PERCEPTION OF FACTORS INFLUENCING ACADEMIC PERFORMANCE OFVISUALLY IMPAIRED LEARNERS INTEGRATED IN PUBLIC PRIMARY SCHOOLS IN RONGO SUB-COUNTY, MIGORI COUNTY, KENYA.

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DECLARATION

I declare that this research thesis is my original work and has not been submitted for award of any degree in any university.

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MSNE/9508/2014

Declaration by supervisors

This research thesis has been submitted for examination with our approval as university supervisors

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DEDICATION

This work is dedicated to the almighty God who has given me good health, wisdom and knowledge. It is also dedicated to my husband Pastor Hercules Oruko, my daughters Anne, Sharon, Marian and my son Fiil for their financial and moral assistance.

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ABSTRACT

Visual impairment has a negative impact on the learner's ability to learn. In Kenya learners with visual impairment experience problems interacting with learning environment just like otherlearners with other forms of impairment. The purpose of the study was to investigate factors influencing academic performance of visuallyimpaired learners integrated in Public Primary schools in Rongo Sub-County, Migori County, Kenya. The specific objectives of the study were: to investigate the influence of instructional methods on academic performance of learners with visual impairment; to establish the influence of teachers training on academic performance of learners with visual impairment; to find out the influence of teachers attitude on academic performance of learners with visual impairment and to determine the influence of teaching learning materials on academic performance of learners with visual impairment in RongoSub-County. The study was based on Bandura (1968) Social Cognitive Theory of learning whichoutlines the process of learning as a result of the surrounding environment. The study employed descriptive survey design. The study population included 29 head teachers of public primary schools with integrated program, 40 Special Needs Education (SNE) teachers and5 Curriculum Support Officers (CSOs) giving a total of 74 respondents. Purposive and Saturated sampling techniques were used to get a sample size of 29 Head teachers, 40 SNE teachers and 5 CSOs. To establish reliability of research instruments, a pilot study was carried out on 4 SNE teachers, 3 head teachers and 1 CSO in Uriri sub- County. Using test- retest technique, a reliability index of 0.79 and 0.81was attained for teachers' and head teachers' questionnaires respectively. Reliability test for interview schedule was carried out by parallel-form reliability. Content validity of instruments was established by presenting the instruments to expert for confirmation. Quantitative data wasanalyzed using descriptive statisticsof frequencies, percentages and means and Inferential statistics of Pearson Correlation Coefficient and Chi square. Qualitative data wasanalyzed based on emerging themes generated from the study objectives. Data wasanalyzed using the Statistical Package of Social Sciences (SPSS) version 20. Frequency and percentage tables were used to present collected data. The study established that there was significant relationship between instructional methods, teacher training, teachers' attitudeand teaching learning materials and academic performance all at $p < 0.05$. Therefore all null hypotheses were rejected and it was concluded that all the four factors affect academic performance in Integrated Primary Schools inRongo Sub – County. From the study it was recommended that; there should be varied instructional methods in teaching visually impaired learners; teacher training should be regular through in service to help aid teachers handling visually impaired learners update their skills and knowledge; teacher handling visually impaired learners should work on their attitude to improve performance of visually impaired learners; teaching and learning materials that are relevant and appropriate should be made available to visually impaired learners in order to aid their academic performance. Research findings will assist in identifying appropriate teaching methods, teacher training, and conducive working environment to boost teacher morale and adequate teaching and learning resources.

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ABBREVIATIONS AND ACRONYMS

ADA – Americans with Disability Act

ELBS –Education and Library Boards

EFA- Education for All

IEP – Individualized Education Program

IDEA – Individualswith Disability Education Act

KIEP – Kenya Integrated Education Program

KCPE – Kenya Certificate of Primary Education

MOEST – Ministry of Education Science and Technology

NGO – Non Governmental Organization

SNE –Special Needs Education

SPSS- Statistical Package of Social Sciences

UNESCO –The United Nations Educational, Scientific and Cultural Organization

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.0 Introduction

The chapter consists of statement of the problem, purpose of the study, objectives of the study, hypothesisand assumptions of the study, scope and limitations of the study, significance of the study, theoretical framework, conceptual framework and operational definitions of terms.

1.1Background of the study

Globally, the education for visually impaired learners in public primary schools is fundamental to a good national, social and economicoutlook. The academic potential of visually impaired was developed through education which made them contributors to the national as well as the global economics like their sighted counterparts (Omede, 2015). Omede (2015) further opines that education is important for children because they are the future of the world and should be updated with the current affairs and that Primary education ensures broad based development of pupils so that all pupils are able to develop to the best of their cognitive, social, emotional, cultural and physical skills, thus preparing them for further school careers.

According to Omede (2016) inclusive education concentrates on the learning needs of all children, with special attention on those that are vulnerable to discrimination, marginalization and exclusion. Children with or without disabilities have the same rights to educational opportunities under the United Nations Convention on the Rights of the child (Simon, 2010).

According to Vaporanya (2014) the provision of general education to all students in their respective classes with high quality instructions, support and intervention is a key indicator of inclusive education and integrating schools have a collaborative and same school culture where pupils with disabilities face underlying presumptions relating to competence, development of positive social relationships with peers, and are expected to fully participate as members of the school family. This is supported by United Nations Educational Scientific Cultural Organization (UNESCO, 2014) which says that education is a human right for all throughout life and that access must be matched by quality.

United Nations promoted the idea and philosophy of integration education globally through championing Education for All at the world conference on Education For all in Thailand in 1990 and the 1994 Salamanca conference in Spain (UNESCO, 2017).

Studies in Saudi Arabia indicate that some pupils without disabilities liked the practice of integration education since they felt that pupils with special education needs were able to keep in step with lessons taught in class (Felimban, 2017).

In Ghana, several education policies aimed at the implementation of integration studies were passed. They emanated from the launch of the community-based rehabilitation program in 1992 which piloted integration education in ten districts. In this scenario, the National Disability Policy of 2000, the National Disability Act of 2006, and the Ministry of Education Strategic Plan (2010-2020) provided the base in support of integration education (Nketsia, 2013).The policy mandated the inclusive Education Department of Ghana with the task of enhancing the promotion of equal access to opportunities in the Education sector for persons with special needs. However, there is

still a lot to be done particularly with regard to the implementation of the policy directives (Ministry of Education, 2013). Minnaertet al. (2011) state that teachers exhibited a negative attitude towards the whole idea of integration on the basis of the lack of resources and inadequate training they received.

According to Frank (2017) although teachers and school administrators in Ethiopia support the integration of students with disabilities in mainstream schools, lack of enough resources and training were major areas of challenge to Ethiopia's integrated education. An almost similar scenario in South Africa reveals that the lack of key resources and proper management raise challenges to the implementation of inclusive education. This was supported by No Child Left behind Act of 2001 which maintained that, learners with disabilities were required to be held to the same academic standards as their classmates.

They were also taught together with their fellow counterparts without impairment (Mabunda, 2015).

Inclusive education was a critical component in the development of the whole child whose principle was a framework within which all children regardless of ability, gender, language, ethnicity and cultural background could be valued equally, treated with respect and provided with equal opportunity at school (Ambogo, 2012).

In Tanzania the government is implementing inclusive education program according to the Salamanca statement of 1994.Parents are being sensitized by the Ministry of Education to send their disabled children to inclusive schools, The government is becoming more positive towards the rights of people with disabilities. Today there are

several primary schools in Tanzania that are involved in inclusive programs (Akinyi,2015)

In Kenya, a rehabilitation center established by the Salvation Army and meant to assist blind veterans of the Second World War was changed into a school for children with visual impairment. Today, pupils with visual impairment in Kenya are placed in different learning environments including special schools, separate classrooms in regular education schools, and regular education classrooms alongside students without visual impairment. The Low Vision Project andKenya society of the Blind working hand in hand with the Ministry of Education, Science and Technology (MOEST) played a big role in improving the overall level of education of children with visual impairment in Kenya. There are pupils who are totally blind and those who have little usable vision that can hardly be relied on to acquire visual information. The same are trained to learn academic skills through the use of Braille and in orientation and mobility skill (MOEST, 2009).

The Ministry of Education (2009) established regulations for teachers of learners with visual challenges especially learners who are integrated in normal education classrooms. Teachers of these learners were encouraged to Provide sufficient exposure by use of activities to stimulate and maximize their potential; limit movement in the classroom during the lessons to enable students to focus and hear instruction; put into consideration the visually impaired as the sitting arrangement is put in place to ensure they sit at an appropriate distance to view materials on the board to avoid glare and minimize the excesses of light or darkness directed at them; use contrast of colors to

enable low vision students identify features and use grammatically correct, large and clear print on the board.

According toKochung (2011)some factors present challenges in the efficient provision of educational services to students with visual impairments, the most significant being inadequate funding. The same makes it impossible to provide required grade level text books and leisure reading materials. Similarly, it impedes maintenance of Braille machines and purchase of basic specialized equipment along with learning and teaching materials for curriculum areas that are adapted to meet the needs of students with visual impairments. The lack of professionals in the area of special education in general in Kenya is a reality to grapple with**.** Moreover**,** inadequate number of trained personnel for students with visual impairments presents obstacles to efficient servicing of the population (Oluremi, 2013).

With the implementation of Free Primary Education in 2003 , Kenyan Government aimed to increase enrollment in schools throughout the country, This increased enrollment enabled a variety of disabilities access to schooling. According to the Constitution of Kenya, it was clearly stated that people with disability should not be discriminated. The Kenyan government has laid great importance on support of inclusive education by establishing special units in regular public schools in Kenya (Kenyan Constitution, 2010) and (MOEST, 2009).

According to Lyons (2012)learning is a complex activity that involves the interplay of not only pupils' motivation and physical facilities but also teaching resources and skills of teaching curriculum demands. Availability of materials for teaching and learning hence propagates the success of schools since they are generally assumed to be the basic

resources that enhance the realization of good academic performance. Hence from the foregoing paragraphs, the current investigated the influence of instructional strategies, teachertraining, teacher attitude and resources on academic performance of visually impaired learners. The learners with visual impairment in Rongo Sub-County have exhibited poor academic performance over the years in KCPE .The average mean scores were obtained by calculating the mean scores from twenty nine primary schools with integrated programs. The mean scores were below 250, which was an indication that learners with visual impairment were not performing well academically. The study therefore sought to investigate factors influencing academic performance of learners with visual impairment integrated in Public Primary schools in Rongo Sub-County.

A report from Migori county education office (2018) indicates a worrying trend that academic performance of visually impaired children is poor in Rongo Sub County. The academic performance ranking in Migori County is summarized in Table 1.

Table 1 Performance of Visually Impaired Learners in MigoriCounty 2015-2018 In KCPE

Sub-County	2015	2016	2017	2018
Kuria West	199	251	199	198
Kuria East	149	150	189	159
Suna West	152	150	190	16
Suna East	151	149	188	178
Rongo	132	139	131	140
Awendo	149	148	161	149
Uriri	149	147	170	168
Nyatike	152	150	151	154
Ntimaru	149	149	180	177
Mabera	148	150	176	169

Table 1 indicates performance of learners with visual impairment in Migori County from 2015-2018.It shows that RongoSub County lagged behind in academic performance. Factors which contributed to this phenomenon are not yet known, hence there is need to find out factors influencing performance of Visually Impaired children

1.2Statement of the problem

Vision plays a critical role in an educational setting .Visual impairment which is severe enough to interfere with progress is considered a visual handicap. Learners must be able to see clearly, focus on objects far and near, be able to co-ordinate hand and eye,

discriminate small differences and remember what they see. Difficulty in these areas pose problems in the classroom for pupils with visual impairment to access learning.

Despite the effort of the government in identifying visually impaired learners and integrating them into public primary school system, their performance in KCPE is consistently poor over the last four years as shown in table I. The study therefore investigated factors influencing academic performance of visually impaired learners integrated in public primary schools in Rongo Sub-county.

1.3 Purpose of the study

The study investigated factors influencing academic performance of visually impaired learners integrated in public primary schools in Rongo sub county, Migori County.

1.4Study Objectives

The study was conducted under the following specific objectives:

1. To investigate the influence of instructional methods on academic performance of visuallyimpaired learners in Rongo Sub-County.
2. To establish the influence of teacher training on academic performance of visually impaired learners in Rongo Sub-county.
3. To find out the influence of the attitude of teachers on academic performance of visually impaired learners in Rongo Sub-County.
4. To determine the influence of teaching and learning materials on academic performance of visually impaired learners in Rongo Sub-County.

1.5 Null Hypothesis

Ho_1There is no significant relationship between instructional methods and academic performance of visually impaired learners in Rongo Sub-County.

Ho_2There is no significant relationship between teacher training and academicperformance of visually impaired learners in Rongo Sub-County.

Ho_3There is no significant relationship between attitude of teachers and academic performance of visually impaired Rongo Sub-County.

Ho_4There is no significant relationship between teaching and learning materials and academic performance of visually impaired in Rongo Sub-County.

1.6 Significance of the study

The findings will help the Ministry of Education, Teachers Service Commission (TSC), Kenya National Examination Council (KNEC) and Kenya Institute of Special Education (KISE) to identify appropriate teaching and learning materials, instructional methods and the value of teacher's attitude and teacher training to the education of learners with visual impairment.

The findings will enable education stakeholders to come up with ways to enhance learning environment of visually impaired learners in the whole country.

The study will prompt further research on other factors influencing academic achievement of learners.

Research findings have contributed to body of knowledgeon factors influencing academic achievement of learners.

1.7Assumptions of the study

In the study the following assumptions were made:

i) Visually impaired learners were capable of learning inmainstream setting without any challenge.

ii) Teachers were adequately trained to teach learners with visual impairment.

iii) Teaching and learning materials were made available to visually impaired learners.

iv) All CSOs interviewed had proper knowledge on visual impairment.

1.8 Scope of the study

The study was conducted in public primary schools with integrated programs in Rongo Sub-County. It targeted head teachers in integrated public primary schools, Special Needs Education (SNE) teachers and Curriculum Support Officers (CSOs).

The researcher focused on instructional methods, teacher training, teachers attitude and teaching learning materials as factors influencing academic performance of the VI in public primary schoolsRongo sub – county.

Questionnaire and interview schedule were the tools used to collect data from the respondents.

1.9Limitation of the study

The researcher relied on the opinion of few SNE teachers, head teachers and CSOs from Rongo sub- County. This could be overcome by doing a similar study in the whole country involving many schools and respondents.

Some respondents found this study to be sensitive and were not willing to give their opinion to be included in the study. To overcome this, the researchers assured them of confidentiality and promised them that the findings would only be used for academic purpose.

Some respondents did not return questionnaire. However, a return rate of over 80% is representative enough to permit reliable data analysis.

1.10 Theoretical Framework

The Social Cognitive Learning Theory introduced by Albert Bandura (1986) as explained by Rieber and Robinson (2004) that, the learning process is the result of one's observation of the surrounding behavior. He emphasized the elements of behavior, mental activity and environment. These three elements influence the learning process and the formations of Individual Social Cognitions are interconnected. This is a very key constraint to the learning process because the information received from the other senses, through hearing, touch and taste cannot provide overall picture and information as it is through vision (Blasch, 2010).

This theory is applicable in the study because, once learners with visual impairment are integrated in Public Primary Schools; they interact and are supported by teachers and peers in learning process. The relevant instructional methods, appropriate teaching and learning materials, together with trained personnel assist learners with visual impairment to realize their full potential since disability is not inability.

1.11 Conceptual Frame work

The conceptual framework is based on four independent variables namely: Instructional methods, teacher training, attitude of teachers and teaching learning materials.

