INFLUENCE OF TEACHER PREPAREDNESS ON IMPLEMENTATION OF COMPETENCY BASED CURRICULUM IN PUBLIC PRIMARY SCHOOLS IN NYANDARUA NORTH SUB- COUNTY, KENYA.

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DECLARATION

This research project is my original work and has not been presented for award of a degree in any other university

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DEDICATION

This research work is dedicated to my daughter Praise Njeri who despite of being young displays extraordinary ability to explore and go beyond limits. She has been an inspiration throughout the study.

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ABBREVIATIONS AND ACRONYMS

CBA Competency Based Approach

CBC **C**ompetency Based Curriculum

CBEF Competency Based Education Framework

CSO Curriculum Support Officer

KICD Kenya Institute of Curriculum Development

KNUT Kenya National Union of Teachers

NACOSTI National Commission for Science, Technology and innovation

PCI s Pertinent and Contemporary Issues

SPSS Statistical Package for Social Sciences

USAID United States Agency for International Development

ABSTRACT

Kenya has embarked on curriculum reform to improve the quality of education. This is a crucial step in the direction of Kenya's ambition to "develop a knowledge based society" and the growth of regional and global competition in the job market. An important shift has been to move away from knowledge and skills acquisition to knowledge creation and application. The purpose of the study was to investigate influence of teacher preparedness on implementation of competency based curriculum in primary schools. Four objectives guided the study: To determine influence of teacher competence, availability of instructional materials, teachers' mode of assessment and teachers' lesson planning on implementation of competency based curriculum in primary schools. The research employed descriptive survey research design where the researcher used questionnaires, interview guides and checklists to collect data which was then used to describe why and how teacher preparedness influence competency based curriculum implementation. The target population included 336 teachers, 84 head teachers and 4 curriculum support officers making a target population of 424 respondents. Out of the 336 teachers handling the grades under competency based curriculum, 100 were purposively chosen representing a sample of 30.0 %. Out of the 84 head teachers, 17 were randomly selected representing 25.0% and 2 out of 4 curriculum officers were randomly selected representing a sample size of 50.0%. Data analysis was done using the statistical Package for Sosial Sciences (SPSS) programme and the results presented in form of frequencies and percentages. The theory of constructivism by Vygotsky guided the research based on the proponent that humans construct knowledge from their experiences. As learners in pairs or in groups interact with materials, they come up with creative solutions to tasks thereby building on their competencies. 50.6 per cent of the teachers needed support especially on infusing creativity and imagination and 69.2 per cent expressed having challenges infusing critical thinking and problem solving. 80 teachers representing 98.8 per cent of the sample size indicated they were not prepared to implement the competency based curriculum especially in the new subjects which were not equiped with instructional materials as opposed to the old subjects, mathematics and languages which had adequate materials. Majority of the teachers (53.1 per cent), confessed needing a lot of support in designing assessment rubrics, which are tasks tailored towards discerning learners abilities in performing specific tasks. Teachers were not prepared in implementing the competency base curriculum since 95.0 per cent were concerned that preparing lesson plans for all lessons was impossible owing to the much time writing a single lesson plan was taking. The researcher recommended that a framework of a training programme be enacted by the Ministry of Education on infusion, assessment and lesson planning. Competency based instructional materials should also be delivered to schools to facilitate instruction. Further research was proposed for the study: To investigate influence of school factors on implementation of competency based curriculum in primary schools.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Growing demands for the acquisition of 21st century skills and the introduction of technology to the everyday life as well as globalization of the labor market have affected the nature and meaning of learning and teaching process and brought the need to guarantee to everybody the achievement of new key competencies for their personal and social development(Pamier, 2017). Claro (2009) defines competencies as knowledge, skills and attitudes required for successful life in a knowledge-based society. The Spanish Education Act (2006) provides that a Competency Based Curriculum (CBC) is the one that incorporates core competencies as one of the elements of the curriculum and evaluation. The curriculum is defined by a series of outcomes, basic skills, content and criteria of assessment (Ananadiu 2009). Milkman (2017), explains that competency based education (CBE) sets a mastery of discrete knowledge and skills as the gate for learners to progress to more advanced content. As opposed to traditional education which was based on fixed length of academic terms, CBC allows learners to move at their own pace, spending as much or as little time on each strand as necessary to demonstrate mastery of desired competencies.

In many countries of the world, the competency based curriculum has been supported to help achieve the need for a skilled workforce for economic

development in general. In the United States (US), the competency based curriculum has made considerable inroads in recent years in the country's educational system (Natale 2011). The competency based curriculum is advancing across the country as a critical component of creating an education system able to personalize education while staying true to the vision of an equitable education system (Denise 2011). The Solomon's Island education system is currently undergoing significant restructuring and reforms through a process identified to develop a competency based curriculum that is fair and responsive to the needs of all Solomon's Islanders in order to achieve the national vision and goal of the education system as advocated in the Education System Strategic Framework(Curriculum Development Division, 2011)

Rwanda has made considerable strides to implement competency based curriculum, (Hammand, 2012). An important move has been to move away from content acquisition to knowledge and skills application. This is aimed to develop the competencies that are relevant in today's knowledge based competitive economy where every one is trying to become relevant. (Scardamalia et. al. 2012). In Kenya, the basic Education Curriculum Framework was designed to actualize curriculum reforms. (Jeng'ere, 2016). Ji (2017) explains that a competency based curriculum is a curriculum that emphasizes what the learner is expected to do rather than focusing on what the learner is expected to know. It is aimed at helping learners acquire competencies in order to produce solutions to problems in real life contexts.

Teacher competence on delivery of competency based curriculum is a priority (Gatun , 2009).For the paradigm shift to competency based curriculum to be effective, teachers must make a good choice of instructional strategies they use in order to avoid monopoly in class and to be facilitators in order to enable learners engage and interact with knowledge with minimal supervision (Kafyalulo, 2012). The government should prioritize professional development that is focused on improving content understandings and that is of extended duration and time span that are more likely to report changes to knowledge and practice (Gallagher, 2007).

In line with the current curriculum reforms , the teacher has put in mind teaching and learning resources to be used as well as preparing learning activities that will suit the ability of individual learners (cyphan, 2007). Teaching and learning resources used during instruction should bring out learners competencies as opposed to outdated methods where the teacher was the know-it-all. The teacher should now assume the role of a couch, (Duffy, 2007). In summary, the role of the teacher in creating an interactive learning environment and planning for various resources makes a difference (Postholm, 2007).

Assessment of learners' progress is key in any educational curriculum. With the paradigm shift to the new curriculum, there is need to align assessment to ongoing emphasis on competencies (O' Connor, 2009). Stiggins (2008) suggests that assessment must change from being an isolated, occasionally timed, event

normally attached at the end of an instructional programme toattached to ongoing interrelated events that demonstrate change in learners' behaviour progressively.

Planning is an important component of successful teaching, which involves the art of combining a number of different tasks into a coherent whole that learners can identify with and which students can recognize, work with and react to (Harmer, 2006). International Bureau of Education –U.N.E.S.C.O.s report on the implementation of the new curriculum states that despite the shift of the education system in Kenya from content based to competency based , various stakeholders claim that the shift has been hurriedly done without due consideration to preparing teachers properly, inadequate instructional materials and due process has been compromised.. A letter (KNUT/EDU/45/27/2017) addressed to the cabinet secretary for education by the KNUT secretary general also expressed dissatisfaction on the side of trade unions on the hasty way the system change is being implemented and called for an overhaul on the whole process.(Daily Nation,27thdec. 2017).

1.2 Statement of the problem

The degree of teacher preparedness on implementation of the competency based curriculum seemes still low despite Kenya Institute of Curriculum Development(KICD) putting measures to train teachers for a week during holidays on the same (IBE-UNESCO , 2017). In 2016, USAID through the Ministry of Education increased its support for the system of education change to

competency based curriculum by providing some level of funding to assist in the curriculum development process and production of instructional materials. Various workshops were conducted through this grant to actualize the curriculum, some materials (books) produced and teachers trained for seven days during the 2017 august holiday (IBE-UNESCO, 2017). Later, the curriculum was rolled out for piloting from pre- primary one to grade two. One year later, external reports emerged revealing that there were gaps that needed to be addressed. The Kenya Publishers Association chairman, Lawrence, (2018) had cast doubts about the implementation of the new curriculum saying materials had not been published. On observation, the researcher had seen no evidence of the presence of instructional materials in schools except for mathematics and language activities. A letter by KNUT addressed to the cabinet secretary of education in December 2017 feared that the new system was hurriedly done, without appropriate designs, pupils books and teachers were ill prepared. An external report by IBE-UNESCO, (2017) revealed that teachers of Nyeri County, subject to a case study on the new curriculum raised alarm over the too much time lesson planning was taking which compromised time for instruction and that it was difficult for teachers to construct assessment rubrics. This research work, therefore, is out to investigate influence of teacher preparedness on implementation of competency based curriculum in Nyandarua North sub county, Nyandarua county, Kenya.

1.3 Purpose of the study

The purpose of this study was to find out the influence of Teacher Preparedness on implementation of Competency Based Curriculum (CBC) in public primary schools in Nyandarua North Sub County, Nyandarua county, Kenya.

