and students' performance in KCSE examinations and other internal examinations in school. This chapter therefore presents the questionnaire return rate, demographic data and the analysis made according to the research objectives.

4.1 Questionnaire Return Rate

This is the proportion of questionnaires which are returned after they have been submitted to the respondents for purposes of data collection.

4.1.1 Demographic information for teachers

The following demographic information of teachers was collected based on gender, age and the educational level of the respective teachers who filled the questionnaires.

4.1.2 Distribution of Teachers according to Gender

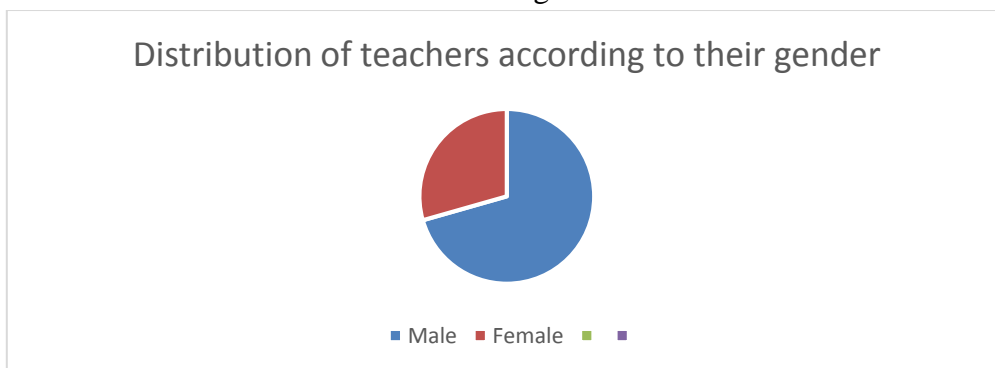


Figure 2: Distribution of teachers according to gender

The majority of teachers who participated in the research were male 36 (71.59%) and 15 (29.41) were females.