The Dependent variable is academic performance as moderated by the Government policy, parental involvement and Children's' Act as illustrated in diagram 1.

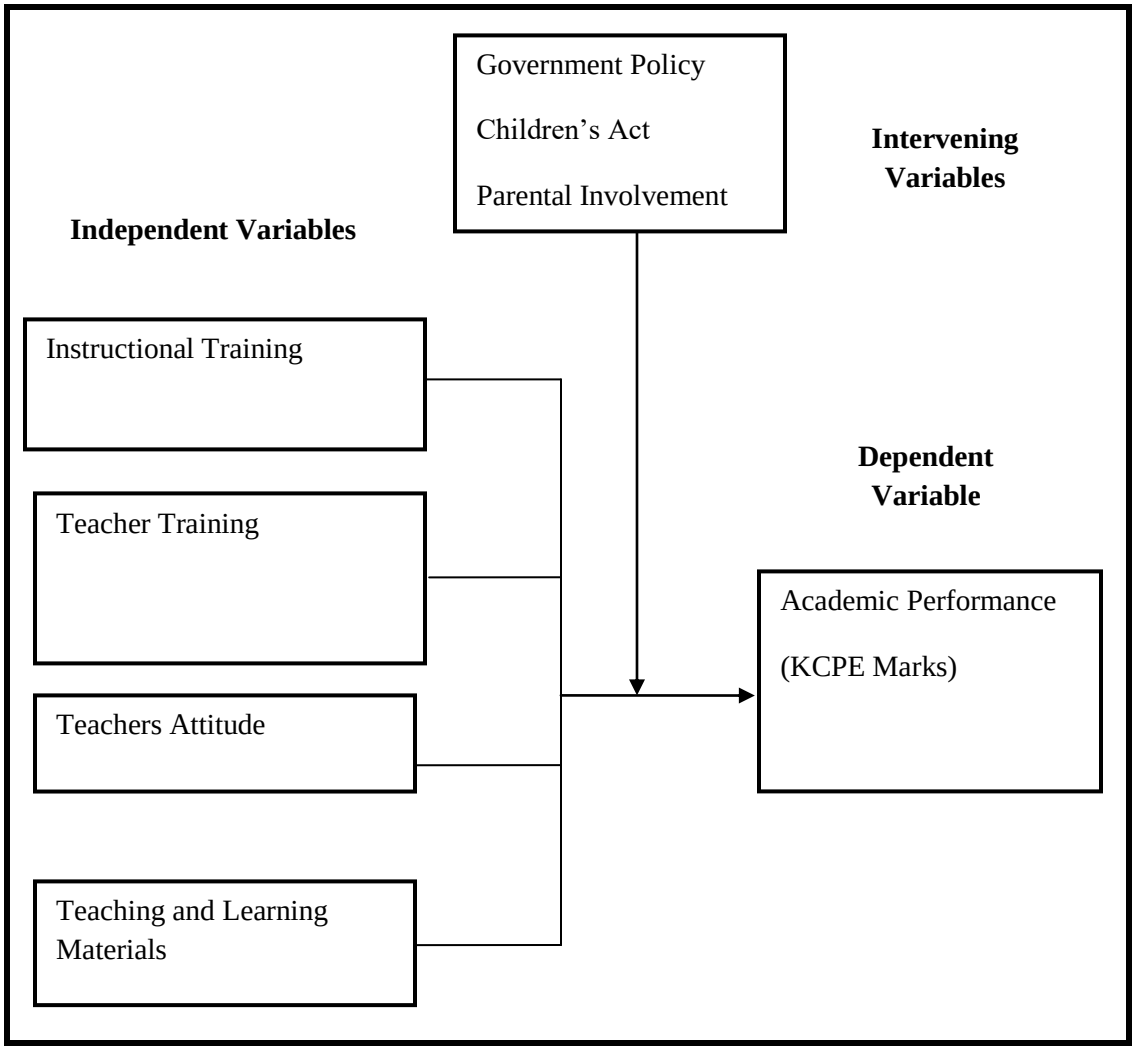

Figure 1: Conceptual Framework on the factors influencing academic performance of visually impaired learners integrated in public primary schools.

Good performance require consideration of factors such as; instructional methods, teacher training, attitude of teachers and teaching and learning materials. Teachers of visually impaired pupils should use relevant instructional methods like Individualized Education Program to cater for individual needs of these learners. Teacher training

should be done to equip the teachers with skills and knowledge on Special Needs Education. This can be done through seminar and workshops. A professional teacher must demonstrate sound attitudes when teaching visually impaired pupils to transform them positively. This can be done by listening to their concern and rewarding them verbally for any attempt made. On the other hand, to make learning real and enjoyable, teachers must use relevant teaching and learning materials for visually impaired pupils. Braille machines should be provided to pupils who cannot benefit from the printed materials. Embossed maps and enlarged prints can also be used during classroom instruction. The mentioned Independent variables influence academic performance of visually impaired learners in mainstream settings.

1.12 Operational Definition of Terms

Academic Performance: Academic performance according to this study refers to the KCPE marks of pupils with visual impairment that are enrolled in standard eight in public primary schools in Rongo Sub- County.

Attitude: In this study attitude refers to a way of thinking or feeling about learners with visual impairment.

Integration: In this study, integration refers to the inclusion of VI learners in mainstream school settings in Rongo Sub County.

Instructional methods: In this study instructional methods are different techniques applied by teachers in teaching learners with visual impairment.

Impairment: In this study impairment refers to deterioration or weakening o the eyes due injury or defect.

Integrated Education: This refers to educating children with special needs and those without together in mainstream settings

Special Needs: These are various difficulties (such as emotional, behavioral, physical, or impairment or learning disability) that cause an individual to require additional or specialized services or accommodations.

Special Education: Thisis a system of education whereby the instruction is modified to suit learners with special needs.

Teacher training: In this study this refers to the policies, procedures and provision designed to equip teachers with the knowledge, attitudes, behavior, and skills they require in performing their tasks effectively in the classroom, school and wider community.

Teaching Learning Materials: In this study refers to all materials, equipment, furniture, electronic media that are used to facilitate in both teachers and learners.

Visually Impaired Learners: In this study these are learners enrolled in standard eight in Rongo Sub County with functional loss of vision.

Visual Impairment: In this study, visual impairment is defined as a functional loss in vision that, even with correction, adversely affects a learner's educational performance.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Literature was reviewed on factors influencing academic performance of visually impaired learners. There are four sub topics discussed in this section: Influence of instructional methods on academic performance of visually impaired learners integrated public primary schools; Influence of teacher training on academic performance of visually impaired learners integrated public primary schools;Influence of attitude of teachers on academic performance of visually impaired learners integrated public primary schools and Influence of teaching learning materials on academic performance of visually impaired learners integrated in public primary schools in Rongo Sub-County, Kenya.

2.1Influence of Instructional methods on Academic Performance

Strategies used for learners with visual impairment in the classroom teaching include: Using large writing on the chalkboard or visual aids; Reading aloud what is written on the chalkboard; Preparation of large print materials; Use of magnifying aids (whole page or line magnifiers); Learning through touch as well as hearing; Pairing a visually impaired learner with a seeing classmate; Use of verbal praise or touch to give the children encouragement (Leonard Cheshire Disability, 2011)

Tebabal&Kahssay(2011) in their study investigated the differential effectiveness of teaching methods on students' academic performance. The study sample was 109 undergraduate students from colleges. Student performance in assessment tests was

analysed using the general Linear Model based univariate ANOVA technique. The result indicated significant differences on the effectiveness of the three teaching methods. However, the study only investigated college students and did not show the methods of data collections. The current study involved primary school pupils and employed both questionnaires and interview schedule.

Annie et al. (2015) investigated instructional devices that provide an expert's problem solution for a learner to studyusing experimental research design. Samples were divided into control and experimental groups. The findings of the study reveal that thereis no significant mean difference between the achievements of pretest and post test scores taught by traditional methods. However, the study only investigated high school students and was carried out experimentally. The current study used descriptive research design. The study investigated pupils in public primary school. Furthermore, the current study looked into modern instructional methods.

Wahmeyer (2012) examined promoting self –determination practice in special education. The study conducted a group –randomized, modified equivalent control group design. Data on self-determination using multiple measures was collected from 312 high school students. The study found out that significant difference in latent means across measurement occasions and differential effects was attributed to the SDLMI. However, the study did not involve public primary school pupils. The study only used interview schedule, descriptiveresearch design and did not separate the sample but used it as one.

Habulezi and Phasha (2012) investigated traditional mode of instruction as a major short coming affecting the learning and higher achievement in science subject. The study used descriptive survey design. The study population was 30 pupil primary schools. A sample fraction of 20% was used, simple random sampling was carried out and it used questionnaires to collect the data. The findings of the study reveal that inquiry was the most common strategy used in teaching science. However, the study used a small sample fraction of only 20%. . The current study involved used both questionnaires and interview schedule.

Chepngetich(2015) studied Challenges Encountered by Students with visual impairment and Teachers in an Integrated School Environment between September and November 2006 in Kericho County of Kenya. The study used a case study design method. The study employed the use of questionnaires, focus group discussion and document analysis. A total of 200 respondents participated in the study. Data was analyzed using both qualitative and quantitative methods. Findings indicate that the teachers differ significantly with the students' perceptions and attitude. However, the results were not separated making it difficult to make conclusion on which of the groups had challenges in an integrated environment. The current study involved the descriptive design and used questionnaires and interview schedule.

Tugli(2013) established the extent to which inclusive education was being implemented in teachers' college in Zimbabwe. Qualitative methodology and multiple case studies guided the study. Homogenous purposeful sampling and snowballing technique were adopted. A total of 25 participants took part in the study. Face to face interviews, direct observation guide and document analyses were used and lastly, thematic data analysis

and Vivo qualitative were used. However, the study used a very slim study population and did not use questionnaire. The current study used both interview and questionnaires and also used both qualitative and quantitative data.

Butler et.al (2016) examined a new achievement goal approach to teacher motivation by testing the predictions of mastery and ability-avoidance goals for teaching. The study was completed by 53 teachers and 1287 students in grade 7-9. The study used longitudinal studies. However, the study population was too large interims of students interviewed and only tested predictions of mastery. The current study involved teachers, head teachers and curricular support officer. The study used public primary schools.

Agesa (2014)investigated the instructional practices and challenges teachers face in teaching students with visual impairment in the government secondary schools of Harare region. A mixed method approach with convergent design was employed. The sample consisted of 118 participants selected through simple random and purposive sampling technique. Data was collected using questionnaires, semi-structured interview and focus group discussion. Qualitative data was collected. However, the study did not collect quantitative data and only involved secondary students. The current study involved descriptive design, collected both qualitative and quantitative data.

Ayeni (2011) investigated teachers' compliance with professional ethics and instructional task performance and the implication on students' academic performance in secondary schools in Owo Local Government Area of Ondo State, Nigeria. The sample consisting of 90 respondents were given questionnaires for the purpose of gathering required information for the study. The study revealed that there was

relationship between teachers professional and instructional performance. However qualitative data was not used in this study. The current study involved both qualitative and quantitative data. Interview schedule was used to collect information from respondents. The sample of the current study had 74 respondents.

Asikhia (2010) examined the perception of students and teachers on the causes of poor academic performance among secondary school students in Ogun State, Nigeria.135 participants were involved in the study. Questionnaires were used to collect raw data from the field. The study revealed that teachers' qualification and students' environment influenced students' poor performance but method of teaching and learning materials does not .The study involved Secondary students. The current study involved primary pupilsin Public primary schools and Curriculum Support Officers(CSOs)

Blasch (2010) examined curriculum barriers to teaching orientation and mobility in selected schools for learners with visual impairments in West Pokot,SiayaCounty. Purposive sampling was used to select learners. The size of the sample was 44 respondents and the instrument used was questionnaire. The study revealed that educational programs for orientation and mobility, syllabus, and resources were lacking. However this study did not use interview schedule .The current study used both questionnaire and interview schedule and investigated instructional methods for the learners with visual impairment.

Seweje (2010) examined the extent to which teaching methods used by teachers influence the academic performance of secondary school students in Nigeria. He adopted descriptive research design in his study. The target population consisted of 180

students in three secondary schools. The instrument of the study was a questionnaire. The study revealed that most of the teachers' methods of teaching have a great effect on students' academic performance. However the study didnot use interview schedule. The current study used both questionnaire and interview schedule. The current study was carried out in29 integrated public primary schools.

Richard (2010) studied challenges in school situations and their influence on poor performance in Chemistry by students with blindness at Ramagana Schoolfor the Blind in Eastern province of Rwanda. Respondents of the study comprised of 135 students.The study sample consisted of students, teachers and administrators with a sample size of 40 respondents. Both qualitative and quantitative data were collected. Simple random sampling technique was used to sample teachers while administratorswere purposively sampled. Data collection instruments were questionnaires, observation checklist and interview. The study revealed that lack of adapted laboratory for learners with blindness is a great impediment to learning of Chemistry as a subject. The study was not specific on the challenge leading to poor performance.This study is specific on factors influencing academic performance.

Mugambi (2012) investigated problems the teachers encountered in integrating students withvisual impairment inMoi Girls School Nairobi. The data for the study was collected using questionnaire to investigate the challenges. Purposive random sampling technique was applied to identify the teachers. The study sample was 47 teachers selected from the school whereby 25 were female and 22 were male. The study revealed that teachers teaching students with visual impairment lacked support from the school administration. However the study did not use qualitative method of collecting data.The current study

used qualitative data to collect detailed information from the respondents. It also employed purposive and saturated sampling techniques and lastly investigated factors influencing academic performance of learners with visual impairment.

Daluba (2013) explored the effect of demonstration method of teaching on students' achievement in agriculturalscience in secondary school in Kogi East Education Zone of Kogi State.The population of the study was 18225 senior secondary two (SSII) students in 195 schools. The study employed a quasi-experimental research design.Using Kuder Richardson 20(K-R20) formulas, a reliability index of 0.78 was obtained. The study sample consisted of students only. The study used questionnaires as the research instrument.The research questions were answered using mean,standard deviation and analysis of covariance.The study revealed that demonstration had significant effect on students' achievement than those taught with the conventional lecture method. However the study did not employ qualitative method in collecting data. One instrument was used in the study. The current study used both questionnaire and interview schedule to collect raw data from the field.

Najumba (2013) explored factors that contribute towards effective teaching and learning in primary schools.The researcher investigated why there was decay in schools in Zimbabwe. Data collection was done through mixed methods.The study revealed that teachers do not employ a variety of methods.Preparation of a variety of media for use in the teaching and learning was not done.Teachers' instructional materials are limited to text books and syllabuses. The study did not use any instrument, sampling techniques were not stated, qualitative and quantitative data were not used. The current study used questionnaires and interview to collect raw data from the respondents,mixed method

approach was used.It was also revealed that methods applied in teaching and learning influence academic performance of learners with visual impairment.

Baraka (2013) investigated the way general teachers teach students with visual impairment in inclusive classrooms and the challenges facing them. This study was conducted at one of the secondary schools in Noorway.It employed qualitative case study design using four (4) general teachers teaching in classes having students with visual impairment. Semi-structured interviews and participant observation methods were used to collect data .According to the findings of this study, general teachers have very little knowledge about inclusive education and how it should be practiced not only for students with visual impairment but for all children with special needs. However the studydid not collect data using questionnaire and quantitative data was not employed in the study. The current study used both qualitative and quantitative methods.