1.4 Objectives of the study

The following objectives guided the research.

(i) To examine influence of teacher competence on implementation of CBC in public primary schools in Nyandarua North sub county Kenya.

(ii) To determine influence of use of instructional materials on implementation of CBC in public primary schools in Nyandarua North sub county Kenya.

(iii) To assess influence of teachers' mode of assessing learners on implementation of CBC in Nyandarua North sub county Kenya.

(iv) To determine influence of teachers' lesson planning on implementation of CBC in Nyandarua North sub county Kenya.

1.5 Research questions

The research was guided by the following research questions .

(i) In what ways does teacher competence influence implementation of CBC in public primary schools in Nyandarua North sub county, Kenya?

(ii) What is the influence of availability of instructional materials on implementation of CBC in public primary schools in Nyandarua North sub county, Kenya?

(iii) How does teacher's mode of assessment influence implementation of CBC in public primary schools in Nyandarua North sub county, Kenya?

(iv) In what ways do teacher's lesson planning influence implementation of CBC in public primary schools in Nyandarua North sub county Kenya?

1.6 Significance of the study

The findings of this particular study would be of great benefit to teachers as the government through the department of Basic Education, in the Ministry of Education would consider training teachers adequately on the new curriculum and supply adequate materials for use during instruction. Field officers and specifically curriculum support officers (CSO s) and Quality Assurance and Standards Officers (QUASOs), would also find this research useful as it may assist them in determining areas of focus when giving formative feedback to practicing teachers on the ground. Researchers, students and other scholars would also get knowledge to supplement the existing research. Also, the ministry of education would also find it necessary to restructure primary teacher education to be CBC compliant so as to give pre-service training to teachers on the paradigm shift and therefore avoid duplication of resources.

1.7 Limitations of the study

Limitations refer to aspects of the study which may influence the results but which the researcher has absolutely no control over (Mugenda and Mugenda, 2007). The study was faced with a few limitations. Some of the respondents did not cooperate in providing necessary information for the study. This was overcome by explaining to the various stakeholders the benefits of the study. The respondents also gave socially acceptable answers to avoid offence and also to please the researcher. The respondents were assured by the researcher that their respomses would be confidential and would be used for academic purose only.

1.8 Delimitation of the study

The scope of this specific study was public primary schools of Nyandarua North sub county, Nyandarua County. Privately managed schools in Nyandarua north Sub County were not of interest for the study. The respondents were grade one and grade two teachers since the competence based curriculum is being actualised in these grades. The theoretical focus of the work was teacher preparedness on implementation of competency based curriculum in public primary schools. The factors being considered for the study were: Teacher preparedness, availability of instructional materials, teacher's mode of assessment and teachers' lesson planning.

1.9 Assumptions of the study

The study had the following assumptions;

I. Pre- primary one to grade two teachers in public primary schools in Nyandarua North sub county adhere to competency based requirements with regard to preparing schemes of work, lessons plans and assessment rubrics.

II. All pupils in public primary schools learn under the same environment in terms of physical resources and the recommended methods of teaching competency based curriculum.

III. The selected teachers were honest and they answered the questions truthfully and without bias.

1.10 Definitions of significant terms

The section provides contextual meaning of terms which were significant to the study:

Competency based curriculum refers to a curriculum that emphasizes the application of knowledge, skills, attitudes and values in real life situations as opposed to acquisition of content.

Teacher competence refers to ensuring that the teacher understands the paradigm shift in the learning approach of the new curriculum.

Instructional materials refer to the materials used by the teacher to bring out clarity on especially abstract ideas. In this case, these are course books which are CBC compliant and are expected to be in schools.

Mode of assessment refers to the tool used by the teacher to draw conclusion about the learner's level of acquiring or applying a competence

Lesson planning refers to writing a description for a step by step process where instructional resources, pedagogy, the time and place of instruction as well as mode of assessment are described in detail

Public primary school refers to schools which are run by the state under the jurisdiction of the Ministry of Education and whose source of income and expenditure are approved and controlled by the government.

Assessment rubric refers to a teacher-made tool, structured and tailored to assess learners in acquisition of a given set of instruction

Curriculum reforms refer to changes that have been effected and continue to be proposed in the system of education in Kenya.

1.11 Organization of the study

The study was organized in five chapters whereby chapter one contained the background to the study, the statement of the problem, the purpose of the study, the objectives of the study, research questions, the significance of the study, limitations and delimitations of the study, the assumptions of the study, the

organization of the study and in conclusion definition of significant terms. Chapter two contained review of related literature of the topic under study and it included teacher competence, availability of instructional materials, teacher's mode of assessment and teacher lesson planning. It also included theoretical and conceptual framework. Chapter three had research methodology which has the introduction, research design, target population, sample population and sampling procedure, research instrument, instrument validity, data collection procedure, ,analysis technique and ethical issues. Chapter four contained data analysis, presentation and interpretation while chapter five had the summary, conclusion and recommendation.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter discussed various relevant literatures to investigate teacher preparedness and its influence on implementation of competency based curriculum. It also offered both theoretical and conceptual framework on which the study was based on. The review was organized as per the objectives of the study under the following sub- headings: An overview of competency based curriculum, teacher competence and implementation of inquiry based curriculum, availability of instructional resources and implementation of inquiry based curriculum, teacher's mode of assessment and implementation of inquiry based inquiry and teachers lesson planning and implementation of inquiry based curriculum

2.2 An overview of competency based curriculum

Intrinsic desire to continuously seek knowledge is key. Deliberate initiative to integrate competencies often concentrate on nurturing skills that cut across all sectors or soft skills such as the ability to communicate, collaborate, think rationally and to look at problems critically, (Sullivan and Bruce, 2014). Competence Based Inquiry is a way of creating a learning framework designed to meet individual learners pre-determined set of abilities. Given the fact that

learners have diverse abilities, it is vital for them to comprehend and actualize that competence based learning requires that the activities are hands on and not learning just by observation (Jengere, 2017). In practice, the success of any education programme largely depends on the underlying philosophy od the curriculum design adopts (Sudsomboan, 2007). As observed by Choudana, (2008), the competency based inquiry learning is the only way to link education product with the job market. If the education process is not "work" ready, then , it should be rejected by industry. Therefore, to cut on the youth un employment levels quite rampant in African countries, consideration of "occupation specific" learning must be captured in curriculum designs and its implementation, (Sudsomboan, 2007) the competence based approach to learning revisits the entire elements of the esign , looks at the end product against prevailing system and shifts the concept of learning to acquisition of key competencies as a paradigm shift towards acquiring the 21st century skills, (Edwards .et.al., 2009)

In practice, a competency is the ability to apply learning resources: skills, knowledge, ethics and attitudes adequately in various defined real life contexts (education, work, personal or professional development) (Jeng'ere, 2017).In the competency based approach, learners are expected to be presented with resources with which they interact and construct meaning out of them .This way, they are perceived not only as consumers of knowledge but as active producers of knowledge (Barman, 2011). In fact, competency based inquiry approach is considered the way to go in terms of innovation since it emphasizes the

integrated nature of learning tasks or to face not only for the labor market but also for life.(Edward et. al., 2009)

2.3 Teachers competency and implementation of competency based curriculum in primary schools

The literature of the recent times is helping us to recognize that teacher training has to be priority in order to actualise reform in education (Gatlin, 2009).The teachers role is to provide opportunity for the learner to realize and develop full potential (Stronge et.al., 2011) .This type of approach to teaching and learning changes the teacher's responsibility from a monopoly of the instructional programme to a guide, facilitator ,whose task is to drive and guide the learning process, (Sturgis, 2010).The dated manner of schooling where learners were empty bank accounts to be filled through teaching required good specialists of teaching points and therefore, training focused on expertise in piling facts (Kleikmann et.al.,2012).In the context of 21st century skills acquisition, the facilitator has to adopt a paradigm shift in way of conceptualizing the learner as having innate abilities whose role is to nurture. This is the footpath to which education reforms seeks to follow, (Gatt, 2009). Teachers need significant knowledge and skill, ability to interact with all students, setting manageable standards and choosing instructional materials that can accommodate students at different levels (Zeiger, 2018).

The expanded learning or pathways for the target learners beyond the dated content full product attracts a system of educaton focused on knowledge , abilities and attitudes whose combination leads to efficient task performance, (Jones, 2012). The teachers mind under the new curriculum has to conceptualise the paradigm shift from teaching to learning and there fore, shifts their attention to learning experiences, (Jones et. al 2012). The teacher under the new curriculum must have in mind the extension of the teachers responsibilities focused on the connections built between the curriculum and the student during the instructional delivery (Mundia, 2017). The move from content based to competency based inquiry approach was an attempt to improve the quality of education by enabling learners to acquire the requisite competencies relevant in different spheres of life (Komba, 2016). For effective learning especially under the competency based curriculum, a good choice of a variety of pedagogy is key. As such, the teachers need to be highly knowledgable in the application of teaching strategies necessary to make pupils learning effective. (Kafyulilo, 2012). Consequently, teachers should receive adequate training on the new curriculum in the form of professional development to enable them effectively deliver their mandate (Kelly, 2018). Edebile (2009) note that a functional system of education should involve consistent retraining of teachers for efficient implementation of the curriculum.

