

**ASSESSMENT OF SELECTED DETERMINANTS OF THE  
IMPLEMENTATION OF HEALTH AND PHYSICAL EDUCATION  
CURRICULUM IN PUBLIC PRIMARY SCHOOLS IN  
NANDI COUNTY, KENYA**

**BY**

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## DECLARATION

### DECLARATION BY THE CANDIDATE

This research thesis is my own original work and not a duplication of similarly published work of any scholar for academic purpose. It has never been submitted to any other institution of higher learning for the award of degree. Further, I declare that all materials cited in this paper which are not my own work, have been duly acknowledged.

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**DEDICATION**

To my parents Wilimina and the late Henry Malingu, my wife Edith Malingu and my children Linah, Faith and Fadhili Lyam.

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## ABSTRACT

Health and Physical Education (HPE) is one of the core subjects in primary and secondary schools, as well as in teacher training colleges in Kenya. The implementation of the HPE curriculum is however not progressing as expected. The purpose of this study was therefore to assess selected determinants of implementation of HPE curriculum in public primary schools in Nandi County. The study was guided by five objectives that sought to establish the influence of teacher preparation and use of professional documents; teaching methods; teacher attitude; adequacy of equipment and facilities; and monitoring and evaluation, on implementation of the HPE curriculum. The study was grounded in the pragmatic paradigm and adopted the convergent mixed methods research design. A population of 1290 individuals (comprising of QASO, head teachers, HPE teachers, and pupils) was targeted, out of which a sample of 296 was drawn. Both stratified and simple random sampling techniques were used to ensure fair representation of study units. Data from HPE teachers were gathered using a structured questionnaire, while that from QASO and head teachers were gathered through face to face interviews. Focused group discussions involving groups of 10 pupils each were used to collect data from the pupils. Document Analysis was used to verify teachers' preparation and use of professional documents. Data collection instruments were validated through a pilot study conducted in five primary schools in the neighbouring Uasin Gishu County. Thematic analysis was used to extract recurring themes from QASO and head teachers' interview responses as well as from focused group discussions. Multiple regression analysis was conducted to identify determinants of implementation of HPE curriculum. Results of the multiple regression analysis revealed that professional documents ( $B = 0.482, p < 0.05$ ); teaching methods ( $B = 0.332, p < 0.05$ ); teacher attitude ( $B = 0.204, p < 0.05$ ); and teaching equipment and resources ( $B = 0.822, p < 0.05$ ) were positive and significant determinants of HPE curriculum implementation, and explains upto 61.3% of the variance in implementation of the curriculum. Thematic analysis results indicated that implementation of HPE curriculum in public primary schools in Nandi County was being hampered by inadequate use of professional documents; lack of variety in teaching methods; negative attitude among teachers; inadequate facilities; and inadequate monitoring and evaluation of HPE instruction. The study recommended need for adherence to professional records, use of diverse teaching methods, positive attitude, adequate resources and improvement in monitoring and evaluation of HPE instruction.

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## ABBREVIATION AND ACRONYMS

<b>AAH</b>	American Association for Health.
<b>APDK</b>	Association for persons with disability in Kenya
<b>CEO-</b>	County Education Officer.
<b>DEO</b>	District Education Officer.
<b>DN</b>	Daily Nation.
<b>HPE</b>	Health and Physical Education.
<b>IAAF</b>	Federation of International Athletics Association.
<b>IOC</b>	International Olympic Committee.
<b>JKF</b>	Jomo Kenyatta Foundation.
<b>KCPE</b>	Kenya Certificate Primary Examinations.
<b>KSCE</b>	Kenya Certificate of Secondary Examinations.
<b>KIE</b>	Kenya Institution of Education.
<b>KICD</b>	Kenya Institute of Curriculum Development
<b>KNEC</b>	Kenya National Examinations Council
<b>TAC</b>	Teachers Advisory Center.
<b>NASPE</b>	National Association for Sports and Physical Education.
<b>NTC</b>	National teachers' council in Uganda.
<b>NCSTI</b>	National Commission for Science, Technology and Innovation.
<b>PDE</b>	Provincial Director of Education.
<b>HPE</b>	Health and Physical Education.
<b>IAAF</b>	International Association of Athletics Federations.
<b>ICSSP</b>	International Conference on Software and Systems Process
<b>IDI</b>	Indepth Interview
<b>PES</b>	Physical Education and Sports.

<b>PTA</b>	Parents and Teachers Association.
<b>PTC</b>	Primary Teachers Colleges
<b>QASO</b>	Quality Assurance and Standards Officers
<b>TIQET</b>	Totally Integrated Quality Education and Training.
<b>UNESCO</b>	United Nations Education, Scientific and Cultural Organizations.
<b>UNICEF</b>	United Nations International Children's Emergency Fund.
<b>UN</b>	United Nations.
<b>VI</b>	Visually Impaired.
<b>WYAC</b>	World Youth Athletics Championships.

## CHAPTER ONE

### INTRODUCTION TO THE RESEARCH STUDY

This chapter presents the following sub-topics: Background to the study, statement of the problem, the purpose of the study, specific objectives of the study, research questions, justification/significance of the study, limitation and delimitation, Conceptual framework and theoretical framework, assumptions of the study operational definitional terms and summary of chapter one.