Nasiforo (2010) investigated academic impediments students with visual impairments encounter in the colleges of the University of Rwanda.The study was carried out at the college of arts and social sciences in HuyeDistrict and Gasbo District in Kigali city. The target population was 1405 who included deans of faculties, resource room managers, lecturers, all learners and all level four sighted learners. Purposive sampling, stratified random sampling and snow ball methods were used to obtain 125 respondents. Questionnaires and interview guides were used to collect data. Content validity was tested to ascertain the suitability of the questionnaires.The findings revealed that curriculum was not adaptedand learning resources which aid in learning of students with visual impairment were not available. Descriptive statistics was used to analyze

data. The study was carried out in colleges. The current study was carried out in public primary schools.Purposive and saturated samplingwas employed in the current study.

Mary (2016) investigated factors influencing performance of students with special needs in middle level collegesin MachakosCounty,Kenya.The study adopted Albert Bandura's Social Cognitive Theory.Survey research design was used to gather data from the respondents.The population of the study included 79 students with special needs and 72 tutors from the institutions, a total of 151 respondents. Purposive sampling was used to select students with special needs. Questionnaires wasthe instrument for the study. The findings revealed that family background, adapted classrooms and extra notes influence academic performance of students with special needs in Middle level colleges in Machakos County. The study was not done in primary school. The current study was done in public primary schools. Questionnaires and interview schedule were theinstruments used.The study revealedthat instructional methods,teacher training,teacher's attitude and teaching learning materials influence academic performance of learners with visual impairment in integrated primary schools.

Mwakyenja (2013) examined the way general teachers teach students with visual impairments in inclusive classrooms and the challenges facing them. The case study was conducted in one of the secondary school located in the southern part of Tanzania. Data collection was done using semi-structured interviews and participant observation methods.The study revealed that the general teachers were not using the little knowledge of teaching in inclusive classrooms due to many challenges in the whole inclusive teaching. The study did not use questionnaires to collect raw data from the

respondents. Quantitative data was not employed. The current study engaged the mixed methods(quantitative and qualitative).The study involved one secondary school to make general conclusion on all schools in southern Tanzania. The current study involved 29 integrated public primary schools in Rongo Sub County for better results.

2.2 Influence of Teacher Training on Academic Performance

Zwane and Malale (2018) investigated barriers teachers face in the implementation of inclusive education in high schools in Gege branch, Swaziland. Data was through semi-structured research interviews and document analysis. The study reveals that there is lack of facilities in the government schools and teachers incompetence in identifying learners facing learning challenges in their classrooms are barriers to inclusivity. Only qualitative data was obtained. Purposive sampling was used in the study. However, the study neglected the use of quantitative data and did not use questionnaires. The current study used both interview and questionnaires. The current study involved primary school children.

Makundu (2017) examined the impacts of teachers' training and students' performance in secondary schools in Narok County. The study employed a descriptive research design. The study participants were 50 teachers both untrained and trained and 384 students. Stratified random sampling was employed to stratify 47 counties. Questionnaires were used for teachers and observation schedule for students. Both qualitative and quantitative data was collected. However, study area was too big in that all the 47 counties were involved and did not involve curricular support officer. The study only used stratified random sampling. The current study used purposive and

simple random sampling technique. The current study involved pupils, teachers and curricular support officers.

Everling (2013) who examinedqualities of teachers'effectiveness in teaching and learning in primary schools. The study used mixed method approach. The study found out that teachers do not employ a variety of teaching methods and they do not prepare a variety of media for use in the teaching and learning. This was a qualitative study and convenience sampling. Semi-structured interviews were used. However, the study did not collect quantitative data. The current study used both qualitative and quantitative methods; descriptivedesign and purposive sampling technique.

Khurshid et al(2011) investigated the satisfaction level of prospective teachers towards their training course. Sample of 100 prospectiveteachers throughadministration of questionnaires. The study employed descriptive quantitative research. However, the study fell short of sample in that only college students were involved. The study only used questionnaires as a way of data collection. The current study used both questionnaires and interviews, and curricular support officers and teachers were involved in the study. The current study used purposive and saturated sampling.

Sarwart et al (2014) in their study, they examined teaching speaking skills in English language using classroom activities in secondary schools level in Eldoret, Kenya. The study was based on Krashen's (1985) Monitor Model. Theyadopted mixed methods design and simple random sampling. Purposive sampling technique was also used. Data was collected by use of questionnaires and students direction observation. The study found out that there was variation in use of classroom activities. However, the study did

not include the use interview. The current study employed the use of both questionnaires and interview schedule and the use of descriptive research.

Ngala et al (2010) established the influence of adequately trained teachers on retention of pupils withdisabilities in mainstreamed primary schools in Bomet County, Kenya. The study employed correlation research design with a sample of 271 teachers. Questionnaires were used to collect data from the respondents. The study concluded that adequately trained teachers influence retention of pupils with disabilities in mainstreamed primary schools. It alsorevealed that trained teachers influence academic performance of learners with visual impairment.The current used study both questionnaire and interview schedule. The current study also used both quantitative and qualitative data to investigate the influence of teacher training. The current study used descriptive research design.

Barikena (2012) in his study on factors contributing to ineffective teaching and learning in primary schools in Zimbabwe. He used mixed method to collect data. The study revealed that teachers did not employ a variety of teaching methods and teachers' instruction materials were also limited. The study did not use any instrument. However the current study used questionnaires and interview to collect raw data from the field. This study also captured learners with visual impairment in integrated primary schools.

Morgan (2010) investigated the influence of teacher training on the performance of students in Mixed Secondary schools in Gem District,Kenya.The study used descriptive design and the sample consisted of 58 trained and untrained teachers giving a total of 107.The study confirmed thatthere were manyuntrained teachers in the district. The

study was not specific on learners with visual impairment. It was carried out in secondary school and not primary. There were no instruments used in the study. This study used questionnaire and interview schedule to collectraw data.

Tim (2012) studied the effect of teacher training, teacher quality and student achievement at Madison University of Wasconsin.The studyrevealed that content-focused teacher professional development is positively associated with productivity in middle and high school maths and that more experienced teachers appear more effective in teaching Maths.However thestudy did not indicate the type of instruments used to collect data,the research design, study population and the type of validity and reliability used. The current study used descriptive research design,74 respondents were involved, validity was established by presenting the instruments to experts and lastly reliability was established by administering the test twice to the respondents.

Dolores et al (2018) examined training and development of teachers and how it can enhance their performance in delivery under the Ghana Education Service(GES).The study was based on a case study and quantitative research design.Respondents (teachers)were 40 teachers selected through simple random sampling technique. Questionnaire was used to collect data from teachers.The study revealed that poor performance of teachers was due to lack of frequent in-service training,lack of teaching learning materials lack of incentives and motivation and improper supervision. The study did not use questionnaire and qualitative method of collecting data to get in-depth information from the respondents.Thecurrent studyusedboth quantitative and qualitative dataand purposive sampling used because the respondents had relevant information for the study. Questionnaire and interview schedulewere employed to get raw data.

Kesiktas et al (2011) in their study investigated the teachers' challenges in teaching pupils with visual impairment in inclusive classrooms in Ghana. A sample size of 50 teachers was chosen, representing 3 inclusive basic schools. A questionnaire was administered on the teachers. The study revealed that teachers had challenges in teaching pupils with visual impairment. However the study used one instrument to collect raw data from the respondents.The current study used questionnaires and interview schedule.Qualitative data was not employed in the study. Quantitative and qualitative methods were used in the current study.

John (2012) investigated challenges and strategies of working with learners with low vision.The study was carried out in six schools for the visually impaired.The study involved 78 participants.Survey designwas used togather data.The study revealed that challenges faced by teachers are;lack of appropriatedevicesforlearnersteachers are not trained. However teachers were the only respondents used in the study. The current study involved SNE teachers, head teachers and CSOs. The current study revealed the challenges faced by learners with visual impairment as Instructional methods and attitude of teachers.

2.3 Influence of the Attitude of Teachers on Academic Performance

Balal and Rehan(2012) examined perceptions of teachers and students about curriculum viability inhibitors that are equally important but may differ. The study adopted a mixed method approach, used valid and reliable questionnaires. The study found out that curriculum under review had no clear inhibitor number of pupils. Qualitative data was collected upon inquiry. However, the study did not use interview nor show the

number of respondents. The current study used both questionnaires and valid and reliable interview and used descriptive research design. The study showed the number of schools and the exact number of respondents.

Bruwiler& Blatchford (2011) investigated effects of class size and adaptive teaching competence on classroom processes and academic outcome. There were 49 teachers and 898 students. The study adopted a multi-method approach. However, the study used a large number of students. The study adopted descriptive design. The current study used teachers, curriculum support officer and pupils while employing both questionnaires and interviews.

Dukmak (2013) investigated the attitudes of regular classroom teachers towards including students with disabilities in regular classrooms. Different statistical analyses such ANOVA and correlations were administered to the study. The study findings reveal that in general, teachers showed positive attitudes towards educational inclusion but male teachers showed more positive attitude than females did. Adult attitude scale and student checklist were employed. A total of 800 primary teachers were included in the study. However, the study did not use questionnaires and interview, the study only involved teachers. The current study used both the questionnaires and interviews and also involved teachers, and curriculum support officer.

Dawn (2015) investigated the attitudes of teachers and self-esteem of learners with visual impairments on academic performance. The study involved high schoolstudents' self-esteem and reading attitude. The study consisted of 10 classes was developed and reading education was conducted. The study found out that reading that uses program

based on board game affects high school students' self-esteem and reading attitude. However, the study did not involve primary school pupils and the study only used few schools to obtained 10 classes. The current study used primary school pupils KCPE performance and also involved 29 of schools in the sub county.

Although educators will have to make specific modifications to the teaching approach and classroom arrangements so as to accommodate learners with visual impairments, educators need to still hold these learners to the same standard as the rest of their students. This implies giving them equal opportunities to participate in learning activities and listening to their concerns and needs Omede (2015).

According to Simon, et al, (2010), teachers who are highly willing tend to support and contribute positively towards change and decreases resistance to its implementation. Positions and intentions of the educators with regard to the implementation of the right teaching approaches is reflected on the willingness to teach visually impaired learners, what amount of information is required and their ability to perform it. On the other hand, low willingness makes it a challenge in adopting and implementing the proposed change. Several scholars have found that successful implementation of integrated learning depends majorly on the willingness of educators along with the skills they are required to possess.

According to Penda and Ndhlovu (2013) teachers tend to be generally more supportive towards learners with physical and sensory impairment compared to learners with cognitive and behavioral disabilities. The extent of the disability that educators are obliged to contain in their classes is inversely related to their attitude towards inclusion

and teaching. This means that the more severe the disability of the learner, the less positive the teachers attitude towards integration. The implication of this finding is that teachers will consider severe visual impairment as a nuisance since they have to deal with numerous challenges associated with the disability. The kind of impairment affects the attitude of teachers.

One of the major challenges in an integrated classroom is teachers dislike in teaching learners with visual impairment. When resources and proper training are not offered, negative results concerning attitudes towards teaching is likely to be experienced(Simon, 2010). Therefore, for effective implementation of an integrated education, this major obstacle has to be overcome beforehand. From this understanding, it is equally vital to acknowledge that assessment of teacher's attitude is critical to providing educators with the training and necessary support services to facilitate them in dealing with the challenge effectively.

The ability of a teacher to enjoy teaching learners with visual impairments lies in their levels of motivation. Motivation is described by AL-Ghafri (2015) as the state that can maintain learner's attention and conduct along with providing energy required to complete tasks. Therefore, it can sustain learning activities over a long time. In learning, teacher's motivation can have different impacts on learner's behavior, preferences and performances. For example, teacher's motivation can help in directing student's attention towards the learning goals and objectives within short and long periods of time.

According toShittu and Oanite (2015) teacher's attitudes highly influence student'sinterest in learning. Teacher'sprofessionalattitude in the areas of communication, classroom management and pedagogy may be strong factor that could influence student's academic performance in schools. Positive professional attitudes of teachers with respect to their teaching job will go a long way in bringing about positive performance to the students while negative attitude demonstrated by teachers in the discharge of their responsibilities may ruin students' academic performance.

According to Fehintola (2014) in a classroom setting a professional teacher must demonstrate excellence attitude in his teaching. It shows that teachers must put forth an attitude that will help to transform the learners positively in the three domains of learning: cognitive, effective and psychomotor areas. A professional teacher must demonstrate sound attitudes such as neatness, intelligence and desirable traits.

Langat (2015) examined s the attitude of students on learning and achievement in Mathematics in Pubic Secondary schools in Kiambu County, Kenya. The study adopted descriptive survey design due to the implicit nature of the study. Purposive and random samplings were employed in selecting the schools. Questionnaire was used to collect raw data. The study involved seven public secondary schools and the target population were the form four students who were about to sit for their K.C.S.E examinations.The current study used both questionnaire and interview schedule. Quantitative and qualitative data were.However the study examined the attitude of students in Mathematics in Secondary schools .The current study investigated the influence of attitude of teachers in academic performance of learners with visual impairment.

Quantitative and qualitative data were not employed in the study. The current study used qualitative and quantitative data.

Murithi (2015) study examined the impact of attitudinal adaptation on academic achievement among Boys and Girls in boardingSecondary schools in Meru County in Kenya.Descriptive survey design was adopted in the study with a sample of 384 students,school counselors and deputy principals in the boarding secondary schools Instruments for the study were questionnaires and interview schedules. The findings revealed that attitudinal adaptation had a positive impact between boys and girls in boarding secondary schools within Meru County.The current study used 74 respondents, SNE teachers, head teachers and CSOs in integrated public primary schools.The study revealed that attitudinal adaptation had a positive impacton academic achievement but there were no significant differences between boys and girls in boarding secondary schools within Meru County. The current study revealed that attitude of teacher influence academic performance of learners with visual impairment in integrated public primary schools in Rongo Sub County.

Chemundeswari (2013) study investigated attitude towards learning of Science and academic achievement among students in the secondary level. Respondents comprised of 422 students chosenrandomly. Mean standard deviation, T-test,F-ratio, Karl Pearson's Product Moment Correlation Co-efficient r were subjected to statistical analysis. The study revealed that girls are significantly better in their attitude towards learning of Science when compared to the boys in their academic achievement. However the study did not include the type of instrument used, the research design and methods involved in data collection. The current study administered questionnaire and

interview schedule to the respondents who were teachers and CSOs..The study involved a bigger population. The current study investigated the attitude of teachers and academic performance and it had a small number of respondents.

2.4 Influence of Teaching and Learning materials on Academic Performance

According to Mng'ong'ose et al (2017) sufficiency of teaching and learning materials means satisfactory or reasonable quality and amounts of material resources. He argued that sufficiency of educational materials such as textbooks which is the major learning material is the most cost effective input impacting academic performance of learners with visual impairments. It is also necessary to have the right personnel plan for satisfactory educational materials and physical facilities in supporting learning effort.

To improve the quality of education, its effectiveness and output, good learning materials, physical facilities and qualified and competent personnel are necessary. A study was conducted by Okongo*et al* (2015) to investigate the effect of availability of teaching and learning resources on the implementation of integrated education in pre-school centers in Nyamira North Sub-County, Nyamira County, Kenya. The researchers argue that, based on previous studies, teaching and learning materials are not adequately available in schools posing a serious concern to educators.

According to Maindi (2018) learning is a complicated process involving interaction of learner's motivation, physical facilities, learning resources, and instructional methods and curriculum needs. Accessibility of teaching and learning materials improves the effectiveness of schools since they are the fundamental resource that results in outstanding academic performance in learners. He also added that, essential resources

that need to be available for education and learning include material resources, personal such as educators and support staff, and physical facilities comprising of laboratories, libraries and classrooms.