2.4 Availability of instructional materials and implementation of competency based curriculum in primary schools

Instructional resources are the basic channel of communication in the classroom for the purpose of experiencing effective teaching and learning (Mundia, 2017). It is intolerable to do without Instructional resources in the teaching learning process. They catch and sustain learners' interest and also allow learners to discover themselves and their abilities (Adedapo, 2006). In the Nyandarua north sub county training workshop for teachers on the competency based curriculum, Mundia, a CSO, in 2017 informed teachers that curriculum designs had been distributed to schools. However, pupil's books and teacher's guides had not. The teachers were supposed to adapt their lessons by using the designs and getting relevant content from the old textbooks (K.I.C.D , 2017). Using instructional resources effectively and digital devices is key in way of making positive strides permanent for students .This can be achieved by the teacher as integrating attention, motivation and preliminary observations at the entrance of the teaching period, integrating methods and techniques in the lesson appropriately to arrest learners attention and finally summarizing, measuring and evaluating the lesson.(Gagne, 2010)

Teaching resources can be two-dimensional objects like pictures, drawings, graphics, posters and books. They could also be real objects, models or audio-visual aids like television and video (Ekieiet.al. 2014). This days , the tools are

available and should be availed in the instructional process (De-lay, 2010).This study supports the findings of Kurtdede –Fidans (2008), which suggest that the level of the use instructional resources alongside classroom teaching has yielded success during classroom instruction.

2.5 Teacher's mode of assessment and implementation of competency based curriculum in primary schools

Formative assessment is broadly considered as the process by which teachers draw out and respond to students thinking in the course of instruction (Randy et. al. 2011). Furtak and Herodia (2014), describe formative assessment as the administration of tools that enable the teacher to draw out students thinking while learning is in progress or the activities in which teachers and students engage for the purpose of drawing out conclusion about the cognitive and psychological levels of the child. It is important to think about embedded formative assessment which pays keen attention to scope and sequence of a given curriculum as well as the learners' entry behavior and experience of tasks (Kelly, 2008). Sudha (2018), emphasize that it is important to develop capacity in teachers to develop valid rubrics for assessment. This requires a complete preview to the learning outcomes , identify ability levels of learners and demonstrate the ability to develop an array of assessment ratings. Brookhart (2014) asserts that teachers should be skilled after sufficient training in designing assessment rubrics which are far much more than just grading or scoring. They give a reflection of individual learners level of

progress and areas of attention can be diagnosed for a specific learner and not collectively. The skill of designing rubrics is complex and requires that teachers are properly trained , guided and given formative feedback. The tasks or rubrics are crafted with specific questions and prompts that draw out students thinking relevant and relative to what students have just learnt, and where they are headed (Barman, 2011).

KICD (2017), provides that learning outcomes are realised through administration of assessment rubrics. A rubric refers to assessment tasks derived from a certait scope of content geared towards gadging learners ability to understand and perform a task. The training expected the teacher to decide his or her own rating, for example excellent, good, meeting expectation and below expectation based on how effectively a learner can demonstrate a competence. Kelly (2011), suggested a paradigm shift to an assessment which is embedded in different stages of instruction, informs the next instructional, step and engages learners in critical thinking about their own ideas. In using assessment rubrics, teachers are able to obtain evidence of a learner acquiring a specific competence from formal and informal learning contexts such as observation, questioning, extended work, peer and self- assessment discussions, demonstrations, projects, portfolio, performance and development of success criteria and rubric (Jeng'ere, 2017).

2.6 Teacher's lesson planning and implementation of competency based curriculum in primary schools

A lesson plan is a written description for this process where the materials, the strategy, the time and the learning environment as well as methods of evaluating the learners levels of progress are described in detail (Farrel, 2012). Williams (2005), pointed out that a lesson plan outlines the procedures which provides direction for a teacher of the choice of relevant resources to assist in the delivery of tasks be taught and how to teach them. Teachers proper decision making and planning is ideal in order to avoid students' reluctance during the teaching. The lesson plan is one means a teacher can use to manage their classes properly for it is tailored to suit the learner's needs and abilities. (Naimieet.al. 2012).

Teaching styles and learning styles should be compatible.KICD (2017), requires a conscious effort by the teacher to deliberately integrate the aspects of competency based curriculum (CBC) such as core competencies, Pertinent and Contemporary Issues (PCIs), Values, Extended learning activities and the key Inquiry Questions. Such is the requirement of grade one and grade two teachers who participated in the training. A teacher should not deliver a lesson in the absence of a reflective lesson plan because it is a requisite for successful teaching (Coppole et.al. 2004). Rugambuka (2012) notes that a well trained teacher under the competency based curriculum is able to plan and organize scope and sequence of subject matter to be taught in advance, focusing clearly on the ability of the learners in the way it

should be taught hence avoid vagueness and irrelevance, plan, prepare and assemble teaching /learning resources, present concepts and skills procedurally using appropriate pedagogy to achieve the desired lesson outcome well after instruction. Besides, the teacher should select and design and actualise appropriate assessment strategies to evaluate the teaching learning process and to make connections between components of teaching and learning.

2.7 Summary of review of related literature

Review of related literature has been done on teacher competence, availability of instructional materials, teacher's mode of assessment and teacher's lesson planning on implementation of competency based curriculum. Komba (2016), found that the level of teacher's competence influence implementation of any curriculum. Jalek (2017), expressed concern that teachers were incompetent in some subjects like creative arts and music and which they were expected to deliver. For availability of instructional materials, De-Lay (2010), advised that instructional materials should be made available through different tools such as books, videos, flip charts and realia. Facilitators Training Manual on the Competency Based Curriculum (2017), required teachers to adapt instructional materials and use them alongside curriculum designs. This is because CBC instructional materials had not been so far distributed to schools.

On the teacher's mode of assessment, Jeng'ere (2016) explains that teachers should ensure quality formative assessment which should provide individual

learner formative feedback to express a learner's individual level of achievement in the curriculum. IBE-UNESCO External Report for the Implementation of competency based curriculum, however, expressed concerns that teachers were not actually competent in constructing structural assessment rubrics, since they had not been effectively guided. Finally, Facilitators Training Manual for Early Years Education (2017) require teachers to prepare detailed, infused lesson plans. However, Otieno, (2017) of ENEZA foundation, an external monitor on the implementation of the new curriculum raised concern that teachers took too much time to lesson plan since they lacked enough guidance on the aspect of infusion.

2.8 Theoretical framework

The study adopted the constructivism shool of thought whose proponent is Vygosky. It is based on the proponent that humans construct knowledge and meaning from their experiences. The focus tends to shift from the teacher to the learner, who is the central focus of any learning situation (Kelly, 2009). The classroom is no longer a place where the teacher "the experts" banks content to passive students, who wait like empty containers to be filled. Learners are argued to be actively involved in the process of learning (Roy, 2011). The learners acquire abilities and access their understanding and thereby their learning. One huge role of the teacher is that of a coach, guide, mentor and their job becomes that of "asking good questions" that prompt learner's curiosity to work with resources and construct meaning out of them.

In a constructivist classroom, both teachers and learners think of knowledge not as abstract facts to be memorized, but as a dynamic, ever changing view of the world we live in and the ability to successfully reach out and explore that view (Bram, 2017). Learning in a constructivism environment is hands on where the teachers set the materials in order and ignites learners' minds by using inquiry methods, guides learners create their own understanding of concepts and draw individual conclusions and application of the knowledge gained (Sever, 2014)).

According to this theory, learners learn by building on the previous knowledge and experience by actively interacting with content and materials instead of receiving knowledge passively through lectures. Pedagogies include; guided discovery, discussions on thoughts and ideas as well as activities to help students learn (Hayes, 2013). Constructivism has the following strengths; teaching is effective for learners who learn better by doing and helps learners to better make the information learnt relevant in the classroom to their lives; the method caters for students prior knowledge, motivates teachers to spent more time on the students favourate areas and allows teachers to focus on important and relevant concepts; learners work in groups and pairs therefore learn coping skills, support each others learning process and value in each others opinion and input and ideas.

However, constructivism is faced with some weaknesses; training necessary for constructive teaching is extensive and often requires costly long term professional development of the teaching force. This may be unreasonable for school and

national budgets as well as destructive to the students learning as several resources may miss at some point; chances are that teachers may not be able to customize learning for each student level as their entry behaviour may vary. Finally, constructs curriculum eliminates standardized testing and grading. This eliminates grade centered targets and rewards as well as the comparison of learners across the nation or in smaller regions.

2.9 Conceptual framework

A conceptual framework refers to a diagrammatic representation of the relationships anong the variables under study, (Mugenda and Mugenda, 2007). The dependent variable is implementation of Competency Based Curriculum in public primary schools .The independent variables are teacher competence, availability of instructional materials, teacher's mode of assessment and teachers lesson planning.

The conceptual framework was developed using the input- process- outcome model. The inputs were independent variables, namely: teacher preparedness, availability of instructional materials, teacher's mode of assessment and teacher lesson planning. The process was compliance with competency based approach to teaching and learning.