4.1.3 Distribution of teachers according to their level of education

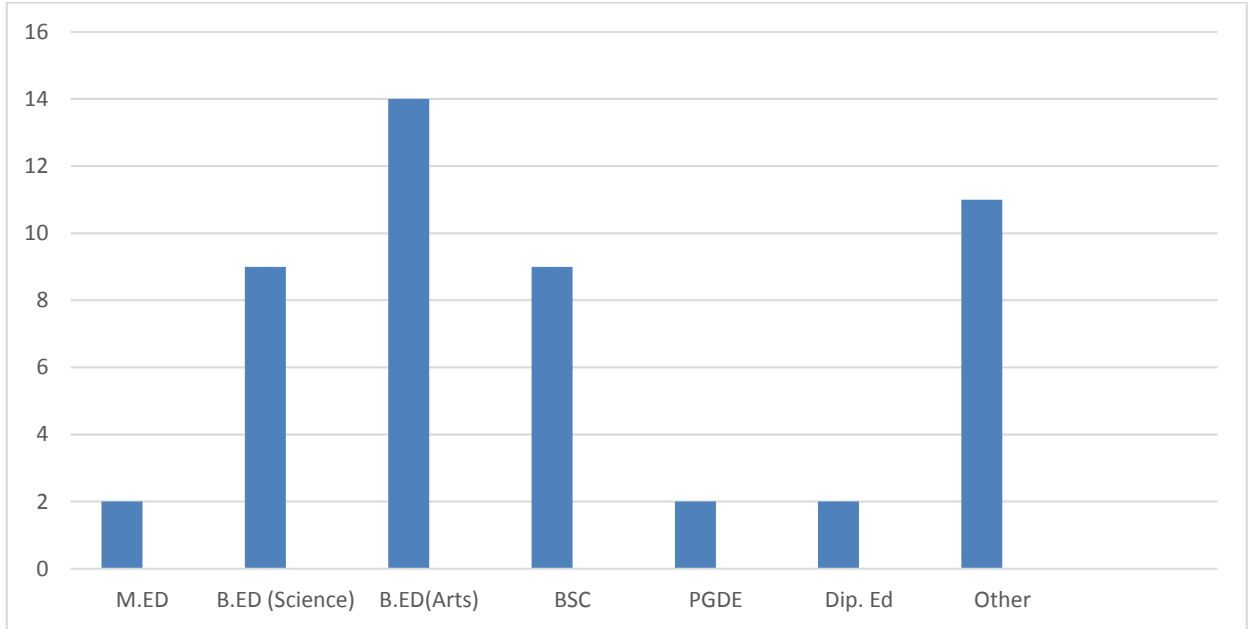


Figure 3: Distribution of teachers according to their level of education

Majority of the teachers 29 (59.18%) were trained teachers and therefore able to understand factors affecting students' performance like psychological issues, students behavior, intelligent quotient, positively reinforcing good behavior and negative reinforcement of bad student behavior and also ensuring the wellbeing and safety of students. They therefore work towards improving the academic performance of the students since they have better capacity to do so. This percentage of teachers are those who did Maters in Education, Bachelor of Education Arts and Science, Diploma in Education and a Postgraduate Diploma in Education. The rest of the teachers 20 (40.81%) were not trained to teach and did courses like Bachelor of Science (General), form four certificate and some who did other non-teaching courses yet were employed by boards of management to teach in secondary schools in Narok County. This cohort of teachers did not undergo any form of training to teach in secondary schools and therefore could not really understand the issues facing education and students behavior that affects academic performance.

4.1.4 Distribution of teachers according to their duration in schools

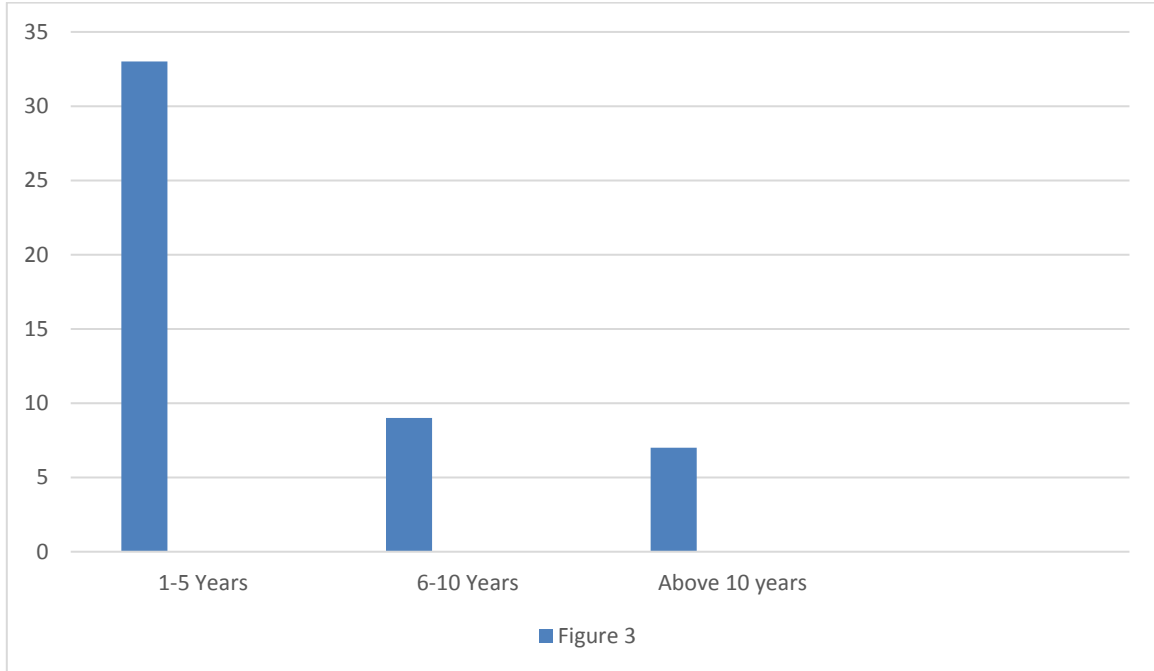


Figure 4

This findings indicate that teachers have a considerable number of years at their current station and thus have professional experience. This expertise is important since the teachers are able to understand their students. Teachers who stayed longer in institutions of learning were more welcoming to students and were able to interact effectively and professionally with the students. On the other hand, teachers who stayed for lesser years in teaching profession were more energetic to teaching/learning activities but were less interactive and sometimes had poor interaction skills with the learners. They are also able to identify student's behaviors and correct them accordingly.