According to Nsagha (2012) teaching and learning process offers the visually impaired unique needs, facilities and equipment. Most of the VI learners face difficulty learning how to use them. For example using the slates and stylus is writing from left to right as if you are writing Arabic. Resources helps in improving access and learning outcomes since learners are less likely to absent themselves from schools offering interesting, vital, and relevant experiences for them. These resources need to be delivered in quality and quantity in schools for successful teaching and learning process.

Mboshi (2018) discussed the concept of visual impairment and its aspects as it relates to teaching outcomes in an integrated education setting in Cameroon. Maximum academic achievement can be realized with visually impaired learners in an integrated education environment if appropriate support technology is mastered. He also argued that satisfactory classroom organization ensuring ease of learner movement and interaction, adoption of effective ways of using chalkboard by ensuring that vital information are written fully on the chalkboard for visually impaired to see, and use of appropriate tactile diagrams or models while teaching is necessary for the best learning outcome. When teaching and learning materials are inadequate, the quality of learning is compromised and this is unavoidably reflected in poor academic performance, school dropout rates, social problems, poor teacher motivation, and unmet educational goals.

Educators need to order all class textbooks in Braille upon noticing that they have blind learners or learners with significant visual impairments. Learning materials and printed documents can as well be transformed into Braille by making use of Braille translation software. According to Mushome and Monobe (2013) Braille is the most effective code for reading, which has been created in a standard paper and book format. AL-Ghafri, (2015) recommends photocopying images into a capsule paper, adding labels, lines and symbols and creates a raised imagery for improved learning for students with visual impairments.

According to Nasongo (2013)some adaptations are as simple as moving a distractible student to the front of the class or away from a window. Other modifications may involve changing the way that a material is presented or the way that a student responds to show their learning. Adaptations, accommodations and modifications need to be individualized for students, based on their needs and their personal learning styles and interests. Learners with visual impairments regularly experience light sensitivity issues. Therefore, it is helpful to have them sit away from windows and other glaring light.

Mushome and Monobe (2013) assert that educators should make efforts at controlling the glare of classrooms by making use of blinders and curtains. Light need to be spread evenly all through the classroom for optimum visual effect. In addition, so as to give learners with visual impairments or blind learners an equal opportunity for success in the class, they should be encouraged to sit in the front row of their classroom near the board. When teaching, it is necessary for the educator to stand close to the learner with visual impairment as it will allow better hearing.

Onosanya et al (2011) in their study examined the effect of using standard instructional materials and improvised instructional materials on Secondary School Students' academic performance in physics in Ilorin,Nigeria.The research employed a quasi-experimental design of the pretest-posttestnon-randomized control group design. The study revealed that there was significantly difference between the students taught with standard instructional materials and those taught with improvised instructional materials. However the current study targeted integrated public primary schoolsand questionnaires and interview schedule were used to collect data. The current study also employed qualitative and quantitative data were not used in the study.

Bizimana (2014) examined the availability of teaching and learning resources and effective classroom management and content delivery in Secondary Schools in Huye District, Rwanda. Descriptive survey research design was used in the study. Stratified sampling technique was used to select a sample size of 619 respondents of which 81 were school administrators, 160 teachers and 378 students. Data analysis was done using Pearson's Product Moment Correlation Coefficient. The research was done in Secondary school .The current research study was done in Public Primary school.This study also used both questionnaire and interview schedule to gather in-depth information.

Mwangi (2014) investigatedpedagogical challenges faced by teachers of Mathematics of learners with visual impairment at Thika Primary School for the Blind Kiambu County. The study employed both quantitative and qualitative methods of data collection in which questionnaires and interview schedules were used to collect data from respondents. Purposive and stratified random techniques were used to sample the

respondents. Quantitative data was analyzed using Statistical Packages for Social Science and qualitative data coded thematically. Findings revealed that most of the sampled teachers were highly qualified. The study investigated challenges faced by teachers. Thecurrent studyrevealed that challenges faced by learners with visual impairment include; instructional methods, teacher attitude, teacher training.

Isola (2010) study examined the extent to which Lagos Eko project en the teachers' performance.It also investigated the perception of teachers and students on the school provision of supportive facilities to aid the Eko project training.Descriptive survey and ex-post-factor design were used in the study; Questionnaire was administered to the students to gather information for the study. T-test and Multivariate Analysis of Variance statistical tools were used to test the hypothesis. The study that the exposure of trainee teachers to Eko project training enhanced their quality of instruction.Only questionnaires were used to provide information from teacher performance. However the study did not collect qualitative data. The current study provides more detail in the provision of instructional materialsto learners with visual impairment.

Lathi et al (2011) in their study investigated the way instructional materials affect the academic performance of students with visual impairment in higher learning institutions in Rwanda. Survey and purposive sampling technique were used to determine the sample with a sample size of 133 respondents outof 216. Questionnaires and interviews were used to collect data which were later analyzed with the aid of Statistical Package for Social Sciences for Descriptive version 16.The study employed the use of Chi-square test method to establish the nature of relationship between variables.The finding revealed the reality of a significant relationship between instructional materials and

academic performance of students with visual impairment. However the study was not carried out in integrated public primary schools. The current study involved learners with visual impairment from public primary schools.

Conclusion

Even though previous studies have explored how these factors influence learning outcome of visually impaired students, there are some gaps that have not been fully investigated, particularly in public primary school with integrated program .Most of the previous studies have applied only one approach, either qualitative or quantitative, in investigating various research topics, which is not satisfactory to get an in-depth understanding. Mixed approach methodology has an advantage since it provides a better understanding of the research topic than either of them (Creswell, 2014). By combining both quantitative and qualitative research and data, the investigator gains in breadth and depth of understanding and corroboration, while counterbalancing the weaknesses intrinsic to using each approach by itself. Therefore the intention of this study was to fill the study gap.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.0 Introduction

This chapter consists of research location, design, study area, target population, sample size, sampling procedure, data collection procedure, data analysis, methods of data presentation and ethical considerations

3.1 Research Design

This study used descriptive research design. It describes characteristics of the population or the phenomenon that is being studied. The advantages of this type of research design includes: subjects or participants are observed in a natural and unchanged environment; it is effective to analyze non-quantifiable topics and issues and it also provides the opportunity to integrate the qualitative and quantitative methods of data collection. Quantitative method has the advantage of getting responses of the same questions from a large number of people which are quantifiable for conclusions to be drawn from them (Creswell, 2014).

3.2 Study Location

The study was conducted in 29integrated public primary schools in Rongo sub-county where Visually Impaired learners are learning. Rongo Sub County is one of the sub-counties making up MigoriCounty. It borders Kuriawest to the West and Kuria East to the East and Uriri Sub -County to the south. It was specifically carried out in Rongo sub-county becauseof consistent poor performance of learners with visual impairment in public primary schools with integrated program. Furthermore no study has been done to establish the causes of this poor performance.

3.3 Study Population

The researcher targeted 29 head teachers from public primary schools with integrated programs, 40 Special Needs Education (SNE) teachers and 5 Curriculum Support Officers. The entire population of the study was 74.

Table 2 Target population

Stratum	**Target population**
CSOs	5
Teachers	40
Headteachers	29
Total	**74**

Source: Education Office Rongo Sub-County, 2018

3.4 Sample size and Sampling Procedure

The researcher obtained a list of Rongo sub-county Integrated public primary schools from the sub-county office. Twenty nine head teachers from public primary schools with integrated program were involved in the study. Twenty nine Head teachers, 40 SNE teachersand 5 Curriculum Support Officers were purposively sampled to bepart of the study because they had the required information with respect to the objectives of the study. The researcher then used saturation technique to sample all the respondents because the number was small and manageable. The sample size was hundred percent (100%) of the target population as shown in table 3.

Table 3 Sample size

Stratum	sample size	percentage
CSOs	5	100
Headteachers	29	100
Teachers	40	100
Total	**74**	

3.5Research Instruments

The researcher used two research instruments that is questionnaires and interview schedule. See Appendix I & II

3.5.1 Questionnaire:

According to Kothari (2011) a questionnaire is a research instrument used to gather data over a large sample. It is also a series of questions asked to individuals to obtain statistically useful information about a given topic. Each questionnaire contained 25 closed ended questions. The closed ended items are easier to analyze since they are in their immediate usable forms, are easier to administer since they have alternative answers and lastly are economical to use in terms of time and money. One set of questionnaire was administered to head teachers and another to SNE teachers

3.5.2 Interview schedule:

It is the guide used when conducting an interview. CSOs were interviewed through interview guide. The interview was used because the interviewer could clarify the questions thereby helping the respondents give relevant responses; very sensitive and personal information could be extracted from the respondents by honest and personal

interactions and lastly interview yields higher response rate. It had five open-ended questions.

3.6 Validity of research instrument

To ascertain content validity, the expert knowledge is needed. For the researcher to ascertain content validity, expert assistance was sought. The experts were requested to check on simplicity, clarity and ambiguity of items. The items that were found to be clear, simple and non-ambiguous were included and lastly items were reviewed as per the expert suggestion. Based on expert's responses, items with 65% or more agreement as per specific construct were retained. For interview schedule, the researcher and the experts developed interview guide questions in line with the study objectives. Following this procedure, the researcher redefined and developed the questions. The interview schedule questions were then critiqued by the researcher's colleagues. After the pilot process, the researcher gave out the questions to the expert to look at them again before they were used to collect the data from the field.

3.7 Reliability of research instrument

A research instrument is considered to be reliable if the results of a study can be reproduced under a similar methodology. A pilot test was carried out on the questionnaire to ensure reliability. The questionnaire was administered to 4 SNE teachers and 3 head teachers,1 curriculum support officer which were not part of the sample but from the neighboring Uriri sub County which was 10% of the study sample (Mugenda and Mugenda, 2012). More than one test was carried out to help ascertain reliability of the study instruments. Test-retest research technique of reliability was used whereby the pilot questionnaires were administered twice to the same respondents in an

interval of two weeks. The pilot scores were then correlated using Pearson product correlation method to determine reliability. A coefficient index of 0.79 and 0.81 was obtained for SNE teachers' questionnaires and head teachers' questionnaires respectively, meaning the instruments were reliable. The researcher used parallel forms reliability test for the interview schedules. The researcher created two parallel forms. One way to accomplish this was to come up with a large set of questions that addressed the same formed questions and then randomly divided the interview questions into two parallel groups. Comparison between the two parallel forms gave out the estimated reliability of the interview questions. The researcher used parallel forms reliability because this test approach brings out the assumption that, randomly divided halves are the same (Von, 2011.).

3.8 Data collection procedures

Before the process, the researcher secured a research authorization letter and research permit as attached as Appendix III from the National Council for Science and Technology (NACOSTI) and the Ministry of Higher Education through the School of Graduate Studies(S.G.S) of RongoUniversity. Before going to Rongo Sub County Office the researcher reported to Migori County Director of Education office and presented research authorization letter to the offices. The researcher went to schools and with consent of thehead teacher in each school gave out questionnaires to teachers.

The researcher distributedquestionnaire to the twenty nine (29) head teachers in integrated primary schools and forty (40) Special Needs Education (SNE) teachers in the same schools.Interviewschedules were also conducted to five (5)Curriculum

Support Officers to collect raw data. The questionnaires were collected after two weeks as agreed. CSOs were given appointment on the appropriate date to carry out the interview. The researcher conducted the interview for 50 minutes taking the responses in point form.

3.9 Data Analysis

The researcher used Quantitative and Qualitative data. Statistical Package for Social Sciences (SPSS) version 20was used to edit, classify, and analyze data obtained from the teachers and head teachers at a significant level of .05 while qualitative data obtained from CSOs was analyzed and results presented through narrative in accordance to the study objectives. Frequency, percentages and inferential statistics of Correlation Coefficient and Chi-square were used to analyze quantitative data .To summarize the responses of respondents on the objectives of the study, descriptive statistics were used while inferential statistics were used to test hypothesis.

Significantrelationship between the independent variables (instructional methods, teacher training, teacher's attitude and teaching and learning resources) and dependent variable academic performance of visually impaired learners a Correlation Coefficient and chi-square test was used. A p-value less than .05 indicated a significant relationship between the independent variable and dependent variable while a p-value greater than .05 meant there was no significant relationship between the independent variable and the dependent variable.

The analyzed quantitative data was presented in frequency and percentage tables.

3.10 Ethical Considerations

The following ethical considerations were given serious attention in research work: Respondents were protected by making the information given confidential. Lack of confidentiality leadsto physical or psychological harm to the respondents. The researcher did not alter any information given to her by the respondents and respondents were not forced to answer any question and finally, the data collected was only used for this study only.

CHAPTER FOUR

RESULTS ANDDISCUSSION

4.0 Introduction

Data analysis, presentation, interpretation and discussion of the findings of the research were discussed in this chapter. The resultsof the study were obtained as per the research questions and themes of the study. The main purpose of the study was to determine the factors influencing academic performance of visually impaired learners in public primary schools with integrated program in Rongo Sub - County.

4.1 Demographic Information of the Respondents

Demographic information fromthe respondents after completing questionnaire was analyzed. There were twenty nine questionnaires for head teachers and forty questionnaires SNE teachers. There were five interview schedules given to the CSOs. Thirty six questionnaires were returned by teachers (90%) while for the head teachers' twenty five questionnaires were returned (86%).The five CSOs were interviewed (100%).

Table 4 ***Gender of CSOs, Teachers and Head teachers***

N=5		**N=36**		**N=25**			
		CSOs		**teacher's**		**head teachers**	
		Frequency	**%**	**Frequency**	**%**	**Frequency**	**%**
Valid	**Male**	**1**	**20**	**16**	**45**	**8**	**31**
	Female	**4**	**80**	**20**	**55**	**17**	**69**
	Total	**5**	**100**	**36**	**100**	**25**	**100**

Data in table 4 established that there were more female CSOs compared to male in Rongo sub- County. As per table 4, 1 (20 %) of them was a male while 4(80%) were female. This could imply employment of more female teachers.

Table 5 Age of CSOs, Teachers and Head teachers

AGE		**N=5**		**N =36**		**N=25**	
		CSOs		**TRS**		**H/TRS**	
		Freq.	%	Freq.	%	Freq.	%
Valid	31-40 years	-	-	14	37.5	-	-
	41 - 50 years	1	20	18	50	13	52
	Over 50 years	4	80	4	12.5	12	48
	Total	**5**	**100**	**36**	**100**	**25**	**100**

Data in table 5 revealed that 4(80%) of the CSOs were aged over 50 and only 1 (20%) fall in the age bracket of between 41 and 50. The results imply that all the field officers are old enough to handle curriculum matters. Data also established that 14(37.5%) of the teachers were aged between 31 and 40 while 20(50%) were agedbetween41-50. The study also revealed that 4(12.5%) of the teachers were aged over 50. Majority 35(87.5%) of the teachers are aged between 31-50, meaning they are mature and strong enough to teach effectively. As regards head teachers, all 25(100%) are 40 years and above, meaning they are all mature and likely to be capable of handling various administrative matters.

4.1.1 Training of Teachers in SNE

The table 6 shows the response of CSOs, teachers and head teachers on training in Special Needs Education:

Table 6 Training of Teachers in SNE

	N= 5		N= 36		N= 25	
Response	Freq.	%	Freq.	%	Freq.	%
Yes	0	0	33	92.5	10	38
No	5	100	3	7.5	15	62
Total	**5**	**100**	**36**	**100**	**25**	**100**

From table 6, all 5(100%) CSOs are not specialists in SNE. However, 33(92.5%) teachers have training in SNE while 3(7.5%) are not trained. Teachers are therefore better placed to teach the VI pupils. Regarding head teachers, 10(38%) are trained while 15(62%) are not trained, meaning they mainly rely on teachers of children with special needs.