The conceptual frame work has been developed as follows:

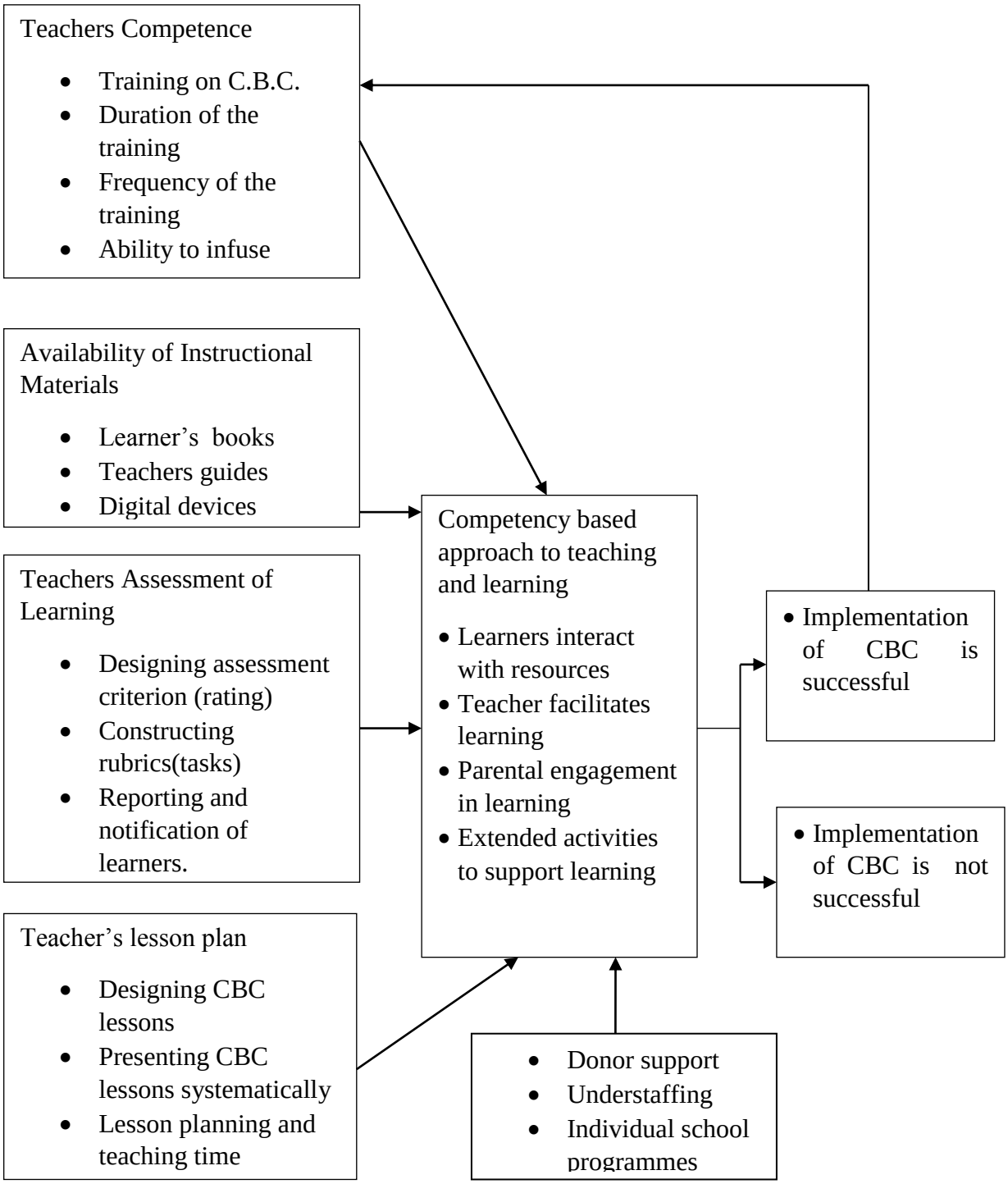

Figure 2.1: Conceptual framework showing the relationship between teacher preparedness and CBC implementation Intervening variables.

Under teacher competence, the researcher investigated the contribution of in-service training, college option, the possibility of specialization and the degree to which core competencies have been actualized.The researcher also interrogated the learner-course book ratio to establish availability of instructional materials and teachers guides. Concerning assessment in line with Competency Based Curriculum, the researcher inquired into whether teachers are able to design an assessment cliterion (rating), construct assessment rubrics (tasks) administer the tasks effectively, reporting and notification of learner's achievement after assessment and keeping assessment records for summative reports. Finally, the researcher also investigated teachers lesson planning in line with CBC and inquired as to whether teachers prepare lessons with all CBC aspects , present practical lessons systematically (following all steps), make lesson plans for all lessons and whether the teachers ensure that lesson planning doesn't eat into the lesson time. All these indicators were reflected on the Competency based approach mirror to establish whether the Competency Based Curriculum is successfully rolling or if there is need to retreat and reflect

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research methodology that the researcher adopted in his investigation. The researcher discussed target population, sampling procedure, types of instruments, validity and reliability procedures and data analysis procedures.

3.2 Research design

This study used cross-sectional descriptive survey research design. Cooper and Shinier (2003) assert that research is descriptive when it is concerned with why and how a variable influences another variable and survey if it uses questionnaires, interview guides and checklists in an attempt to collect data.. Orodho (2004) notes that descriptive survey research involves the collection of information by interviewing the respondents or by administering questionnaires to the target population. This design collects data fromsually a sub section of the entire population with respect to one or more variables (Mugenda and Mugenda, 2003). Descriptive survey research design deemed appropriate for this study so as to establish influence of teacher preparedness on implementation of competency based curriculum in Nyandarua North Sub County since it allows data to be

collected, analyzed, and reported within a prescribed period of time for academic reasons.

3.3 Target population

A target population sums up the total number of individuals to whom the research results are generalized, (Mugenda & Mugenda 2003). Orodho (2005), also defines target population as the entire number of people under consideration in any field of inquiry. Frankel &Willen (2006) explain that the researcher is more confident in making generalization if the target population is homogeneous. Nyandarua North Sub County has 84 public primary schools. The research involved all the head teachers in the 84 public primary schools as they supervise curriculum implementation in their respective schools. The research also involved Pre-primary one to Grade 2 teachers in all the 84 schools. Each grade had one teacher. Curriculum Support Officers (CSOs) were also involved as they oversee curriculum implementation in the zones. This made a target population of 84 head teachers, 336 Pre-primary one to grade two teachers and four CSO s representing the four zones making the sub county; hence a target population of 414. (Education Office, Nyandarua North Sub County).

3.4 Sample size and sampling procedures

Sampling is the process of selecting a representative of the entire population such that the selected group contains elements representative of the characteristics found in the entire group. According to Mugenda & Mugenda, (2003) ,a sample

size of 10% -30% of the target population is sufficient to make a generalization. The sample size and sampling procedures employed are shown in table 3.1

Table 3.1: Sample size

Respondents	**Target population**	**Sample size**	**Percent**
Head teachers	84	17	20.0
Teachers	336	100	30.0
Curriculum Support Officers	4	2	50.0

Table 3.1 shows the sample size for the study. The research used 20 % of the public primary school head teachers in the Sub County which makes 17 head teachers. 2 Curriculum Support Officers representing 50% of the total 4 was also used. Both the head teachers and the C.S.O.s were selected through simple random sampling where a code was assigned to every member of the entire population, written on a piece of paper, folded and put in a box. Selection was then done with replacement until the required sample sizes were gotten. Teachers totaling to 100 were selected through purposive sampling because they were the ones implementing the Competency Based Curriculum.

3.5 Research instruments

Data was collected using questionnaires and an interview guide. Each of these instruments was divided into five parts, A B C D and E, each of which addressed different issues with regard to implementation of the new curriculum. Part A had Background information, Part B addressed Teacher competence, Part C availability of instructional materials, Part D addressed teachers' mode of assessment while Part E addressed lesson planning and implementation of Competency Based Curriculum. Head teachers supervise curriculum implementation in their respective schools while the C.S.O s do the same in their zones. Learners did not participate in this research since they are too young. The instructors responded to questionnaires while the interview guide were administered to the head teachers and C.S.O.s to collect data on teacher preparedness, availability of instructional materials, Teachers' mode of assessment and Teacher's lesson planning. The responses to the research instruments were hinged to a 4 point Likert scale. The questionnaires incorporated closed ended questions, enabling collection of quantitative data while the interview guide contained open ended questions to attract qualitative data.

3.6 Validity of instruments

Validity refers to the degree to which a research instrument measures what it purports to measure. It refers to the correctness of the implications which are grounded on the study outcomes. It is seen to be the degree to which outcomes

obtained from a scrutiny of the data truly reflect the objectives under study. Validity is concerned with accuracy of data results. The questionnaires were appraised by the supervisors and adjustments done as content validity was used to measure the degree to which data collected using questionnaires truly represent specific domain of indicators under research. Finally, face validity was done via a pilot study.