4.1.5 Statements of teachers from the questionnaires sampled.

Statements	Strongly Agree		Agree		Not Sure		Disagree		Strongly Disagree	
	F	%	F	%	F	%	F	%	F	%
	I teach because I have no option	1	2.04	2	4.08	2	4.08	39	79.59	5
I have enough training to teach my subjects	7	14.28	3	6.12	5	10.20	15	30.61	19	38.78
Students do not have a positive attitude in my subject	18	36.73	11	22.45	10	20.40	6	12.24	4	8.16
Students are free to consult me in case of any difficulty	9	18.37	21	42.86	4	8.16	6	12.24	9	18.37
Teaching is difficult	18	36.37	12	24.49	2	4.08	9	18.37	8	16.33

Table 2

Majority of the teachers 29 (59.118%) agreed that students do not have a positive attitude towards their subjects. Though, when sampled, the majority of the teachers who gave this response are science teachers. The majority of teachers 30 (60.86%) also agreed that teaching is difficult and but on the other hand about 68% agreed that they do not have enough training to teach properly in their subjects areas. Opportunities for students to consult the teachers freely helped the teachers identify subject areas of concern and what they can do to help the students achieve their goals. The teachers agreed that professional development was necessary for them and that the schools needed to facilitate training for them to be updated on the current educational affairs.

Majority of the teachers emphasized that they did not actually teach because they had no other option. This shows that they had interest in the teaching profession and should they have enough training they could deliver the best to the students. Majority had no training and showed willingness to participate in any form of training that could help them deliver

The study also sought to investigate the student's responses towards their school and their teachers and also how their attitude affects them in their teaching experiences.

4.2 Demographic information of students

4.2.1 Students' KCPE performance

The study sought to find out the KCPE score of the students before they joined secondary school and how that has affected their attitude towards secondary school education.

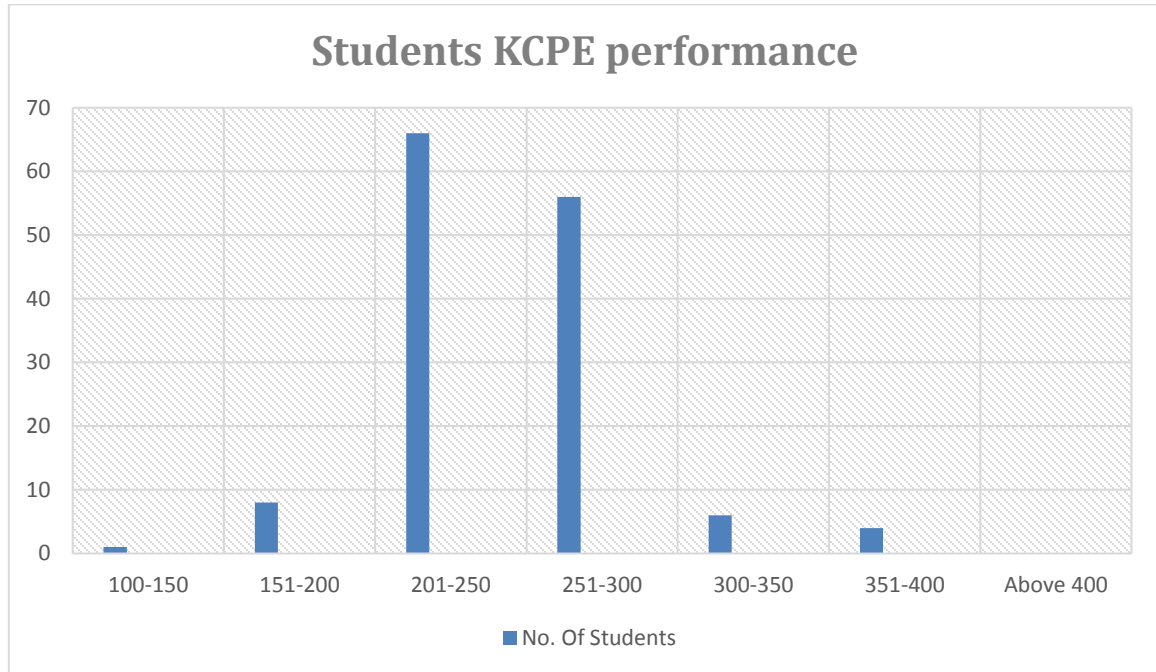


Figure 5

From the findings, majority of the students (122) scored between 200-300 marks in their KCPE exams.