4.1.2 Teaching Experience with the Visually Impaired

The teaching experience of teachers and head teachers is shown in table 7

Table 7 Teaching Experience with the Visually Impaired

	N =36		N = 25	
Experience in Years	Freq.	%	Freq.	%
1-5	13	35	3	10
6-10	14	40	7	28
11 and above	9	25	15	62
Total	**36**	**100**	**25**	**100**

From table 7, 13(35%) teachers and 3(10%) head teachers have teaching experience between 1 to 5 years, 14 (40%) teachers and 7 (28%) head teachers between 6-10 years. Lastly 9(25%) teachers and 15(62%) head teachers have above 11 years of experience. This could imply majority of teachers and head teachers have enough experience of teaching.

4.2 Influence of Instructional Methods on Academic Performance

The first objective of the study was to investigate the influence of instructional methods on academic performance of visually impaired learners in public primary schools with integrated program in Rongo Sub County. The researcher wanted to find out from head teachers and teachers the influence of instructional methods on academic performance.

Table 8: Response of Teachers and Head teachers on Individualized Education Program

The table shows responses of teachers and head teachers on the use of Individualized Education Program.

		N =36		N= 25	
		Frequency	**Percent**	**Frequency**	**Percent**
Valid	Very low	1	2.5	1	3
	Low	6	17.5	7	28
	Moderate	21	60	10	41
	High	5	15	5	21
	Very high	2	5	2	7
	Total	**36**	**100**	**25**	**100**

Data in table 8 reveals that majority 21(60%) of teachers moderately used individualized program while minority 1(2.5%) of teachers used it very low. On the same data, 7(17.5%) of teachers performed low in individualized education program, 5(15%) of teachers was high in individualized program and lastly, 2(5%) of teachers employed very high use of individualized program.

In table 8, majority 10(41%) of head teachers used individualized program while minority 1(3%) of head teachers were very low in using individualized program. On the same, 7(28%) of head teachers were low in using individualized program, 5(21%) of head teachers used it highly and lastly, 2(7%) of head teachers used individualized program very high. On theuse of Individualized Education Program, 2(40%) of the CSOs said, *"Teachers use IEP in the classroom teaching".* Individualized Education Program (IEP) was averagely used and thiscould be contributing to poor academic performance in Rongo Sub- County. Tugli (2013) concurs with the findings that Individualized Education Program is the fundamental component of special education program for learners with visual impairment. Group instruction for learning specialized

skills may not be provided in a meaningful manner therefore these learners require individualized instructions.

Table 9: Teachers and Head teachers Responses on Provision of Tactile Experiences

Table 9 shows the responses of teachers and head teachers on provision of tactile experiences.

		N =36		N=25	
		Frequency	**Percent**	**Frequency**	**Percent**
Valid	Very low	6	17.5	4	17.2
	Low	6	17.5	4	17.2
	Moderate	15	40	4	17.2
	High	7	20	11	41.4
	Very high	2	5	2	7
	Total	**36**	**100**	**25**	**100**

Data in table 9 established that 6(17.5%) of the teachers rated very low provision of tactile experiences, 6(17.5) rated low, 15(40%) were moderate with an average of 3.0 meaning the tactile learning experiences is moderately provided by teachers, 7(20%) rated high and 2(5%) rated very high. A significant percent at 11(41.4%) of the head teachers rated high, 2(7%) rated very high, while 6(17.2%) rated it very low, and 4(17.2%) head teachers moderately rated it. The results indicated that majority of teachers 15(40%) said provision of tactile experience was moderate (with a weighted average of 3.0) meaning the provision of tactile by head teachers was also moderate but

11 (41.4%) say its use was high. However an average of 3.0 indicated that its use was moderate. Learners with visual impairment learn through touch and therefore its moderate provision as was said by teachers could be contributing to poor performance.1 (20%) of the CSOs said, *"VI learners are taught through touch".* Butler, et al (2016) assert that tactile learning experience is important in helping learners overcome classroom challenges and ultimately challenges in real life. A teacher usually acts as the primary mediator of the learning environment that implements various strategies to facilitate learner's assimilation into the classroom and school environment. The researcher also sought to find out fromteachers and head teachers about provision of tactile experiences in table 9.

Table 10 Giving Additional Time to Complete Work

Response of teachers and head teachers on giving additional time to complete work is shown 10.

		N =36		**N=25**	
		Frequency	**Percent**	**Frequency**	**Percent**
Valid	Very low	2	5	2	7
	Low	5	12.5	6	24
	Moderate	10	27.5	4	17
	High	12	35	7	28
	Very high	7	20	6	24
	Total	**36**	**100**	**25**	**100**

Data in table 10 revealed that majority of the teachers at 19(55%) for both high and very high rating agreed that learners are given additional time to complete their work. 2(5%) were very low rating, 5(12.5%) low rating and 10(27.5%) of moderate rating(with a weighted average of 3.5). Teachers moderately give the learners with visual impairment additional time to complete work. From the results there was an indication that 2 (7%) of the head teachers have very low rating, while another 6(24%) low rating with the statement. The other 4(17%) of them were moderate with an average of 3.4. It was further noted that 7(28%) and 6(24%) of the head teachers rated highly and very highly respectively. Results show that learners are given time to do their work and this helps them to understand the curriculum hence good academic performance. 1(20%) CSO said, *"Pupils with visual impairment are given extra time to finish tasks given by their teachers."* This is further supported by Odumbe (2015) who said instructional methods depend on a number of factors such as time, developmental level of students, goals, intent and objectives of the teacher, content, and environment including physical setting and resources. The researcher sought to find out from the teachers and headteachers about giving the VI additional time to complete the work on table 10.

Table 11 Use of Projected Sound

Table 11 shows the response of teachers and head teachers on the use of projected sound.

		N =36		N =25	
		Frequency	**Percent**	**Frequency**	**Percent**
Valid	Very low	4	10	4	17
	Low	6	17.5	5	21
	Moderate	14	40	8	31
	High	11	30	5	21
	Very high	1	2.5	3	10
	Total	**36**	**100**	**25**	**100**

Data in table 11 established that 4 (10%) of the teachers rated very low use projected sound during instruction, 6(17.5%) rated low, 14(40%)of them were found to be moderate(with a weighted average of 3.0) meaning use of the projected sound by teachers was moderate. Another 11(30%) rated high while 1(2.5%) rated very high.

Regarding head teachers, 4(17%) rated very low, 5(21%) rated low, 8(31%) rated moderate with an average of 3.0, meaning projected sound during instruction was moderate by the head teachers, 5(21%) rated high and 3(10%) rated very high. The results indicated that use of projected sound was moderate; meaning some of students could not be getting the instruction clearly and therefore contributing to poor performance. According to Agesa (2014) the easiest and cost effective way of improving the learning environment and academic performance for visually impaired learners is providing projected sound during instruction. Learners with VI are limited to acquiring information through incidental learning since they are often unaware of subtle activities in their environment. The researcher sought to find out from the teachers and head teachers about use of projected sound in table 11.

Table 12 Use of Appropriate Instructional Methods

Table 12 shows the response of teachers and head teachers on the use of appropriate instructional methods.

		N =36		N =25	
		Frequency	**Percent**	**Frequency**	**Percent**
Valid	Very low	4	12.5	-	-
	Low	6	17.5	5	20
	Moderate	12	32.5	6	24
	High	12	32.5	7	28
	Very high	2	5	7	28
	Total	**36**	**100**	**25**	**100**

Data in table12 established that 4 (12.5%) of the teachers rated very low on the statement that effective and appropriate instructional methods enhances performance, 6(17.5%) rated low and 12(32.5%) rated moderate with an average of 3.0 meaning the effective and appropriate instructional methods enhances performance in a moderate way by teachers. The other 12 (32.5%) rated high and 2 (5%) rated very high. On the head teachers, 5 (20%) rated lowwhile6(24%) of them rated moderate. The findings also shows that 7 (28 %) rated high and 7(28%) rated very high (with a weighted average of 4) meaning the effective and appropriate instructional methods enhances performance in a moderate way as was shown by head teachers. Majority of teachers therefore agree that effective and appropriate instructional methods enhance academic performance. This finding is supported by Wahmeye (2011) who asserts that majority of student have

poor academic performance due to ineffective teaching methods. Quality of teaching is often reflected by the achievement of learners.

Table 13 Giving Oral Instructions for Every Assignment and Activity

Table 13 shows the response of teachers and head teachers in giving instruction for every assignment and activity.

		N =36		N =25	
		Frequency	**Percent**	**Frequency**	**Percent**
Valid	Very low	4	10	3	13.8
	Low	2	5	5	20.7
	Moderate	13	37.5	3	13.8
	High	11	30	8	31
	Very high	6	17.5	6	20.7
	Total	**36**	**100**	**25**	**100**

Data in table13 established that 4(10%) teachers rated very low on oralinstructions given for every assignment and activity, 2(5%) rated low and 13(37.5%) rated moderate .The other 11 (30%) rated high and 6 (17.5%) rated very high. On the head teachers, 4(13.8%) rated very low, 6 (20.7%) of them rated low and 3(13.8%) rated moderate with an average of 3.2. The findings also show that 8(31 %) rated high and 6(20.7%) rated very high. Majority of teachers therefore agrees that giving oral instructions for every assignment and activity enhance academic performance.1 (20%) of the CSOs said, *teachers give explanations orally before learners do any given work".* The findings concur with Beamish (2012) who says academic performance is dependent on how the content is delivered to the learners. Teaching styles help improve how well the students understand the content thus either improving or deteriorating the academic performance of the learners.

4.2.1Testing of the Null Hypothesis

The relationship between instructional methods and academic performance was expressed in terms of KCPE mean scores. Correlation coefficient and Chi-square were usedat 0.05 level of significance.

4.2.2 Pearson Product Correlation Coefficient for Instructional Methods and Academic Performance

The study sought to determine the impact of instructional methods on academic performance of learners with visual impairment in integrated public primary schools in Rongo Sub- County. Correlation analysis was conducted to determine the significant correlation between KCPE mean scores for the period 2015 to 2018 and the results obtained from teachers and head teachers responses. The results are presented in table 14 and 15 for the teachers and head teachers respectively.

Table 14 Correlation Coefficient for the Teachers' Responses

Factors	**Correlation with KCPE Mean (2015-2018)**		
	Correlation r	**signifN**	
Instructional methods	0. 152	0.004⋆	36

⋆Significant at $p<0.05$

Results in table 14 reveals that there was significant correlation between KCPE mean scores (2015-2018) and instructional methods at $p<0.05$.Instuctional methods had a positive value. This meant the more appropriate and adequate the instructional method, the better the academic performance. Schools putting more emphasis on this variable

recorded improvement in KCPE mean scores than those putting less emphasis on them. However, there was a weak relationship because the correlation coefficient r, was low.

Table 15 Correlation Coefficient for the Head teachers' Responses

Factors	**Correlation with KCPE Mean (2015-2018)**		
	Correlation r	**signifN**	
Instructional methods	***0.129***	0.020⋆	25

⋆Significant at p<0.05

The results in table 15 revealed that KCPE mean scores (2015-2018) and instructional methods had a significant correlation at p<0.05. The positive correlation coefficient for this variable indicated that it has influence on academic performance in the integrated primary schools.

The correlation coefficient, r was low, hence weak relationship..

4.2.3 Hypothesis Ho1

There is no significant relationship between instructional methods and academic performance in integrated public primary schools in Rongo Sub County.

Table 16: Chi-square for Teachers' Responses

	Instructional Methods
Chi-Square	176.528[a]
Df	37
Asymp. Sig.	.004

Table 17: Chi-square for Head teachers' Responses

	Instructional Methods
Chi-Square	162.583[a]
Df	14
Asymp. Sig.	.001

To test the effect of instructional methods on academic performance Chi-Square was used. Summary of the analysis on table 16 and 17 indicate that there was significance relationship between instructional methods and academic performance at P=0.004<0.05 and P=0.001<0.001respectively.Null hypothesis was therefore rejected and concluded that instructional methods had significant effect on academic performance. Poor academic performance by majority of the pupils was due to ineffective teaching methods. Learners with visual impairment should be taught using relevant teaching methods according to individual needs (Adunola, 2011).

4.3 Influence of Teacher Training on Academic Performance

The second objective of the study was to establish the effect of teacher training on academic performance of visually impaired learners in Public Primary schools in Rongo Sub- County. The researcher sought to find out from head teachers and teachers the effect of teacher training on academic performance and results summarized below.

Table 18 Attending Seminars and Workshops

The table 18 shows the response of teachers and head teachers on attending seminars and workshops.

		N =36		N= 25	
		Frequency	**Percent**	**Frequency**	**Percent**
Valid	Very low	10	27.5	-	-
	Low	15	40	6	24
	Moderate	5	15	6	24
	High	4	12.5	8	31
	Very high	2	5	5	21
	Total	**36**	**100**	**25**	**100**

Data in table 18 established that 10(27.5%) of the teachers rated very low, 15 (40%)rated low with an average of 2.2. Meaning teachers attending seminars and workshops were low while 5 (15%) were moderate, 4(12.5%) of the teachers rated high while the other2 (5%) of them rated very high. Regarding head teachers, 6(24%) rated low, 6(24%) were moderate, 8(31%) high (with a weighted average of 3.5). Meaning head teachers attending seminars and workshops were rated high and 5(21%) rated very high hence majority of the teachers do not attend refresher courses but head teachers do. 1(20%) CSOs said "*Teachers are trained through seminars and workshops.* "This indicate that few teachers have training in Special Needs therefore this contributed to poor performance among the VI because teachers as curriculum implementers are not acquiring new teaching skills and knowledge. According to Khurshidand Malik (2011) simply getting an initial training to become an educator for visually impaired learners is not enough to become or remain an effectual instructor. Teachers of learners with visual impairment should be trained on how to cater for individual needs of learners .The researcher sought to find out from teachers and head teachers about attending seminars and workshops on table 18.

Table 19 Trained in Special Needs Education

Table 19 shows the response of teachers and head teachers on training in special needs education.

		N = 36		N = 25	
		Frequency	**Percent**	**Frequency**	**Percent**
Valid	Very low	3	7.5	8	35
	Low	6	17.5	4	17
	Moderate	8	22.5	7	28
	High	10	27.5	3	10
	Very high	9	25	3	10
	Total	**36**	**100**	**25**	**100**

Data in table 19 revealed that 3 (7.5%) of the teachers rated very low teachers training in SNE, 6(17.5%) rated low, 8(22.5%) of them were moderate (with a weighted average of 3.5) meaning teachers trained in special needs were trained moderately. The research further notes that 10(27.5%) rated high and 9(25%) rated very high. 8(35%) of the teachers rated teacher training very low, 4(17%) ratedlow, 7(28%) of them rated teacher training in SNE moderate, 3(10%) rated it high and 3(10%) rated very high.*1 (20%) of the CSOs said, "A small number of teachers have been trained in Special Needs Education"*. The results therefore indicate majority of teachers are trained in SNE but most of head teachers are not. Teachers are hence competent and qualified to teach. Mukundu (2017) concurs with the finding that teacher training has a positive and significant effect on academic performance of learners with visual impairment and

teachers in high performing schools took more interest in staff training programs compared to their colleagues in the average and low performing schools. The researcher sought to find out from teachers and head teachers about training in special needs education in table 19.

Table 20 Seeking Further Study

Table 20 shows the response of teachers and head teachers on seeking further study.