Piloting, also referred to as feasibility studies, refers to small scale versions or trials done in preparation of the major study (Polit, 2001). It is the pre-testing of particular research instruments with a view that it might give advance warning about where the main research paper could fail, where research protocols may not be followed or whether proposed methods or instruments are inappropriate or too complicated (Baker, 2004). Mugenda & Mugenda (2007), asserts that 10% of the sample size is ideal to measure the face validity of research instruments. Thus, piloting was done on 7 teachers and 1 head teacher who were randomly selected. Necessary adjustments were thereafter done to the items in the instruments in preparation for the main research.

3.7 Reliability of the instruments

Reliability measures the degree to which the research instruments give consistent results in subsequent trials (Orodho 2004). It is the degree to which empirical indicators are consistent in two or more trials (Kothari 2006). The researcher still uses the test re test reliability test where the same instrument was administered

twice to the same respondents to determine the reliability of the instruments. A correlation coefficient of 0.75 was used for the study. The collected scores were then computed by use of Pearson Moment Correlation Coefficient (r) using the following formula

$$r = \frac{N\sum XY-(\sum X)-(\sum Y)}{\sqrt{N\sum X2-(\sum X2)\ N\sum Y2-(\sum Y)2}}$$

Where;

$\sum Y^2$= sum of the squared Y scores

$\sum XY$= sum of the products of paired X and Y scores

N= number of paired score

$\sum X$= Sum of X scores

$\sum Y$= sum of Y scores

$\sum X^2$=sum of the squared X scores

According to Kothari (2011) a reliability coefficient of more than 0.5 is considered adequate enough for research results resulting from the administration of research instruments to be used in social research. A reliability index of 0.01 was used for the teachers' questionnaires.

3.8 Data collection procedures

The researcher obtained a research permit from the National Council for Science and Technology (NACOSTI). The acquired permit was then be taken to the county commissioner and the sub county director of education of Nyandarua

North Sub County. A prior visit to the sampled schools was done for the researcher to familiarize with the respondents and explain to head teachers the procedure and purpose of the study after which the questionnaires were administered. Immediately the questionnaires were filled they were collected, awaiting cleaning.

3.9 Data analysis technique

Data cleaning began immediately all data was collected. This involved the identification of incomplete or in accurate responses which were rectified in order to improve the quality of the responses. The information was then coded and categorized according to the items in the questionnaire and interview guide. The data was then entered, organized, and analyzed using the statistical package for social sciences (SPSS) version 20.0 which is recommended for use due to its accuracy and speed processing. The four research questions were answered through thematic discussions. Descriptive data analysis technique was used to determine the frequency and the percentages of demographic characteristics. The results of the analyzed data were then presented using visual diagrams like charts and tables.

3.10 Ethical considerations

Before consenting to participate in the research, the participants were fully informed about the general purpose of the study and any possible factor that could affect their willingness to participate explained. The respondents were then

assured that their rights and privacy shall continue even after the research. The researcher was truthful to all participants and has not put them into situations where they might be at risk of harm as a result of their participation in this research. The principle of voluntary participation was adhered to throughout the whole research.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, DISCUSSION AND INTERPRETATION

4.1 Introduction

This chapter is a presentation and discussion of the research results for the study on the influence of teacher preparedness on implementation of Competence Based Curriculum (CBC) in public primary schools. The research results presented are on the respondents' response rate of research instruments, demographic data of the respondents who consisted of teachers, head teachers and Curriculum Support Officers. The research further presented and discussed teachers' competence, availability of instructional materials, teachers' lesson planning and head teachers and Curriculum Support Officers' mode of assessment as issues on the implementation of Competence Based Curriculum.

4.2 Response rate of research instrument

The research instruments which were used in this study consisted of teachers' questionnaires and interview guides for the head teachers and Curriculum Support Officers. The questionnaires were administered to teachers in pre-primary one to grade two while the interview guides were for the head teachers in the sampled public primary schools and the Curriculum Support Officers in the Sub-Counties

of the sampled public primary schools. Their rate of response is as indicated as shown.

Table 4.2 Response Return Rate of the Research Instruments.

Respondents	Sample	Returned Rate	Percentage Return rate
Teachers	100	81	81.0
Head teachers	17	14	82.3
Curriculum Support Officers	2	1	50.0
Total			**81.0**

Table 4.2 shows that only one Curriculum Support Officer out of the expected two was interviewed giving a response rate of 50 percent. The head teachers interviewed were 14 out of 17 giving an 82.3 percent response rate. Out of the 100 questionnaires administered to the Pre-primary 1, 2, Grade 1 and 2 teachers in the sampled public primary schools, 81 were filled as expected and returned representing a response rate of 81 percent.

The overall response rate of all the instruments was 81.0 percent. According to Aday & Cornellius (2006), response rate is viewed as an important indicator in determining the quality of survey. Bram (2015) asserts that a sample which is more than 80% is quite appropriate for quality survey and thus, this study considers it to be appropriate for making conclusions.

4.3 Demographic data of the respondents

This section presents the background information of the respondents who consisted of the head teachers, teachers and the curriculum support officers of the Sub- Counties of the sampled public primary schools. The background data analyzed herein consists of gender, age and experience in teaching of the respondents.

4.3.1 Gender of head teachers and teachers

The Gender of Head teachers and Teachers results are indicated as shown.

Table 4.3 Gender of head teachers and teachers

Gender	Head teachers		Teachers	
	f	%	f	%
Male	4	28.6	20	24.7
Female	10	71.4	61	75.3
Total	**14**	**100.0**	**81**	**100.0**

The results in Table 4.3 revealed that a majority of teachers teaching lower primary grades were females (75.3%). Further, gender parity had not been achieved even in headship as out of the fourteen heads being interviewed, ten were female representing 71.4%. This is contrary to Makura(2009), whose position is that women face leadership challenges due to their lack of confidence, teachers negative attitude towards female primary school heads and their unwillingness to face hardships related to distance and weather. This differs with sentiments by Nzeli (2013), who believes that primary schools headed by females perform better because of their proper management skills and the zeal to affirm that they to are not any lesser.

4.3.2 Age brackets of head teachers and teachers

Research instruments administered to the respondents included a stem on their ages to link that to their understanding of the paradigm shift towards the new system. Their ages are indicated as shown.

Table 4.4: Age of head teachers and teachers

Age	Head teachers		Teachers	
	f	%	f	%
19-30	1	7.1	26	32.1
31-40	10	71.4	25	30.9
41-60	3	21.5	30	37.0
Total	**14**	**100.0**	**81**	**100.0**

The results in Table 4.4 show that the majority of pre- primary one to grade two teachers are aged between 41-60 years. Only 32.1 percent are between 19-30 years. However, majority of head teachers are between 31-40 years (71.4 percent), revealing that most schools in the region are managed by the young generation. This scenario concurs with Pont (2015), who argues that young head

teachers invest most of their time and energy in the school and are either to prepare the younger generation to meet new challenges and the demands of a dynamic world. They have room for improvement to professionalize school leadership,support current school leaders and to make school leadership an attractive career for future candidates. Leithwood (2006), however, differs with the sentiments and argues that improved and consistent learners' outcome are a result of head teachers' experience in the practice of school management of human and physical resources.

4.3.3 Teaching experience of head teachers and teachers.

The researcher sought to understand the respondents experience in the teaching of lower grades to link that to the understanding of the physical versus cognitive growth of the learner. Their response is indicated in Table 4.5.

Table 4.5: Teaching experience of head teachers and teachers.

Experience in years	Head teachers		Teachers	
	f	%	f	%
0-10	5	35.7	25	30.9
10-30	3	21.4	27	33.3
Over 30	6	42.9	29	35.8
Total	**14**	**100.0**	**81**	**100.0**

Table 4.5 indicates that a lower primary teaching experience of 0-10 years occupy the least percent (30.9 percent). Those with an experience of 10-30 years are 27 occupying a higher level of 33.3 percent. The highest percentage is the teachers with an experience of over 30 years. These findings are in agreement with Millinger (2018), who explains that teachers with a vast experience in handling young children have accumulated kid friendly set of qualities, have patience and a sense of humour and demonstrate an understanding that all children are different. They are also flexible and can tolerate young childrens' ability and speed of acquiring new competencies.

4.3.4 Distribution of teachers according to grades concerned.

The research instruments focused on investigating how teachers are distributed across PP1 to grade 2 and thereby gather data if headteachers have a direct contact with the concerned grades. Their response is displayed as shown.

Table 4.6: Distribution of teachers according to teaching grades.

Grade	Head teachers		Teachers	
	f	%	f	%
PP1	1	7.1	18	22.2
PP2	3	21.4	23	28.4
Grade 1	5	35.7	17	21.02
Grade 2	5	35.7	23	28.4
Total.	**14**	**100.0**	**81**	**100.0**

Table 4.6 indicates that both head teachers and teachers are involved in teaching lower primary grades. This gives an implication implies that head teachers are involved in the classroom supervisory role and can therefore assess any challenge learners encounter and can hence seek mitigation measures. They are also sensitive to the level of success learners make in acquiring new competencies. They have hands on experience. Mulford (2013), agrees with these findings and notes that head teachers should contribute to the improvement of classroom teaching practice and should be role models for their juniors to emulate. Roy (2010), however, disagrees with this opinion and argues that the role of the head

teacher is to provide educational vision and direction rather than teaching in the classroom.