This implies that students of average performance are the majority who joined secondary schools in Narok County. From the KCSE performance index for the last three years, this index has dropped substantially and students performance in relation to their KCPE performance has dropped. Very few students showed an improvement.

4.2.2 Students' responses on whether the best modes of teaching was used by their teachers to deliver the teaching curriculum.

Statements	Strongly Agree		Agree		Not Sure		Disagree		Strongly Disagree	
	F	%	F	%	F	%	F	%	F	%
My teacher uses models and charts while teaching	59	22.60	40	15.32	10	3.80	70	26.81	82	31.03
Teacher do not revise elementary ideas before teaching	89	34.09	37	14.81	5	1.92	63	24.14	87	25.67
Most examples and illustrations used are locally available	102	39.08	21	8.05	11	4.21	64	24.52	63	24.14
I am not able to cope with the teaching pace of my teacher	110	4.21	51	19.54	27	10.34	30	11.49	43	16.48
Concepts taught in class are linked to daily life	21	8.01	52	19.92	63	24.14	40	15.33	85	32.57

Table 3

Majority of the students responded that their teachers do not use models and charts while teaching. This therefore implies that most teachers are not privy to the best teaching methods of actualizing class work by using models and real life experiences to deliver content. This therefore requires that the teachers be trained on the same. On the other hand, 48.90% of the students who responded said that teachers were able to revise the previous elementary skills taught, which an aspect of training. On the same note, teachers were not able to relate class work and real life quite well.

All this aspects of training on the part of the teacher created a missing link with the students and thus the remorseful performance of the students in their KCSE Examinations. An adequately trained teacher would be able to employ all teaching skills and deliver content to the best of their abilities. It can therefore be concluded that teacher training is necessary and significantly affect students' performance in their KCSE examinations and general school exams.

4.2.3 **Chi-Square test for the relationship between the trained teachers and untrained teachers according to the KCSE performance.**

	Trained Teachers	Untrained Teachers	Total
	29	20	49
Students' performance	4.98	3.51	8.41
Total	33.98	32.51	57.41

Table 4

From the above table, degree of freedom (df) =1, P<0.05.

$$\begin{aligned}
 X^2 &= 57.41(29 \times 3.51 - 20 \times 33.98)^2 \div (49 \times 8.41 \times 32.51 \times 33.98) \\
 &= 0.000604844 \\
 &\approx 0.0006
 \end{aligned}$$

Therefore, the value for the Chi-Square statistic is significant, $X^2 = 0.006$, $P < 0.05$. This implies that there is a significant difference in the KCSE performance of trained teachers to the untrained teachers. The statistic therefore shows that trained teachers posed better results than the untrained teachers.

4.3 Discussion of Results

The mean performance of students at secondary schools in Narok County for last year stood at 4.23 with 4.98 for trained teachers and 3.51 for untrained teachers out of the 49 teachers who returned the questionnaires (table 3). Generally, since the Chi-Square statistic is significant at $P < 0.05$ at degree of freedom = 1, the performance of the trained teachers in Narok County Secondary schools was far much better than that of the untrained ones. This was observed by the responses of the students towards their teachers. The students attributed poor performance to poor time management, lack of motivation by their teachers and teachers who developed wrong attitude towards them. Attributes of

teachers like the correct usage of teaching materials, proper time management and improved delivery of content was cited as the most reliable teaching by the students. From this discussion, teacher training improved teacher content delivery techniques and thus good performance by the students.