		N =36		N =25	
		Frequency	**Percent**	**Frequency**	**Percent**
Valid	Very low	2	5	3	14
	Low	7	20	4	17
	Moderate	12	32.5	10	35
	High	4	12.5	4	17
	Very high	11	30	4	17
	Total	**36**	**100**	**25**	**100**

Data in table 20 established that 2 (5%) of the teachers rated very low the statement on teachers seeking further study, 7(20%) rated low, while 12(32.5%) were moderate (with a weighted average of 3.4) meaning teachers seeking further studies were moderate The study further noted that 4 (12.5%) rated high and 11 (30%) rated very high. Concerning head teachers, 3(14%) rated very low, 5 (17%) rated low, 10 (35%) moderate (with a weighted average of 3.1) meaning head teachers seeking further studies were also moderate, 4(17%) rated high, and 4(17%) rated very high. From these results, majority of the teachers seek further studies while head teachers advancing their studies are moderate.1 (20%) of the CSOs said, *"Few teachers seek further studies".* This is

supported by Maende (2012) who says that teacher professional development has high influence on pupil motivation, communication skills, teaching methodologies, organization of content, planning of lessons and teacher confidence.

Table 21 Internal Insets Conducted in School

Table 21 indicates response of teachers and head teachers on internal Insets conducted in schools.

		N = 36		N = 25	
		Frequency	**Percent**	**Frequency**	**Percent**
Valid	Very low	10	27.5	3	10
	Low	7	20	6	28
	Moderate	11	30	9	38
	High	6	17.5	4	14
	Very high	2	5	3	10
	Total	**36**	**100**	**25**	**100**

Data in table 21 established that 10(27.5%) of the teachers rated very low the statement that internal insets are conducted in school, 7 (20%) of them rated low, while 11(30%) were found to be moderate (with a weighted average of 3.0) meaning internal insets conducted in schools by teachers were moderate. The study further reveals 6(17.5%) rated high 2(5%) rated very high. The study also establishes that 3(10%) of the head teachers stated very low, 7(28%) rated low (with a weighted average of 2.6) meaning internal insets conducted by head teachers were low, while 9(38%) were moderate. The

study further notes that 4(14%) rated high and the remaining 3(10%) rated very high. The respondent therefore, as shown in table 21 say that the conduct of internal insets is low and this could be negatively affecting academic performance. However, 2(40%) of the CSOs said, "*INSETSare conducted in schools."*Omede (2015) concurs with the finding that internal insets are recommended for educational change in school systems and support their implementations, a teacher with less experience in dealing with students with VI tended to place those pupils in more restrictive placement, have less confidence in their own abilities to deal effectively with the pupils.

4.3.1 Testing of Null Hypothesis

To determine the relationship between teacher training and academic performance expressed in terms of KCPE mean scores, Correlation coefficient and Chi-square was used at the 0.05 level of significance.

4.3.2 Pearson Product Correlation Coefficient for Teacher Training and Academic Performance

The study sought to determine the Influence of teacher training on academic performance of learners with visual impairment in integrated public primary schools in Rongo Sub-County. To determine significant correlation between KCPE mean scores for the period 2015 to 2018 and the results obtained from the response of teachers and head teachers, a correlation analysis was conducted. Presented on table 20 and 21 are results for the teachers and head teachers respectively.

Table 22 Correlation Coefficient for the Teachers' Responses.

Factor	Correlation with KCPE Mean (2015-2018)		
Teacher training	0.126	0.037⋆	36

⋆Significant at p<0.0

In table 22 there was significant correlations between the KCPE mean scores (2015-2018) and teacher training at p<0.05.There was a positive correlation coefficient, meaning teacher training influences academic performance as expressed in terms of KCPE performance. The more appropriate and adequate training, the higher the improvement in academic performance. Quality teacher training leads to improvement in KCPE mean scores.

Table 23 Correlation Coefficient for the Head teachers' Responses

Factor	Correlation with KCPE Mean (2015-2018)		
Teacher training	0.031	0.004⋆	29

⋆Significant at p<0.05

There was significant correlations at P<0.05 between KCPE mean scores (2015-2018) and teacher training. There was a positive correlation coefficient meaning teacher training influences academic performance in the integrated primary schools. Low correlation coefficients, r, indicates that although significant, the relationships was weak.

4.3.3 Hypothesis H_{02}

There was no significant relationship between teacher training and academic performance. To test the effect of teacher training on academic performance, Chi-Square was used..

Table 24 Chi-Square for Teachers' Responses

	Teacher training
Chi-Square	263.499[b]
Df	15
Asymp. Sig.	.020

Table 25 Chi-Square for the Head teachers' Responses

	Teacher training
Chi-Square	282.951[b]
Df	20
Asymp. Sig.	.010

There was significant relationship between teacher training and academic performance at P=0.020<0.05 and P =0.010< 0.05 as shown on table 24 and 25.Tere was a significant relationship between teacher training and academic performance and therefore the null hypothesis was rejected.

4.4 Influenceof Attitude of the teachers on Academic Performance

The third objective of the study was to find out the Influence of teachers' attitude on academic performance of learners with visual impairment in Public Primary schools in Rongo sub-county. Response from head teachers and teachers on the effect of teachers' attitude on academic performance are summarized below:

Table 26 Listening to Learners Concerns

Table26 indicates response of teachers and head teachers on listening to learners concern.

		N =36		N =25	
		Frequency	**Percent**	**Frequency**	**Percent**
Valid	Very low	3	7.5	-	-
	Low	11	30	2	7
	Moderate	10	27.5	9	34
	High	8	22.5	6	28
	Very high	4	12.5	8	31
	Total	**36**	**100**	**25**	**100**

Data in table 26 revealed that 3(7.5%) of teachers rated very low statement on being ready to listen to learners, 11 (30%) rated low, while 10(27.5%) rated moderate (with a weighted average of 3.27) meaning teacher ready to listen to learners concerns were moderate hence enhancing learners performance, 9(22.5%) rated high and 4(12.5%) rated very high. The results indicated that 2 (7%) of the head teachers rated listening to learners concern low, 9(34%) moderate, 6(28%) rated high and 8(31%) meaning head teachers ready to listen to learners concerns were moderate hence enhancing learners' performance in schools. There is a consensus between heads and teachers that majority of them listen to concerns of learners and this can improve pupils' performance. 1(20%) of the CSOs said "*Teachers' attention to learners with visual impairment is minimal".* This finding is supported by Shittu(2015) who says that positive professional attitude of teachers with respect to their teaching job will go a long way in bringing about

positive performance of the pupils while negative attitude demonstrated by teachers in the delivery of their responsibility may mar pupils' academic performance. This concurs with Basic Education Act (2013) that giving learners with visual impairment equal opportunities to participate in learning activities and listening to their concerns and needs was a requirement for good academic performance. By eliciting learner's voice, learners will feel that their views are taken more seriously, an increased sense of respect which in turn makes them more inclined to reflect and discuss their learning.

Table27 Willingness to teach the VI

Table 27 indicates response of teachers and head teachers on willingness to teach the VI.

		N = 36		**N = 25**	
		Frequency	**Percent**	**Frequency**	**Percent**
Valid	Very low	2	5	1	3
	Low	7	20	4	17
	Moderate	14	40	4	17
	High	5	12.5	7	28
	Very high	8	22.5	9	35
	Total	**36**	**100**	**25**	**100**

Data established in table 27 established that 2 (5%) of the teachers rated very low the statement on willingness to teach learners with VI, 7 (20%) rated low, 14(40%) moderate (with a weighted average of 3.27) meaning teachers willing to teach learners with VI were moderate hence promoting good performance., 5(12.5%) rated high and

8(22.5%) rated very high. The study also notes that 1 (3 %) of the head teachers rated very low, 4(17%) rated low, 4(17%), moderate. The other 7(28%) rated high(with a weighted average of 3.7)meaning head teachers willing to teach learners with VI were moderate hence promoting good performance while 9(35%) rated very high. Teachers who had more special education coursework develop more positive willingness to teach the VI was moderate and this could be the cause of poor performance. Head teachers were more willing to teach. 1(20%) CSO said *"Few teachers are willing to teach learners with visual impairment".* This is supported by Simon et al (2010) that teachers who are highly willing tend to support and contribute positively towards change and decreases resistance to implementation of the right teaching approaches. The researcher sought to find out from teachers and head teachers about willingness to teach learners with VI in table 27.

Table 28 Visually Impaired learners are a nuisance

Table28 indicates responses of teachers and head teacher on VI learners being nuisants.

		N = 36		**N = 25**	
		Frequency	**Percent**	**Frequency**	**Percent**
Valid	Very low	12	32.5	15	59
	Low	12	32.5	4	17
	Moderate	6	17.5	4	17
	High	2	5	1	3
	Very high	4	12.5	1	3
	Total	**36**	**100**	**25**	**100**

Data in table 28 established that 12 (32.5 %) of the teachers rated very low the statement on finding learners with VI a nuisance, 12 (32.5%) rated low , meaning teachers view on Visually impaired learners are a nuisance were low hence promoting poor performance, 6 (17.5%) moderate, 2(5 %) rated high and 4(12.5%) rated very high. Regarding head teachers, results indicate that 15 (59 %)with an average of 1.7,meaning head teachers view on Visually impaired learners are a nuisance were low hence promoting poor performance rated very low, 4(17%) rated low, 4 (17%), moderate. The other 1(3 %) rated high while1(3 %) rated very high.1(20%) of the CSOs said, *"Teachers in schools with integrated program are of the opinion that visually impaired learners should be taught in Special Schools*". This statistics indicate that the VI was not seen as nuisants and this could enhance academic performance. This finding is supported by Basic Education Act (2013) which provides the right for every child to free basic education and the right of every child in public primary school to equal standards of education. This was supported by Penda and Ndhlovu (2013) that teachers tend to be generally more supportive towards learners with physical and sensory impairment compared to learners with cognitive and behavioral disabilities. Empowering child self-esteem happens when learners are consulted by their peers and teachers. The researcher sought to find out from teachers and head teachers about visually impaired learners are a nuisance on table 28.

Table 29 Dislike teaching learners with VI

		N = 36		N = 25	
		Frequency	**Percent**	**Frequency**	**Percent**
Valid	Very low	18	50	14	55
	Low	3	7.5	2	7
	Moderate	4	12.5	5	21
	High	9	25	3	14
	Very high	2	5	1	3
	Total	**36**	**100**	**25**	**100**

Data in table 29 established that 18(50%) of the teachers rated very low(with a weighted average of 2.2)meaning teachers dislike teaching learners with VI were low hence promoting poor performance the statement on dislike teaching learners with VI, 3 (7.5%) rated low, 4 (12.5%) moderate, 9(25 %) rated high and 2(5%) rated very high. Regarding head teachers, results indicate that 14(55%) rated very low (with a weighted average of 2.0), 2(7%) rated low, 5 (21%), moderate. The other 3(14%) rated high while1 (3 %) rated very high.1 (20%) CSO said "*teachers admit VI learners in schools with integrated programs".* This statistics indicate that the VI is not disliked and this could enhance academic performance. According to Mwebi (2012) a learner's voice is about considering the perspectives and ideas of learners, respecting what everyone has to say, taking risks, sharing, listening, engaging and working together in partnership. The researcher sought to find out from teachers and head teachers about dislike teaching learners with VI on table 29.

Table 30 Enjoy Teaching Learners with VI

Table 30 indicate response of teacher and head teachers on enjoying teaching learners with VI

		N = 36		N = 25	
		Frequency	**Percent**	**Frequency**	**Percent**
Valid	Very low	3	7.5	3	14
	Low	6	17.5	5	17
	Moderate	7	20	3	14
	High	9	25	9	34
	Very high	11	30	5	21
	Total	**36**	**100**	**25**	**100**

Data in table 30 established that 3 (7.5%) of the teachers rated very low the statement on enjoy teaching learners with VI, 6 (17.5%) rated low, 7 (20%) moderate, 9(25 %) rated high and 11(30 %) rated very high (with a weighted average of 3.5) meaning teachers enjoy teaching learners with VI were high hence promoting good performance the statement on enjoying teaching learners with VI. Regarding head teachers, results indicate that 3(14%) rated very low, 5(17%) rated low,3(14%), moderate (with a weighted average of 3.3) meaning head teachers enjoy teaching learners with VI were high, hence promoting good performance. The other 9(34 %) rated high. while 5(21%) rated very high. These results therefore indicate that teachers enjoy teaching the VI and this could enhance teaching and learning. 1(20%) CSOs said, *"VI learners lack motivation by their teachers for good performance"*. This was supported by AL-Ghafri

(2015) who stated that learner's attention and conduct along with providing energy required to complete tasks was as a result of motivation. A teacher of a learner with VI usually acts as the primary mediator of the learning environment and implements various strategies to facilitate learners' assimilation in the classroom and school environment. A teacher should provide collaborative learning in areas such as Braille reading and writing orientation and mobility, print adaptation and learning devices. The researcher sought to find out from teachers and head teachers about enjoy teaching learners with VI on table 30.

4.4.1Testing of the Null Hypothesis

The relationship between teacher attitude and academic performance expressed in terms of KCPE mean scores was determined by Correlation coefficient and Chi-square at 0.05 level of significance.

4.4.2 Pearson Product Correlation Coefficient for Teachers' Attitude and Academic Performance

The study determined the influence of attitude of teachers on academic performance of visually impaired learners. A correlation between KCPEmeans scores for the period 2015 to 2018 was conducted and results obtained from the responses presented in table 31 and 32.

Table 31 Correlation Coefficient for Teachers' Responses.

Factor	**Correlation with KCPE Mean (2015-2018)**		
Teachers' attitude	0.117	0.024⋆	36

⋆Significant at $p<0.05$

There was significant correlations, at p<0.05 between the KCPE mean scores (2015-2018) and teachers' attitude as revealed in table 31. There was positive correlation coefficient meaning it influences academic performance as expressed in terms of KCPE. The positive value means the more positive attitude the higher the performance. The correlation coefficients, r, was low, meaning that although significant, the relationships was weak.

Table 32 Correlation Coefficient for Head teachers' Responses

Factor	**Correlation with KCPE Mean (2015-2018)**		
Teacher attitude	-0.034	0.536⋆	25

⋆Significant at p<0.05

The results in table 32 indicate that there was no significant correlations at P<0.05 between KCPE mean scores (2015-2018) and teacher attitude (r=-0.034, significance level p= 0.536> 0.05). The r in this variable was low, (-0.034), which was close to r =0.0, meaning it has very low influence on academic performance. These results could imply that a positive attitude does not necessarily translate into high quality academic performance.

4.4.3 Hypothesis H_{03}

There is no significant relationship between teacher attitude and academic performance.

Table 33 Chi-Square for Teachers' Responses

	Teacher attitude
Chi-Square	160.431[c]
Df	25
Asymp. Sig.	.001

Table 34 Chi-Square for Head teachers' Responses

	Teacher attitude
Chi-Square	242.992[c]
Df	27
Asymp. Sig.	.003

The results of the analysis summarized in table 33 and 34 indicate that there was significant relationship between teacher attitude and academic performance at P=0.001<0.05 and P =0.003< 0.05. Null hypothesis was therefore rejected and concluded that teachers' attitude has significant effect on academic performance.