4.4 Teachers' Competence and Implementation of Competency Based Curriculum.

The first objective of the study was to determine the influence of a teacher's competence on implementation of competency based curriculum. The researcher was interested in finding out the following: Taining on the competency based curriculum, the duration of training , frequency of training and infusion of core competencies

4.4.1 Training on the competency based curriculum

The researcher was interested in information regarding the impact of the training on Competency Based Curriculum in terms of attendance of headteachers and teacher in such trainings. The responses were presented as shown.

Table 4.7: Training on the competency based curriculum

Attendance	Headteacher		Teacher	
	f	%	f	%
Trained	14	100.0	79	97.5
Not trained	0	0.0	2	2.5
Total	**14**	**100.0**	**81**	**100.0**

The results in the Table 4.7 above reveal that almost all teachers (97.5 percent) attended workshops on Competency Based Curriculum training and the paradigm shift from teaching to learning. All head teachers (100.0 per cent) were duly trained. Stronge, (2011) emphasizes that teachers must be trained to internalize their role in providing opportunity for the learners to realize and develop full potential in their day to day process of instruction. Gatt (2009) agrees with this arrangement by indicating that in the context of knowledge based economy, the teaching force has to be trained to adopt a complex, evolutionary and responsive approach regarding educational reforms. The 2.5 percent who did not train could be attributed to the nature of their work and the fact that such trainings are planned during holidays .

4.4.2 Duration of training on competency based curriculum.

The questionnaires and the observation schedules had a stem on the duration of the training to link the information on how effective competency based curriculum trainings had been. The results were presented as shown.

Table 4.8: Duration of training on competency based curriculum.

Duration	Headteachers		Teachers	
	f	%	f	%
One week	14	100.0	80	98.8
Two weeks	0	0.0	1	1.2
Total	**14**	**100.0**	**81**	**100.0**

Table 4.8 indicates that almost all teachers (98.8 percent) attended a one week training on the Competncy Based Curriculum. This was also so with the head teachers who recorded a 100.0 per cent attendance. Kelly (2018), however, cautions that this duration is not adequate and affirms that a competent teacher is critical to students' achievement. Teachers must adequately train for two years

and must receive ongoing trainings even as they work in the classroom. This give teachers the background information they will need in the classroom.

4.4.3 Frequency of the training of teachers on competency based curriculum.

The researcher sought to investigate how often trainings on competency based curriculum had been convened to ascertain how teachers had internalized the paradigm shift to the new curriculum. The results presented as shown.

Table 4.9: Frequency of the training of teachers on competency based curriculum.

Frequency of training	Headteachers		Teachers	
	f	%	f	%
Termly	14	100.0	80	98.8
Yearly			1	1.2
Total	**14**	**100.0**	**81**	**100.0**

Table 4.9 reveals that all the 14 (100.0 per cent) attend a one week training every term. 80 (98.8 per cent) of the teachers also do attend a one week training termly on the paradigm shift from content based yo the curriculum based curriculum. A negligible number (1.2 per cent) do not. Kleikman (2012), concurs with this arrangement and notes that teachers in Competency Based Approach need to be

specialists in learner-centered pedagogical experience in order to adopt the paradigm shift from teaching to learning.

4.4.4 Infusion of core competencies during instruction.

The research instruments sought data on the degree to which teachers were able to infuse core competencies during instruction. The responses are summarized as shown.

Table 4.10: Infusion of core competencies during instruction.

Core competency infused	Very well done		Well done		Developing		Needs support	
	f	%	f	%	f	%	f	%
Communication and collaboration	-	-	-	-	59	72.8	22	27.2
Critical thinking and problem solving	-	-	2	2.4	56	69.2	23	28.4
Creativity and imagination	-	-	2	2.5	38	46.9	41	50.6
Citizenship	-	-	71	87.7	7	8.6	3	3.7
Learning to learn	-	-	38	46.9	20	24.7	23	28.4
Self efficacy	-	-	32	39.5	21	25.9	28	34.6
Digital literacy	1	1.2	29	35.8	26	32.1	25	30.9

n=81

Table 4.10 indicated varied level of achievements of teachers in the infusion of core competencies during instruction. A majority of the teachers felt that learners were able to construct self concept which encompasses self awareness, self esteem and self confidence- self efficacy (39.5 percent). Instructors also felt that learners were social, respectiful of diversity, engaged and exhibited a repertoire of values-citizenship (87.7 percent). Learners had also developed an intrinsic desire to continuously seek more knowledge for self development through experience, collaboration and interaction with others-learning to learn(46.9 percent).

From observation, the researcher found out that learners worked in pairs and in groups, shared thoughts and resources, looked eager to find solutions to problems through exploration. The researcher also observed that learners respected each other's opinions and had respect for individual differences. This imply that learners were developing in terms of acquisition of self efficacy, citizenship and learning to learn.

However, the researcher observed that most learners had challenges applying learnt knowledge to solve word problems. Learners had difficulties expressing themselves both verbally and in writing. Most learners were not imaginative and creative in terms of doing things in unique ways and fashions. It means that teachers needed support in infusing some competencies. In support of this concerns, 10 head teachers and a curriculum support officer in an interview had

expressed serious concerns that teachers needed support in infusing communication and collaboration, creativity and imagination and in critical thinking and problem solving.

Further, 72.8 per cent of the teachers in ther reasponse to questionnaires had confessed needing a lot of support in communication and collaboration, 46.9 percent in creativity and imagination and 69.2 percent in critical thinking and problem solving. Zeiger (2018), asserts that several factors ranging from lack of sufficient knowledge and skill, inability to positively interact with all students by the teacher, setting higher expectations for learners than they can manage and ignorance of the importance of choosing and creating instructional materials to accommodate students at all levels could contribute to this challenges. Gatun,(2009), agrees with this argument and emphasizes that teacher competence on deliverly of Competency Based Curriculum is a priority. This imply that teachers are not adequately prepared to implemernt the new curriculum since ,though trained for a short time, they are still incompetent in infusing most of the competencies

4.5 Availability of instructional materials and implementation of Competency Based Curriculum.

The second objective of the study was to examine influence of availability of instructional materials on implementation of Competency Based Curriculum. The researcher sought to investigate whether course books and teachers guides were

available for instruction and if handbooks used to expound the designs had been received for use.

Table 4.11: Availabilty of instrument materials according to teachers

Course material	Adequate		Availability but Not Adequate		Not Adequate	
	f	%	f	%	f	%
English Activities	80	98.8	1	1.2	-	-
Mathematical Activities	80	98.8	1	1.2	-	-
Literacy Activities	79	97.5	2	2.5	-	-
Kiswahili Activities	81	100.0				
Environmental Activities	-	-	1	1.2	80	98.8
Creative activities	-	-	-	-	81	100.0
Hygiene and Nutritional activities	-	-	-	-	81	100.0
Music activities	-	-	1	1.2	80	98.8
Christian Activities	-	-	2	2.5	79	97.5
Digital devices	1	1.2	75	92.6	5	6.2
Handbooks	-	-	-	-	81	100.0

n=81

The results in Table 4.11 reveal that teachers felt that instructional materials for teaching mathematics, English and Kiswahili activities were available and adequate (98.8 per cent). On observation, the researcher found out that instructional materials for teaching mathematics, language, literacy and kiswahili activities were available and adequate depending on the number of learners in a class. It implies that the government through Kenya Institute of Curriculum Development (KICD) had availed the materials for use during instruction. The researcher , however , observed that all the other activity areas were seriously deprived as far as availability of instructional materials were concerned. On being interviewed, curriculum support officers and head teachers had also raised alarm that there had been minimal learning in these activity areas since course books and teachers guides had not been availed. Teachers had been using the new designs while adapting materials from the outgoing curriculum, posing a serious scenario. Furthermore, handbooks were not available at all which means that teachers were not orientated at all on the use if instructional materials and their level of compliance to the curriculum design. Sasson (2009), raises concern with this situation and affirms that instructional materials should be developed and improved to suite teaching points. In support of this view, Wales (2009), asserts that the use of adequate and relevant instructional materials helps in indepth understanding of subject matter by learners. Keachie, (2013) notes that before engaging in any curriculum implementation, selection of relevant and adequate

instructional materials is a priority and that the materials should meet the needs of learners and fit the constraints of the teaching and learning environment. This imply that teachers are not prepared to handle the newly introduced activity areas since they are not equiped with instructional materials as opposed to the old activity areas, mathematics and language activity areas which are adequately equiped.

4.6 Teachers' mode of assessment and implementation of Competency Based Curriculum.

This objective was to assess influence of teachers' mode of assessments on implementation of competency based curriculum. The researcher was out to find out whether the teachers were competent in designing criterion (rating), construct assessment rubrics (tasks) and report learners progress after formative assessment and if they kept assessment records for summative reporting. The research findings are indicated as shown.

Table 4.12: Teachers' mode of assessment of competency based learning.