Teachers also listed negative students' attitude as one of the impediments to effective teaching and content delivery. Some students had negative attitude towards the subjects they taught and especially science subjects like Chemistry and mathematics. This made it very difficult for them to reach their teaching objectives. Other reasons they listed that contributed to poor academic performance was lack of resources like school library, equipped laboratory, textbooks, charts and sometimes there are poorly designed classes. Some teachers also said the syllabus is too wide to cover within the stipulated time frame and that the syllabus keeps changing and they are not trained to hand it that way. On other cases, teachers said that school heads did not reinforce good performance by the students and therefore making their work futile.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.

5 INTRODUCTION

This chapter considered the relationship between teacher training and students' performance in secondary schools in Narok County and goes further to summarize, provide conclusions and further give recommendations.

5.1 SUMMARY OF FINDINGS

The summary of findings were presented according to the dependent and independent variables of the study which are:

- (i) Teacher training
- (ii) Students' attitude
- (iii) Students' performance

The study sought to establish the relationship between teacher training and students' academic performance in secondary schools in Narok County. The findings indicate that trained teachers have positive attitude towards themselves, professional contact and their students. They have skills for effective classroom control, effective students' evaluation and understand the code of contact. On the other hand, untrained teachers have low self-esteem towards teaching, do not have sufficient content delivery techniques which are student centered and have no clarity of presentation hence prone to posing poor results.

Students have positive attitude towards trained and experienced teachers since they have better interactions, good dress codes, effectiveness and clarity of classroom presentation which revolves about day-to-day activities of the students and develop learner interest towards the subject of discussion.

From the chi square statistic, the research study found out that majority of untrained teachers posted poor results as compared to the teachers who have undergone training. The study showed that most students were unsatisfied by the way untrained teachers delivered teaching content. From the teachers' responses, majority of the teachers were willing to undergo in-service training if made available and closer to them. The study also indicated that more experienced teachers had a better performance to their counterparts who had spent lesser years in teaching.

The relationship between teacher training and students' academic performance was found to be statistically significant and are jointly influence by students' attitude as a mediating variable of the study.

5.2. CONCLUSION

From the discussion therefore, the research study concluded that there is a significant difference for trained and untrained teachers in terms of content delivery, time management, classroom control and students' interaction. The relationship between teacher training and students' academic performance therefore exists to a chi square value of 0.0006, $P < 0.05$ and $df=1$.

5.3. LIMITATIONS

The research study focused on two major variables only: academic performance which is the dependent variable and teacher training, the independent variable is. However, other variables like resources available at school, teacher to student ration, distance to the nearest school, teacher incentives and teacher motivation may also influence students' academic performance.

5.4. RECOMMENDATIONS

The research study recommends further study to find out the influence on academic performance that are as a result of student related factors like the distance to the nearby school, students intelligence quotient, student motivation by parents, their backgrounds, cultural and religious beliefs among others. Teachers should also be given incentives when they pose good performance so that they get motivated to work harder and improve the academic performance of students. On the other hand, the students should also rewarded when they record a positive deviation of their examination scores so that they can change their attitude towards their subjects and put more efforts to improve.

Schools should also introduce formal in-service training to their teachers to ensure they cope with the current syllabus and curriculum reforms in the educational sectors. Teachers should also be able to engage other educational stakeholders like parents, boards of management and the nearby communities in the affairs of the school and their students. This will enable them understand the socio-cultural background, and intelligence quotient

of the students and be able to handle them effectively. This will also lead to good relations and good will of the school by the external environment and positively affect academic performance.

The school should also invest in resource persons like motivational speakers, former students who performed well and community members who are doing well in the society so as to advise the students and change their mentality to education. According to the responses of teachers, student's attitude to education affected them the most.

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APPENDIX I: LETTER OF PERMISSION

University of Nairobi,
School of Open and Distance Learning,
Main Campus,
P.O Box 482 – 20500,
Narok.

Dear Sir/Madam,

RE: QUESTIONNAIRE ON THE IMPACT OF TEACHER TRAINING ON STUDENTS' PERFORMANCE IN SECONDARY SCHOOLS IN KENYA A CASE STUDY OF NAROK COUNTY.

I am a Postgraduate student in the University of Nairobi pursuing a postgraduate degree in education.

I am carrying out research study on the above mentioned topic area. I kindly request you assist me by filling the attached questionnaire as accurately and truthfully as possible. I guarantee confidentiality utmost respect to your privacy information. In that line, do not write your name on the questionnaire.