4.5 Influence of Teaching and Learning Materials on Academic Performance

The fourth objective of the study was to determine the influence of teaching learning materials on academic performance of learners with visual impairment in public primary schools in Rongo Sub County. The researcher sought to find out from head teachers and teachers the influence of teaching learning materials on academic performance and results were summarized in 35

Table 35 Provision of Braille Machines and Paper

Table 35 indicate response of teachers and head teachers on provision of Braille machine and paper

		N = 36		N = 25	
		Frequency	**Percent**	**Frequency**	**Percent**
Valid	Very low	29	80	13	55
	Low	1	2.5	2	7
	Moderate	2	5	1	3
	High	4	12.5	4	14
	Very high	-	-	5	21
	Total	**36**	**100**	**25**	**100**

Data in table 35 established that 29(80%) of the teachers rated very low (with a weighted average of 1.75) meaning teachers view on provision of Braille machines and paper was very low hence poor performance, 1(2.5%) of them rated low, 2 (5%) were moderate and 4(12.5%) rated high. The study further noted that 13(55%) of the head teachers rated very low with an average of 2.3) meaning head teachers view on provision of Braille machines and paper was very low hence poor performance, 2(7%) rated low, while 1(3%) were moderate. The study also established that 4 (14%) rated high and 5(21%) rated very high. 1(20%) CSOs said *"Braille machines and paper were not provided in schools"*. Braille machines and paper were not provided and this contributed to the poor performance of the learners with VI. Mushome and Monobe (2013) concur with the findings that, Braille is the most effective code for reading,

which has been created in a standard paper and book format for learners with visual impairment. Teachers need to help each pupil become successful member of their communities and equip those in vision field with a reality, available resources to meet the wide range of needs of the pupils they serve to enhance academic performance.

Table 36 Provision of Enlarged Print Materials

		N = 36		**N = 25**	
		Frequency	**Percent**	**Frequency**	**Percent**
Valid	Very low	14	40	9	37
	Low	6	17.5	3	12
	Moderate	2	5	4	17
	High	3	7.5	3	10
	Very high	11	30	6	24
	Total	**36**	**100**	**25**	**100**

Data in table 36 established that 14(40%) of the teachers rated very low (with a weighted average of 2.3) meaning teachers on provision of enlarged print materials was very low hence poor performance the statement on provision of enlarged print materials, 6(17.5%) of them rated low, 2 (5%) were moderate, 3(7.5%) rated high and 11(30%) rated very high. The study further noted that 9(37%) of the head teachers rated very low (with a weighted average of 2.7)meaning head teachers on provision of enlarged print materials was very low hence poor performance, 3 (12%) rated low, while 4(17%) were moderate. The study also established that 3 (10%) rated high and 6(24%) rated very high. 1(20%) CSO said "*enlarged print materials were not provided*

in the schools". The results indicate majority of the respondents say enlarged print materials are not provided and this could be affecting performance of the learners especially with severe VI. In order to realize this, it is essential that students have access to a wide curricular.Mboshi (2018) argue that adoption of effective ways of using chalkboard by ensuring that vital information are written fully on the chalkboard for visually impaired to see while teaching is necessary for the best learning outcome. Braille, larger prints, optical devices, tactile symbols and recorded materials should be provided to learners with VI to assist the learner to access all the areas of the curricular. Provisions of enlarged prints enhance academic performance of VI learners. The researcher sought to find out from teachers and head teachers about provision of enlarged print materials in table 36.

Table 37 Provision of Embossed Maps

Table 37 indicate response of teachers and head teachers on provision of embossed maps

		N = 36		**N = 25**	
		Frequency	**Percent**	**Frequency**	**Percent**
Valid	Very low	23	60	10	38
	Low	5	15	3	10
	Moderate	4	12.5	3	10
	High	4	12.5	4	18
	Very high	-	-	5	24
	Total	**36**	**100**	**25**	**100**

Data in table 37 established that 24(60%) of the teachers rated very low (with a weighted average of 1.7) the statement on provision of embossed, 6(15%) of them rated

low, 5(12.5%) were moderate, and 5(12.5%) rated high. The study further notes that 11(38%) of the head teachers rated very low, 3 (10%) rated low with an average of 2.7, while 3(10%) were moderate. The study also established that 5 (17%) rated high and 7(25%) rated very high.1 (20%) CSOs said *"embossed maps were not provided in schools".* The results indicate majority of the respondents say embossed maps are not provided and this could be affecting performance of the learners with VI. This is supported by AL-Ghafri (2015) who recommended that photocopying images into a capsule paper, adding labels, lines and symbols created a raised imagery for improved learning for students with visual impairments. When materials and class supplies were organized and visible within centers, children increase their appropriate use of these centers.

Table 38 Provision of magnifying glasses

Table 38 indicatesresponsesofteachers and head teachers on provision of magnifying glasses.

		N = 36		**N = 25**	
		Frequency	**Percent**	**Frequency**	**Percent**
Valid	Very low	23	65	9	34
	Low	4	12.5	8	31
	Moderate	3	7.5	1	4
	High	3	7.5	4	17
	Very high	3	7.5	3	14
	Total	**36**	**100**	**25**	**100**

Data in table 38 established that 23(65%) of the teachers rated very low (with a weighted average of 1.8) the statement on provision of magnifying glasses, 4(12.5%) of them rated low, 3(7.5%) were moderate, 3(7.5%) rated high and 3(7.5%) rated very high. The study further notes that 9(34%) of the head teachers rated very low, 8(31%) rated low (with a weighted average of 2.1), while 1 (4%) was moderate. The study also established that 4(17%) rated high and 3(14%) rated very high.1(20%) CSOs said *"magnifying glasses were not provided to learners with visual impairment".* The results indicated majority of the respondents said magnifying glasses were not provided and this could be affecting performance of the learners with VI. This is supported by(Willings,2017)that, the purpose of visual accommodation is to enlarge print materials, to increase contrast and clarity of print materials, or to decrease glare and visual clutter to make items easier to view, The changes can be made directly to the materials by the teacher or students can achieve the changes using devices in class.

Table 39 Provision of Reading Stand

Table 39indicatesresponses of teachers and head teachers on provision of reading stand.

		N = 40		**N = 29**	
		Frequency	**Percent**	**Frequency**	**Percent**
Valid	Very low	19	52.5	8	31
	Low	3	7.5	7	28
	Moderate	8	25	3	10
	High	3	7.5	4	17
	Very high	3	7.5	3	1 4
	Total	36	100	25	100

Data in table 39 established that 19(52.5%) of the teachers rated very low(with a weighted average of 2.1)meaning teachers on provision of reading was very low hence poor performance the statement on provision of reading stand, 3(7.5%) of them rated low, 8(25%) were moderate, 3(7.5%) rated high and 3(7.5%) rated very high. The study further notes that 8 (31%) of the head teachers rated very low, 7(28%) rated low (with a weighted average of 2.5), while 3 (10%) were moderate. The study also established that 4(17%) rated high and 3(14%) rated very high.1 (20%) *CSO said "reading stands were not provided to VI learners in schools".* The results indicate majority of the respondents say reading stands are not provided and this could be affecting performance of the learners with VI. Nasongo (2013) concurs with the findings that adequacy of instructional materials has effect on quality of teacher preparation hence good academic performance. The researcher sought to find out from teachers and headteachers about provision of reading stand on table 39.

Table 40 Provision of Well-lit and Ventilated Classrooms

Table 40 indicates responses of teachers and head teachers on provision of well-lit and ventilated classrooms.

		N = 36		N = 25	
		Frequency	**Percent**	**Frequency**	**Percent**
Valid	Very low	3	7.5	3	10
	Low	-	-	1	3
	Moderate	16	45	7	32
	High	10	27.5	4	17
	Very high	7	20	10	38
	Total	**36**	**100**	**25**	**100**

Data in table 40 established that 3(7.5%) of the teachers rated very low the statement on provision of well-lit and ventilated classrooms, 16(45%) were moderate(with a weighted average of 3.5)meaning teachers on provision of well-lit and ventilated classroom was moderate hence good performance, 10(27.5%) rated high and 7(20%) rated very high. The study also indicates that 3(10%) of the head teachers rated very low, 1 (3%) rated low, while 7(32%) were moderate (with a weighted average of 3.68) meaning head teachers on provision of well-lit and ventilated classroom was moderate hence good performance in schools. The study further established that 4(17%) rated high and 10(38%) rated very high. CSOs affirmed that well-lit and ventilated classrooms were provided in the schools. Majority of the teachers said classrooms were not well-lit and ventilated hence poor performance by learners with VI. However, most head teachers said classrooms were well-lit and ventilated. The finding was supported by Mushome and Monobe (2013) assert that educators should make efforts at controlling the glare of classrooms by making use of blinds and curtains. This was also

supported by Watitwa (2010) that many learners function better with reduction of visual clutter and increasing visual clarity, providing a clear, legible font with reduced clutter and increase clarity.

4.5.1 Testing of the Null hypothesis

In order to determine the relationship between teaching and learning materials and the dependent academic performance expressed in terms of KCPE mean scores, Correlation coefficient and Chi-square was used at the 0.05 level of significance.

4.5.2 Pearson Product Correlation Coefficient for Teaching Learning Materials and Academic Performance

The study sought to determine the influence of teaching and learning resources on academic performance in integrated public primary schools in Rongo Sub- County. To determine the significant correlation between KCPE means scores for the period 2015 to 2018 and the results obtained from the responses of teachers and head teachers on the influence of teaching learning materials a correlation coefficient was conducted. Below are the results for teachers and head teachers respectively.

Table 41 CorrelationCoefficient for Teachers' Responses.

Factor	**Correlation with KCPE Mean (2015-**		
Teaching learning materials	0.169	0.012⋆	36

⋆Significant at $p<0.05$

There was significant correlations, at $p<0.05$ between the KCPE mean scores (2015-2018) and teaching and learning materials as shown on table 41. The positive correlation coefficient mean it influences academic performance as expressed in terms

of KCPE performance. The more appropriate and adequate teaching learning materials the better the performance, Again this confirmed that effective schools were characterized by strong instructional leadership and adequate provision and management of teaching and learning materials. The correlation coefficients, r, was low, meaning that although significant, the relationship was weak.

Table 42Correlation Coefficient for the Head teachers' Responses

Factor	**Correlation with KCPE Mean (2015-2018)**		
	Correlation r	**signif N**	
Teaching Learning Materials	0.019	0.045⋆	25

⋆Significant at p<0.05

There was significant correlations at P<0.05 between KCPE mean scores (2015-2018) and teaching learningmaterials as shown in table 42. The positive correlation coefficient means academicperformance is influenced by teaching and learning materials in the integrated primary schools. The correlation coefficients, r, was low, meaning although significant, the relationship was weak.

4.5.3 Hypothesis H_{04}

There is no significant relationship between teaching and learning resources and academic performance.

Table 43 Chi-Square for the Teachers' Responses

	Teaching& learning resources
Chi-Square	214.103[d]
Df	23
Asymp. Sig.	.000

Table 44 Chi-Square for the Head teachers' Responses

	Teaching& learning resources
Chi-Square	151.458[d]
Df	15
Asymp. Sig.	.002

The findings in table 43 and 44 show that there was significant relationship between teaching and learning materials and academic performance at P=0.000<0.05 and P = 0.002< 0.05. The study therefore rejected the Null hypothesis was therefore rejected and concluded that teaching and learning materials significantly affect academic performance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

Twenty nine integrated public primary schools with integrated program in Rongo Sub-County were involved in the study. This study investigated the influence of instructional methods on academic performance, established the influence of teacher training on academic performance, established the influence of attitude of the teachers' on academic performance and determined the influence of teaching and learning materials on academic performance in Public Primary schools with integrated programs.

The hypotheses for the study were stated in null form as follows:

$H_0$1 There is no significant relationship between instructional methods and academic performance.

$H_0$2 There is no significant relationship between teacher training and academic performance.

$H_0$3 There is no significant relationship between attitude of teachers and academic performance.

$H_0$4 There is no significant relationship between teaching and learning materials and academic performance.

5.2 Summary of the Findings

The summary of findings was based on the objectives of the study - Instructional methods, teacher training, teachers' attitude and teaching learning materials.

5.2.1 Influence of Instructional Methods on Academic Performance.

The results indicated that majority 24(60%) of the teachers moderately used Individualized Education Program while minority 1(2.5%) lowly used it. Majority 12(41%) of head teachers used IEP while minority 1(13%) said the use of IEP was low

On the provision of tactile experiences majority, 16(40%) of teachers moderately rated it. .Majority 12(41.4%) of head teachers rated it highly.

Majority 14(35%) of the teachers highly rated that learners are given additional time to complete work while minority 2(5%) rated it very low.Majority8 (25%) of the head teachers highly rated giving additional time to complete work.

On the use of projected sound majority 16(40%) of the teachers said its use was moderate whileminority1 (2.5%) said it was highly used.

Majority 13(32.5%) of teachers moderately used appropriate instructional methods while minority 2(5%) rated it high. Majority 8(25%)of the head teachers highly rated the use of appropriate instructional methods while minority6 (20%) rated it low.

On giving oral instruction for every assignment and activity majority 15(17.5%) of the teachers moderately rated the use of oral instruction while minority 2(5%) rated it low. Majority 9(31%) of the head teachers rated the use of oral instructions high while minority 4(13.8) rated it very low.

5.2.2 Influence of Teacher Training on Academic Performance

The results indicated that majority 16(40%) of the teachers rated low the attendance of seminars and workshops while minority 2(5%) of the teachers rated very high attendance of seminars and workshop. Results from Head teachers indicated that

majority 9(31%) of head teachers rated high the attendance of seminars and workshops while minority 6(21%) rated it very high.

Majority 11(27.5%) of the teachers rated training is special needs highly while minority 3(7.5%) rated is very low. Majority 10(30%) of the head teachers rated it very low while minority 3(10%) rated it very high

Majority 13 (32.5%) of the teachers moderately rated seeking further studies while minority 2 (5%) rated it very low. On the same data majority 10(35%) of the head teachers moderately rated seeking further studies while minority 4 (14%) rated it very low.

Majority 12 (30%) of the teachers moderately rated use of internal insets conducted in schools while minority 2 (5%) rated it very high. Majority 11 (38%) of the head teachers moderately rated use of insets conducted in schools while minority 3 (10%) rated it very high.

5.2. Influence ofthe Attitude of teachers on Academic Performance

According to theresults majority 12(30%) of the teachers rated listening to learners concern low while minority 3(7.5%) rated it very low. On listening to the learners concern majority 10(34%) of the Head teachers rated it moderate while minority 2(7%) rated it low.

Majority 16(40%) of the teachers rated willingness to teach the learners with VI moderate while minority 2(5%) rated it very low. Majority 10(35%) of the headteachers rated it very high while minority 1(3%) rated it very low.

Minority 2 (5%) rated it high. On the same data majority 17 (59%) of the head teachers rated it very low while minority 1 (3%) rated it very high.

On dislike teaching learners with VI, majority 20 (50%) of teachers rated it very low while minority 2 (5%) rated it very high. On the same data majority of the head teachers 16 (35%) rated it very low while minority 1 (3%) rated it very high.

Majority 12 (30%) of the teachers rated the statement on enjoy teaching learners with VI very high while minority 3 (7.5%) rated it very low. On the same data, majority 10 (34%) of the head teachers highly rated the statement while minority 4 (14%) rated it very low.

Influence of Teaching Learning Materials on Academic Performance

The results indicated that majority 32(80%) of the teachers rated the provision of Braille machines and paper very low while minority 1(2.5%) rated the provision low. Majority 16(55%) of the head teachers rated provision of Braille machines and paper very low while minority 1(3%) moderately rated it..

On provision of enlarged print materials majority 16(40%) rated its provision very low while minority 3(7.5%) rated it high. Majority 9(37%) of headteachers rated the provision of enlarged print materials very low while minority 3(10%) rated of high.

On provision of enclosed maps majority 24(60%) rated it very low while minority 5(12.5%) rated it moderate. Majority 11(38%) of H/T rated it very low while minority rated it low.