Indicator	Very well done		Well done		Developing		Needs support	
	f	%	f	%	f	%	f	%
Ability to design criterion	-	-	1	1.2	43	53.1	37	45.7
Ability to Construct rubrics	-	-	1	1.2	37	45.7	43	53.1
Reporting After formative Assessment.	-	-	31	38.3	24	29.6	26	32.1
Keeping Assessment Records for Summative Reporting.	-	-	22	27.2	26	32.1	33	40.7

n=81

The results in Table 4.12 indicated that teachers felt incompetent in designing assessment criterion or assessment rating (45.7 per cent). The researcher, on observation, saw no evidence of teachers designing their own criterion. Teachers used the only example used during training of: exceeding expectation, meeting expectation, approaching expectation and below expectation. On being interviewed, the curriculum support officers and the head teachers had indicated that teachers had not quite internalized how to design tailored criterions, since assessment criterions could vary depending on the task , grade and the respective activity area.

On designing rubrics which measure how a learner is able to perform a specific task, the researcher observed that teachers needed support on the same for instance, on interviewing teacher 002 on how she assessed her learners, she claimed that *" teachers developed tests at the end of the term or the year , whose content was questions on competency based curriculum"* as opposed to examining a particular scope of study and conclusively determining individual learners ability in the specific area. On administration of questionnaires, teachers had indicated needing support on designing rubrics.

A good effort ,however, was observed by the researcher on reporting learner's progress after formative assessment as teachers made sure that learners were informed of their progress immediately after completing a task. A good example is teacher 11 whose task was washing hands in hygiene and nutrition and the rubric was: fold the sleeves of your pullover, apply soap, wash your hands, rinse

with clean water, rub your hands with a towel. After performing the task, the teacher would report, "*Cynthia, you did not fold your sleeves, you applied soap, you washed your hands well ,rinsed them with clean water but forgot to rub your hands with a towel. Cynthia is meeting expectation. Clap for her.* Findings from questionnaires and interview guides had also indicated that teachers were doing well in reporting learners' progress in formative assessment (38.3 per cent)

Keeping assessment records for summative summative reporting means keeping track of individuals learners progress for a term or an year then report to stakeholders. In English ,for instance, a learner's record can be : Billy understands vowels , constructs syllables, joins syllables to form simple words but cannot join words to make English sentences. On observation the researcher saw no evidence of such records. 40.7 per cent of the teachers had indicated needing support on this. On being inSterviewed, curriculum support officers and the head teachers had indicated that teachers needed support in keeping assessment records for summative reporting. This imply that teachers are not adequately prepared to implement the new curriculum since they have challenges in designing criterion,constructing rubrics and in keeping assessment records for summative reporting.

4.7 Teacher's lesson planning and implementation of Competency Based Curriculum.

The fourth objective was to determine influence of teacher's lesson planning on implementation of competency based approach to learning. The researcher focused his study in finding out if teachers: Wrote lesson plans with all competency based approach aspects, presented competency based curriculum lessons systematically, planned for all timetabled lessons and if teachers made sure that lesson planning never went into teaching time.

On being interviewed, the teachers responses were as displayed as shown.

Table 4.13: Teachers' lesson planning and Competency Based Approach.

Indicator	Very well done		Well done		Developing		Needs support	
	f	%	f	%	f	%	f	%
Writing lesson Plans with all CBC aspects	-	-	22	27.1	25	30.9	34	42.0
Presenting CBC Lessons Systematically	-	-	23	28.4	24	29.6	34	42.0
Preparing lesson Plans for all Lessons	-	-	-	-	4	4.9	77	95.1
Making sure lesson Planning doesn't eat Into teaching time	-	-	23	28.4	24	29.6	34	42.0

n=81

The results in Table 4.14 revealed that a majority of teachers felt incompetent and needed support in designing lesson plans with all CBC aspects and in presenting competency based lessons systematically (42.0 percent). 95.1 percent of the teachers indicated that it was impossible to prepare lesson plans for all lessons. Only 4.9 percent felt otherwise. Most of the teachers (42.0 percent), felt that lesson planning consumed much time and went into teaching time. The researcher observed that teacher were making deliberate efforts to write lessons with all CBC

aspects although most aspects were shallowly described. Moreover, lesson plans had not been written for all lessons. Most teachers were seen by the researcher lesson planning aven during teaching time.

On being interviewed, curriculum officers commented that teachers were developing well in delivering competency based lessons systematically. However, the curriculum support officers and the head teachers expressed concerns over having observed teachers attempting to write lessons during the time of instruction. This implies that teachers were not fully prepared for lessons when it came time to practically present lessons in class. The general feeling was that teachers were incompetent in lesson planning as far as inquiry based approach to lesson planning was concerned. This situation differs with Jengere (2017), who cautions that for effective learning to occur under the competency based approach, teachers should be adequately equipped with necessary skills to prepare and deliver lessons using the inquiry based approach. In support of this view, Roy, (2012) asserts that teachers should be skilled in facilitating differentiated learning to ensure that all learners were wholly engaged in learning.

A well trained teacher under the competency based curriculum is able to organize content to be taught in advance, focusing clearly on the scope to which subject matter ought to be covered and the way it should be taught hence avoid vagueness and irrevance; plan, prepare and assemble teaching/ learning resources.

The teacher is able to present concepts and skills in a systematic manner using appropriate strategies to achieve the stated learning outcomes. The teacher is a good manager of time, selects and designs appropriate assessment methods to evaluate the teaching and learning process and to make connections between components, (Rugambuka, 2012). Sever, (2011) emphasizes on embedding and infusing the aspects of CBC such as core competencies, pertinent and contemporary issues, non-formal learning activities and links to other subjects. A conscious effort must be made during lesson planning to include the types of questioning techniques that will be used in the lesson. This implies that teachers are not ready to implement the new curriculum since grasping the expectation as far as lesson planning is concerned has been a challenge.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter gives a summary of the study, conclusions, recommendations and suggestions for further research. The summary of the study highlights the findings of the study on the influence of teacher preparedness on implementation of Competence based curriculum in public primary schools. From the summary of the research findings, conclusions are drawn and from the conclusions the recommendations emerge.

5.2 Summary of the study

The needs of a knowledge based socierty has nacessitated the alignment of the education system in Kenya towards competency based approach to teaching and learning. The aim is to guarantee to every learner the achievement of new key competencies in order to become relevant both in their personal, social and economic spheres of life and the socierty at large. Competency based curriculum sets a mastery of discrete knowledge and skills as the gate for the learner to progress to more advanced content. It puts the learner at the centre of the learning process, allowing learners to move at their own pace , spending as little or as much time on each sub strand as necessary to demonstrate mastery of the desired competencies. This paradigm shift is a requisite for the achievement of 21st

century skills needed for the national and global development both socially and economically.

The focus of the first objective was to determine influence of teacher competence on implementation of competency based curriculum. 79 (87.5 percent) of the teachers and all the 14 (100.0 percent) of the head teachers had attended trainings on competency based curriculum during holidays. However, results of data analysis revealed that teachers needed a lot of support in infusing core competencies where 56 (69.2 per cent) needed support in infusing critical thinking and problem solving, 41 (50.6 per cent) in creativity and imagination and 59 (72.8 per cent) in infusing communication and collaboration. The researcher had observed a similar situation with no evidence of learners being able to apply learnt knowledge in various contexts, lacking new, unique .stylish ways of solving and displaying results and most learners demonstrated difficulties expressing themselves quite well in english and kiswahili in pairs and in their groups.

The researcher sought to investigate influence of availability of instructional materials on implementation of competency based curriculum in primary schools. 80 (98.8 per cent) of the teachers and 14 (100.0) per cent of the head teachers concured that instructional materials for teaching mathematics and language activity areas had been delivered to schools and were adequate. On the contrary, 79 (97.5 per cent) of the teachers and all the 14 (100.0 per cent) of the head teachers had expressed serious concerns that materials for all the other activity

areas had not been availed including handbooks. Upon observation, the researcher had seen no evidence of such materials in schools. This implied that learning had been minimal, if any, in these activity areas since instructional materials for use were at large.

On the next objective , the researcher sought to find out influence of teacher's mode of assessment on implementation of competency based curriculum in primary schools. 37 (45.7 per cent) of the teachers indicated that they needed support in designing assessment criterion, 45 (53,1 per cent) of the teachers indicating they needed support in construcying assessment rubrics and 33 (40.7 per cent) of the teachers confessed having challenges and needed support in keeping assessment records for summative reporting. This implied that teachers needed re-training on the aspect of assessment as far as the competency based curriculum was concerned.

The fourth objective was to determine influence of teacher's lesson planning on implementation of competency based curriculum in primary schools. 77 (95.1 per cent) of the teachers raised concerns over the too much time writing a single lesson plan was taking causing lessons preparation to go into teaching time. Further, 34 (942.0 per cent) of the teachers claimed needing support in wriring lesson plans with all the competency based curriculum aspects well thought of and in presenting the lessons systematically. There emerged the need to consider

training the teachers adequately on the issue of preparing lessons using the competency based approach.

5.3 Conclusion

From the study findings, the researcher concluded the following based on research objectives. Teachers are still incompetent in the delivery of using the competency based approach. Whereas they have tried to impose self efficacy, learning to learn and citizenship, they need adequate training and most receive ongoing trainings even as they work in the classroom a functional system of education. Should involve consistent re-training of teachers for efficiton implementation of the curriculum.