I take this chance to thank you in advance for your willingness to participate in this important exercise.

Yours Truthfully,

George Saruni Kulo.

georgekulo@gmail.com

APPENDIX II: QUESTIONNAIRE FOR TEACHERS

The main purpose of this questionnaire is to get the information concerning the impact of teacher training and students' academic performance among secondary schools in Narok County. The information you provide in this questionnaire will be confidential and will be used for research purpose only. Kindly respond to all questions as accurately and honestly as possible. Put a tick (✓) against the information most applicable to you and fill in the blank spaces. Your sincere cooperation is highly appreciated.

You may not write your name

1) (a) Name of your school _____

(b) Gender

Male

Female

2) Are you a trained teacher?

Yes

No

3) If Yes, What are your Qualifications?

a) M.ED

b) B.ED (Science)

c) B.ED (Arts)

d) BSC

e) PGDE

f) Diploma in Education Science

g) Form 4 Certificate

Any other (Specify) _____

—

4) What was the school mean score in las year's K.C.S.E examinations? _____

5) What is your teaching experience?

(a) Total number of years _____

(b) Total number of years at current school _____

- 6) Consider each of the following statements and indicate the response that shows your opinion by putting a tick in the appropriate column on the numbers.

	Statements	Strongly disagree	Agree	Not sure	Disagree	Strongly disagree
I.	I teach because I have no option					
II.	I have enough training to teach my subjects					
III.	Students do not have a positive attitude in my subject					
IV.	Students are free to consult me in case of any difficulty					
V.	Teaching is difficult					

- 7) What is your students' attitude towards your teaching subjects?

Positive Neutral Negative

- 8) a) Have you attended any course (In-service, workshop or Seminar) in your teaching subjects?

Yes No

b) If no, give reasons. _____

- c) If yes, is the course assisting in improving your teaching skills and eventually students' performance?

Adequate Inadequate Not at all

- 9) What factors do you think influence KCSE performance in your school?

10) What measures are you taking to improve students' performance in your school?

Thank you for finding time to fill this questionnaire.

APPENDIX III: QUESTIONNAIRE FOR STUDENTS

Over the years, students' academic performance in secondary schools in Narok County has been dismal. Please help the researcher to find out various factors that influence students' performance in examinations. Your response is confidential and will be used for the purpose of research only. Respond to all questions as honestly as possible. Put a tick (✓) against the information most applicable to you and fill in the blank spaces.

NB: you may not write your name

1) Name of your school _____

2) Gender:

Male Female

3) The mean grade obtained from your KCPE exam?

KCPE _____ -

4) (a) Which aspect of teaching do you like? (Put a tick to all aspect)

Teacher explanations Group Discussion Homework

(b) Why do you like the aspect (s) above?

5) Consider each of the following statements and indicate the response that shows your opinion towards the mode of teaching used for teaching by using a tick in the appropriate column on the numbers.

Statements	Strongly Agree	Agree	Not sure	Disagree	Strongly disagree
My teacher uses models and charts while teaching					
Teacher do not revise elementary ideas before teaching					
Most examples and illustrations used are locally available					
I am not able to cope with the teaching pace of my teacher					
Concepts taught in class are linked to daily life					

6) How often do teachers attend lessons when in school?

All the time Rarely Not at all

7) What do you think contributes to the poor performance of students in KCSE your school?

8) In your opinion, what should be done to improve KCSE performance in your school

Thank you for finding time to fill this questionnaire.

**APPENDIX IV: LIST OF SECONDARY SCHOOLS SAMPLED AND THE
NUMBER OF STUDENTS PER SCHOOL**

S/No	Name Of School	Population Of Students	Number Of Students who Filled Questionnaires
1.	Eor – Ekule Secondary School	700	44
2.	Narok Boys Secondary School	1100	71
3.	Maasai Girls Secondary School	820	53
4.	Ole Tipis Girls Secondary school	900	57
5.	Keekonyokie Secondary school	260	20
6.	Naikarra Secondary School	762	48
7.	Ntulele Secondary School	158	10
8.	St. Mary’s Secondary School	668	47
9.	Sr. Stephen Nkoitoi Secondary School	591	37