On provision of magnifying glasses majority of 26(65%) of teachers rated it very low while the minority 3(7.5%) rated moderately high and very high.

Majority 10(34%) of the H/T rated the provision of majority lenses very low. Majority 21(52.5%) of the H/T rated the provision of reading stand very low. Minority 3(7.5%) of theteachersrated the provision of the reading stand very high. Majority 9(31%) of Head teachers rated the provision of the stands very low while the minority 3(10%) rated it moderate.

5.3 Conclusion;

5.3.1 Instructional Methods on Academic Performance

The responses of teachers, head teachers and CSOsindicated the use of various methods of teaching was moderate and this could be contributing to the poor performance of learners with visual impairment in Rongo- Sub County primary schools in KCPE. The Pearson product Correlation and Chi-Square results indicate that there was significant relationship between instructional methods and academic performance

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5.3.2 Teacher Training on Academic Performance

The responses of head teachers and teachers on the provision of teacher training indicated it was moderate. The Pearson Product correlation and Chi- Square results show that there was significant relationship between teacher training and academic performance. It was therefore concluded that teacher training skills was key to better academic performance.

5.3.3 Attitude of teachers on Academic Performance

The responses of head teachers and SNE teachers on teachers' attitude towards the VI generally negative. Correlation and chi-square results indicate that teachers' attitude had influence on academic performance though very low.

5.3.4 Teaching Learning Materials

Based on the results of objective four, the Pearson's Product correlation coefficient and Chi- Square results show significant relationship between teaching and learning resources and academic performance. Most teachersfrom the responses were not using avariety of resources in the classroom and so this could be contributing to poor performance in KCPE.

5.4 Recommendations

The study therefore recommended that:

1. SNE teachers and head teachers to be inducted on a variety of Instructional Methods for the learners with visual impairment.
2. Training sessions for teachers should be enhanced.
3. Teachers need to be motivated to develop a positive attitude towards the VI.
4. A variety of teaching and learning resources should be provided to the schools.

5.5 Suggestions for Further Research:

1. A study should be done on visually impaired learner's background characteristics and academic performance.
2. A study should be done on the impact of visual impairment and academic performance.

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APPENDICES

APPENDIX I: QUESTIONNAIRES

HEADTEACHER'S QUESTIONNAIRE

This research is meant for academic purpose. It is to investigate the factors influencing academic performance of learners with visual impairment in integrated public primary schools in Rongo Sub-County, Migori County, Kenya. The information you give will be treated with confidentiality. This questionnaire consists of two sections A and B.

SECTION A: PERSONAL DATA

Please indicate your choice by a tick [√] where appropriate.

1. Gender: Male [ ] Female [ ]
2. Age in years. 20- 30 [ ] 31- 40 [ ] 41- 50 [ ] over 50 [ ]
3. Are you trained in Special Needs Education?

   Yes [ ] No [ ]
4. State your years of experience in teaching learners with visual impairment.

   1-5 Years [ ] 6-10 Years [ ] 11 and above years [ ]

SECTION B

Respondents Perceptions on the factors influencing academic Performance

Respondents in this section will be expected to rate their perceptions on the effects of the independent variables on the dependent variable on the 5-point Likert scale provided below

1= Very Low 2= low 3= Moderate 4= High 5= Very High

Objective 1: Influence of instructional methods on academic performance

NO.	**Statement:** Teachers	1	2	3	4	5
1.	Use Individualized education program to teach learners with visual impairment					
2.	Provide tactile learning experiences					
3.	Give visually impaired learners additional time to complete work					
4.	Use projected sound during instruction					
5.	Use effective and appropriate instructional methods					
6.	Give oral instructions for every assignment and activity					

Objective 2: Effect of teacher training on academic performance

NO.	**Statement:** Teachers	1	2	3	4	5
7.	Attend seminars and workshops					
8.	Are rained in special needs					
9.	Seek further studies					
10.	Have internal insets conducted in school					

Objective 3: Effect of attitude of teachers on academic performance

NO.	**Statement:** I	1	2	3	4	5
11.	Am always ready to listen to learners concerns					
12.	Am always willing to teach learners with visual impairment					
13.	Find visual impaired learners a nuisance					
14.	Dislike teaching learners with visual impairment					
15.	Enjoy teaching learners with visual impairment					

Objective 4: Influence of Teaching and Learning Materials on academic performance

NO.	**Statement: Learners are provided with:**	1	2	3	4	5
16.	Braille machines and Braille papers					
17.	Enlarged print materials					
18.	Embossed maps					
19.	Magnifying lenses					
20.	Reading stands					
21.	Well lit and ventilated classrooms					

TEACHER'S QUESTIONNAIRE

This research is meant for academic purpose. It is to investigate the factors influencing academic performance of learners with visual impairment in integrated public primary schools in Rongo Sub-County, Migori County, Kenya. The information you give will be treated with confidentiality. This questionnaire consists of two sections A and B.

SECTION A: PERSONAL DATA

Please indicate your choice by a tick [√] where appropriate.

1. Gender: Male [ ] Female [ ]
2. Age in years. 20- 30 [ ] 31- 40 [ ] 41- 50 [ ] over 50 [ ]
3. Are you trained in Special Needs Education?

   Yes [ ] No [ ]
4. State your years of experience in teaching learners with visual impairment.

   1-5 Years [ ] 6-10 Years [ ] 11 and above years [ ]

SECTION B

Respondents Perceptions on the factors influencing academic Performance

Respondents in this section will be expected to rate their perceptions on the effects of the independent variables on the dependent variable on the 5-point Likert scale provided below

1= Very Low 2= low 3= Moderate 4= High 5= Very High

Objective 1: Influence of instructional methods on academic performance

NO.	Statement: Teachers	1	2	3	4	5
1.	Use Individualized education program to teach learners with visual impairment					
2.	Provide tactile learning experiences					
3.	Give visually impaired learners additional time to complete work					
4.	Use projected sound during instruction					
5.	Use effective and appropriate instructional methods					
6.	Give oral instructions for every assignment and activity					

Objective 2: Effect of teacher training on academic performance

NO.	Statement: Teachers:	1	2	3	4	5
7.	Attend seminars and workshops					
8.	Are Trained in special needs					
9.	Seek further studies					
10.	Have internal insets conducted in schools					

Objective 3: Effect of attitude of teachers on academic performance

NO.	Statement: Teachers	1	2	3	4	5
11.	Are ready to listen to learners concerns					
12.	Are willing to teach learners with visual impairment					
13.	Find visual impaired learners a nuisance					
14.	Dislike teaching learners with visual impairment					
15.	Enjoy teaching learners with visual impairment					

Objective 4: Influence of Teaching and Learning Materials on academic performance

NO.	Statement: Learners are provided with:	1	2	3	4	5
16.	Braille machines and Braille papers					
17.	Enlarged print materials					
18.	Embossed maps					
19.	Magnifying lenses					
20.	Reading stands					
21.	Well litand ventilated classrooms					

APPENDIX II: INTERVIEW SCHEDULE FOR CSOs

SECTION A: PERSONAL DATA

Please indicate your choice by a tick [√] where appropriate.

5. Gender: Male [ ] Female [ ]
6. Age in years. 20- 30 [ ] 31- 40 [ ] 41- 50 [ ] over 50 [ ]
7. Are you trained in Special Needs Education?

   Yes [ ] No [ ]

SECTION B

Respondent's perceptions on the factors influencing academic performance

1. Which instructional methods do teachers use to teach learners with visual impairment in the zone?
2. How are teachers trained to improve the academic performance of learners with visual impairment in the zone?
3. In what ways do you think attitude of teachers influence academic performance of learners with visual impairment in the zone?

4 (a) which teaching and learning materials are learners with visual impairment provided with?

(b)Comment about the adequacy

APPENDIX III: RESEARCH PERMIT FROM UNIVERSITY

RONGO UNIVERSITY

OFFICE OF THE DEAN

SCHOOL OF GRADUATE STUDIES

Tel. 0771349741 P.O. Box 103 - 40404
RONGO

Our Ref: **MSNE/9508/2014** **Date:** Wednesday, March 20, 2019

The Chief Executive Officer,
National Commission for Science, Technology & Innovation,
off Waiyaki Way, Upper Kabete,
P.O Box 30623-00100,
Nairobi-KENYA.

Dear Sir,

RE: RESEARCH PERMIT FOR MRS. NORAH ANYANGO RIWA-MSNE/9508/2014

We wish to inform you that the above person is a bona fide graduate student of Rongo University in the School of Education pursuing a Masters degree in Educational Psychology. She has been authorized by the University to undertake research titled; ***"Factors Influencing Academic Performance of Leaners with Visual Impairment Integrated in Public Primary Schools in Rongo Sub-County, Migori County, Kenya."***

This is, therefore, to request the commission to issue her with a research permit to enable her proceed for field work.

Your assistance to her shall be highly appreciated.

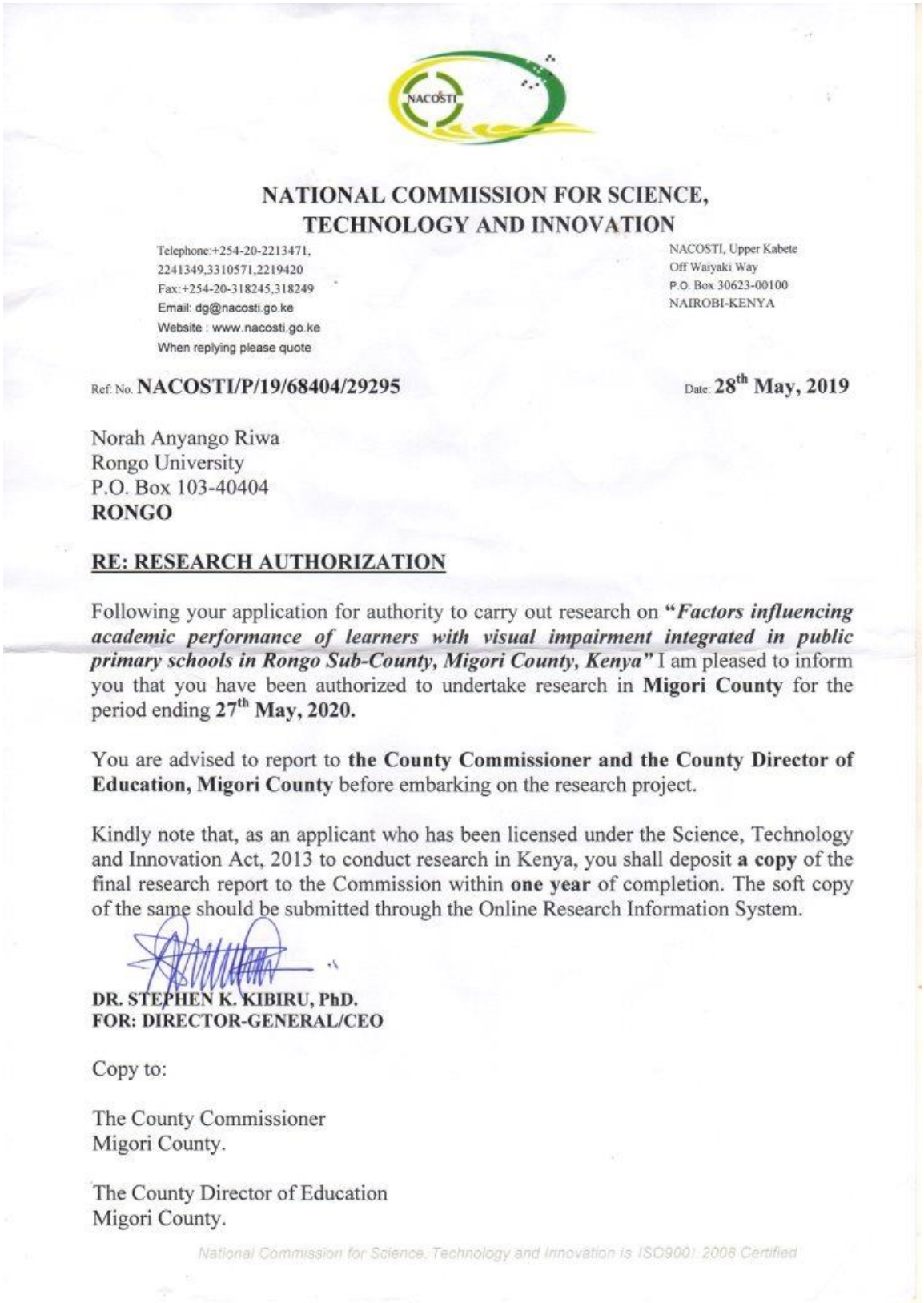
RONGO UNIVERSITY
THE DEAN
20 MAR 2018
SCHOOL OF GRADUATE STUDIES
P. O. BOX 103 - 40404, RONGO

Thank you.

Dr. Edward Anino
DEAN, SCHOOL OF GRADUATE STUDIES

Copy to: Vice Chancellor
Deputy Vice Chancellor (Academic and Student Affairs).
Dean, School of Education
HoD, Educational Psychology & science

APPENDIX IV: NACOSTI RESEARCH AUTHORIZATION



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/19/68404/29295**

Date: **28th May, 2019**

Norah Anyango Riwa
Rongo University
P.O. Box 103-40404
RONGO

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Factors influencing academic performance of learners with visual impairment integrated in public primary schools in Rongo Sub-County, Migori County, Kenya"*** I am pleased to inform you that you have been authorized to undertake research in **Migori County** for the period ending **27th May, 2020.**

You are advised to report to **the County Commissioner and the County Director of Education, Migori 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.

DR. STEPHEN K. KIBIRU, PhD.
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Migori County.

The County Director of Education
Migori County.

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

APPENDIX V: NACOSTI PERMISSION PERMIT

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, registry@nacosti.go.ke
Website: www.nacosti.go.ke

REPUBLIC OF KENYA

NACOSTI

National Commission for Science, Technology and Innovation

RESEARCH LICENSE

Serial No.A 24963

CONDITIONS: see back page

THIS IS TO CERTIFY THAT:
MS. NORAH ANYANGO RIWA
of RONGO UNIVERSITY, 0-40404 RONGO,has been permitted to conduct research in *Migori County*

on the topic: *FACTORS INFLUENCING ACADEMIC PERFORMANCE OF LEARNERS WITH VISUAL IMPAIRMENT INTEGRATED IN PUBLIC PRIMARY SCHOOLS IN RONGO SUB-COUNTY, MIGORI COUNTY, KENYA*

for the period ending:
27th May,2020

Permit No : NACOSTI/P/19/68404/29295
Date Of Issue : 28th May,2019
Fee Recieved :Ksh 1000

Riwa

.....
Applicant's Signature

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

APPENDIX VI: RESEARCH PERMISSION FROM SUB COUNTY

MINISTRY OF EDUCATION

State Department of Early Learning & Basic Education

Telephone: 0203508047
Fax no: 0203508047
When replying please quote
RON/ED/ADM/GEN/VOL 2/238

SUB COUNTY DIRECTOR OF EDUCATION
RONGO SUB COUNTY
P.O. BOX 245- 40404,
24/6/2019

The Head teachers
Rongo Sub County

RE: PERMISSION TO CONDUCT RESEARCH FOR NORAH ANYANGO RIWA TSC NO.294310

The above named officer has permission to conduct research as partial fulfillment for her Masters Degree-Rongo University.
Accord her the necessary cooperation. Attached is the letter of authorization from NACOSTI.

SUB-COUNTY EDUCATION OFFICER -RONGO
Email: dcorongo@gmail.com
P. O. Box 245, RONGO.

Odhiambo S.D
Sub County Director of Education
Rongo Sub County