Adequate and relevant instructional materials which help in depth understanding of lessons by learners had not been delivered to teachers long before the curriculum is rolled out. This instructional material, should meet the need of the learners and fit the constraints of the learning environment. It is against the conventional common practice for teachers to see a new design, alongside the adaptation of dated instructional materials.

It was below expectations the ability of teachers to design assessment crieterion (rating). An array of ratings however in the education arena and thus teachers should be empowered cognitively on how to design a suitable rating to suit a certain area of interest to assess. Adequate guidance constructing assessment tasks or questions to use in assessment is also key. A manageable time saving format

for writing lesson plans need to be agreed upon one that motivates teachers and reaches the target group – learners. Teachers needed support is the area of lesson planning.

5.4 Recommendations

Given the findings of the conclusions of this study, the research recommends the following;

i. The government through the Ministry of Education and other stakeholders should adequately create a framework of training program on preparing the teacher on the paradigm shift from teaching to learning. Various components of the curriculum design are not properly grasped by most teachers, especially assessment using rubrics and reporting after the same.

ii. In order to make teaching practically possible and interesting, stakeholders should come together and agree on a manageable format of lesson planning which can take reasonable time to prepare and whose effect after the presentation is good. Lesson planning does not surpass learners intended benefits from the learning experience.

iii. Assessment of individual learners achievement is key. The competency based approach of using rubrics to test this component is goods. However, it should be made practically possible within the contexts in which our learners are across the nation. This mode is not practically possible in most Kenyan

schools contexts when one class has over 60 learners to be managed by only one teacher. More teachers should be hired and classroom built to achieve the international best practice of 40 learners in class against one teacher.

5.5 Suggestions for further research

The researcher recommends the following areas are recommended for further research in line with the implementation of competency based curriculum;

i. A study to investigate influence of school factors on implementation of competency based curriculum.

ii. A study to assess influence of pupil related factors on implementation of competency based curriculum.

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APPENDICES

APPENDIX A: LETTER OF INTRODUCTION

University of Nairobi
Department of Educational Administration and Planning
P.O. Box 30197-00100
Nairobi
Date: 20/10/2018.

To
The Head teacher,
.....

Sir/Madam,

RE: PARTICIPATION IN RESEARCH

I am a postgraduate student at the School of education, University of Nairobi currently working on a research topic on Influence of teacher preparedness on implementation of competency based curriculum in public primary schools in Nyandarua North Sub County, Kenya. I request that you allow me to obtain data from your organization because it has been selected randomly. The information you give is for academic purpose only and your identity will be confidential. Thank you in advance.

Yours faithfully,

Julius WanyoikeWaweru

APPENDIX B: TEACHER'S QUESTIONNAIRE

This questionnaire seeks information on teacher preparedness on implementation of competency based curriculum in public primary schools, Nyandarua North sub-County. Your careful, complete and honest responses will assist in collecting valid data. The information you will give will be used for research purposes only and will not reflect or you as an individual or as school.

Section one: Background information

1. What is your gender? Male ( ) female ( )

2. What is your age bracket are you?

   19-30yrs ( ) 31-40yrs ( ) 41-6oyrs ( )

3. How many years have you taught in primary school(s) ……..

   0-10yrs ( ) 10-20 yrs ( ) over 20 yrs ( )

4. What grade are you currently teaching?

   Grade1 ( ) Grade2 ( )

Section two: Influence of teacher competence on implementation of competency based curriculum

5. For how many years have you taught in lower primary grades?

   0-5 ( ) 5-10 ( ) 10 and above ( )

6. Do you attend any in-service training on the Competency Based Curriculum?

   Yes ( ) No ( )

7. If yes, how long is the training?

   One week ( ) two weeks ( ) three weeks ( )

8. How often is the training?

Competency	**Very well**	**Good**	**Developing**	**Needs support**
Communication and collaboration				
Critical thinking and problem solving				
Citizenship				

Creativity and imagination				
Learning to learn				
Self efficiency				
Digital literacy				

Monthly ( ) Termly ( ) Yearly (

Please, indicate by the use of a tick in the related columns the extent to which you have been able to infuse the following core competencies appropriately during instruction.

Section three: Availability of instructional materials and implementation of CBC

9. How many learners do you have in your class?

……

……

Please, indicate by the use of a tick in the related columns the extent to which instructional materials are available in your class.

Course Book (CBC)	**Available and adequate**	**Available but not adequate**	**Not available**
Mathematics activities			
Literacy activities			
Kiswahili activities			
Environmental activities			
English activities			
Creative arts activities			
Christian/ IRE activities			
Music activities			

Home science activities			
Digital devices			
Hand books			
Teachers guides			

Section four: Teacher's mode of assessment and implementation of competency based curriculum

Please, indicate by the use of a tick in the relevant columns the extent to which you have demonstrated the ability to perform the stated tasks in assessing learners in line with CBC.

Task	Very well	Good	Developing	Needs support
Ability to design assessment				

criterion (rating)				
Ability to construct assessment rubric (tasks)				
Reporting and notification of learners after formative assessment				
Keeping assessment records for summative reporting				

Section five: Teacher lesson planning and implementation of competency based curriculum.

Please indicate by use of a tick in the related column the extent to which each of the following aspects in relation to lesson planning in line with CBC have been achieved in your lessons.

Very well (1) Good (2) Developing (3) Needs Support (4)

Statement	Very well	**Good**	**Developing**	**Needs support**
Ability to write lesson plans with all				

CBC aspects				
Ability to present CBC lessons systematically in class				
Making lesson plans for all lessons				
Making sure lesson planning doesn't eat into teaching time				

APPENDIX C: HEAD TEACHERS AND CURRICULUM SUPPORT OFFICER'S INTERVIEW GUIDE

1. Have your teachers attended any in-service training with regard to the competency Based Curriculum CBC?
2. Are your teachers competent in all the specific subjects they teach?
3. What subjects are they finding it hard to instruct?
4. Which core competencies are they finding difficult to infuse during instruction?
5. What is the pupil – textbook ratio in the concerned grades?
6. Are digital devises sufficient and are they in use?
7. Are teachers guides available for all the subjects?
8. To what extent are teachers able to design assessment rubrics?
9. In what ways do teachers report and notify learners and parents after conducting formative assessment for learning?
10. How is summative assessment done after the completion of a term or year?
11. To what extent are teachers able to prepare lessons with all the required CBC aspects?

12. To what extent are your teachers able to present a CBC compliant lesson following all the steps?

13. How often do your teachers write lesson plans?

14. In what ways do you ensure that the time teachers take to lesson plan don’t eat into teaching time?

APPENDIX D: OBSERVATION CHECKLIST FOR CBC IMPLEMENTATION

Name of school ……

Date: …….

CBC Indicator	**Implemented**	**Not implemented**	**Remarks**
Competence, Materials, Assessment & Lesson Planning			
i. Learners working in pairs, getting solutions to problems as a group (communication and collaboration)			
ii. Learners working through word questions in order to apply learnt knowledge (critical thinking and problem and solving			
iii. New, stylish and amazing displays of learners work (creativity and imagination)			
iv. Key inquiry questions that prompt learners interest in knowing what next (learning to learn)			
v. Use of digital devices to learn (digital literacy)			
vi. The textbook: learner ratio			
vii. Teachers guide – learner ration			

viii.	Digital devices in use			
ix.	Assessment rubrics designed by teachers			
x.	Assessment records kept by teachers			
xi.	Sample lesson plans (CBC aspects)			
xii.	Lesson presentation (procedural development)			
xiii.	Lesson planning book (are all lessons plans written?)			
xiv.	Average time taken to write a lesson plan			

APPENDIX E: AUTHORIZATION LETTER

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/18/33506/27041** Date: **6th December, 2018**

Julius Wanyoike Waweru
University of Nairobi
P.O Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Influence of Teacher preparedness on implementation of competency based curriculum in Nyandarua North Sub County Kenya,"*** I am pleased to inform you that you have been authorized to undertake research in **Nyandarua County** for the period ending **6th December, 2019.**

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

GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Nyandarua County.

The County Director of Education
Nyandarua County.

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

APPENDIX F: RESEARCH 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
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Website: www.nacosti.go.ke

REPUBLIC OF KENYA

National Commission for Science, Technology and Innovation

RESEARCH LICENSE

Serial No.A 22242

CONDITIONS: see back page

THIS IS TO CERTIFY THAT:
MR. JULIUS WANYOIKE WAWERU
of UNIVERSITY OF NAIROBI, 0-100 NAIROBI,has been permitted to conduct research in *Nyandarua County*

on the topic: *INFLUENCE OF TEACHER PREPAREDNESS ON IMPLEMENTATION OF COMPETENCY BASED CURRICULUM IN NYANDARUA NORTH SUB COUNTY KENYA*

for the period ending:
6th December,2019

Permit No : NACOSTI/P/18/33506/27041
Date Of Issue : 6th December,2018
Fee Recieved :Ksh 1000

.....
Applicant's Signature

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