#### 1.1 Background to the Study

Health and Physical Education (HPE) plays important role in the life of a learner right from childhood to adulthood (Morgan and Hansen, 2007). The main purpose of HPE is to teach the whole learner, not just his/her body and movement but also his/her mind and character (Bassett, 2013). Physical and Health Education provides an opportunity to teach learners about body movement, strategies, teamwork, problem solving and health related fitness (Morgan *et. at.*, 2007). Each of these factors is addressed in the National Association for Sports and Physical education's (NASPE) standards and is important to teaching the whole learner. Exposing learners to various physical exercises, sports and methods of fitness can better provide enjoyment of physical activities as well as build social, psychomotor, discipline and cognitive skills.

The International Charter of Physical Education (HPE) and Sports supported the United Nations Educational Scientific and Cultural Organizations (UNESCO) member states declared access to HPE for all learners in all schools worldwide, It further asserts that Physical education and sports is a fundamental right for all school going children. The Convention for the Rights of the Child (UNICEF, 1990) states that education shall be directed to the development of the child's personality, talent,

mental and physical abilities to his/her fullest potential and the development of respect of human right. The worldwide survey (Hardman & Marshall., 2000) with support of UNESCO and other international and regional agencies affirmed that HPE has faced problems in time allocation, budgetary, constraints, low academic status and negative attitude. UNESCO (2002) advocates the Principle of HPE as fundamental human rights. The UN General Assembly proclaimed 2005 as the international year to help focus worldwide attention on importance of sports in society and how sport and HPE programmes could be used as tools to achieve Millenium Development Goals (MDGS) and peace. According to UNESCO Report (2002), HPE promote the right of children accessing facilities for practicing PE and sports. This right needs to be protected within the context of national education system by encouraging learners to develop strong love towards physical and health education.

According to Pate (2011) Health and Physical Education (HPE) is a process through which an individual obtains optimal physical, mental and social skills and fitness through physical activity. The aim of HPE is to increase every individual's physical, mental and social benefits from physical activities and to develop healthy lifestyle, skills and attitudes. This goes further to include the purpose of HPE as giving the best to an individual's quality life through a long-term commitment to an enjoyable, personal exercise programme that will meet varied needs in a changing world (Ogi, 2006). This can only be achieved if teachers of HPE focus on using correct teaching points and strategies during the lesson. Physical Education may include the following programmes; physical exercise, play, leisure, games, and sport. It also helps us to give support to the development of HPE as a unique school subject that plays a crucial role in the growth and development of children and youth in the society (Morgan et al, 2007).

The Orientals were among the first people to raise higher levels of civilization, health and physical Education (HPE). Chinese education was designed to perpetuate the state by training each individual learner to perform a specialized discipline. Chinese educational programs were designed to maintain the status quo. Due to consistence in doing physical exercises China, Japan and Korea are among the world's best performers in gymnastics (acrobatics). They perform some amazing acrobatic feats with a lot of agility (You, 2002). The performances of these activities were accompanied with some teaching/learning equipment. Teachers depicted positive attitude as they instructed their learners during physical exercises/activities in the field and this made learners to develop strong love towards learning health and physical education (Nsubuga, 2000).

According to Morgan *et. al.*, (2007) involvement of learners in physical exercises in forms of plays and sports dates back to the ancient civilization. The Greeks were the first to embrace the concept of HPE, to develop the whole human being. The goal of producing citizens with a high degree of physical prowess was to ensure that they could defend their homeland. Wamukoya (1985) in his research on HPE also found that the indigenous African societies were involved in various forms of physical activities for recreation, security, as well as development. Participation in HPE was therefore basic to all culture.

Morgan (2007) asserts that HPE is the only area in the school curriculum that promotes the development of the motor skills and fitness. Sallis (2000) states that physical exercise is important to school going children, as it expose the learner to the outside world. Its implementation is being hampered by lack of HPE equipment/facilities and lack of effective assessment from both head teachers and



quality assurance and standards officer (Onywere, 2010). In the U.S.A, Health and Physical Education (HPE) curriculum is designed to allow school children a full range of modern opportunities, dozen of sports and hundreds of carefully reviewed drills and exercises, including exposure to education with the use of pedometer as well as state of Art exercises. The HPE curriculum is designed to allow students to experience at least a minimum exposure to the following categories of activities: aquatic activities, gymnastics, individual's sports, rhythms and dance. Students are encouraged to continue to explore those activities in which they have a primary interest by effectively managing their HPE apparatus, referred to as indirect method (DiFiore, 2010).

In Malaysia, school children are expected to do 2 periods of one hour of HPE throughout the year except a week before examinations. In Scotland pupils do at least 2 periods of HPE in first, second, third and fourth year. In 5<sup>th</sup> and 6<sup>th</sup> years HPE is voluntary. In the Philippines, some schools have integrated martial arts training into their HPE curriculum. In England, pupils are expected to do 2 hours of HPE a week in year 7, 8 and 9 and at least one in year 10 and 11. In Wales, pupils are expected to do at least three hours of HPE a week during primary and secondary education. Universities must also organize at least 60 hrs of HPE classes at undergraduate courses (Shehu, 2009). In these cited countries HPE teachers are encouraged to put much effort on lesson preparation before one goes for a lesson in the field. In addition HPE teachers are required to use either direct or indirect teaching method while handling HPE lesson in the field (You, 2002). At the global level, these assertions are true since these countries perform better in both Olympic and world sports. However, some African countries like Nigeria, Egypt, Algeria, S. Africa, Uganda to name but a few have excelled in various disciplines since these countries have encouraged the

teaching of HPE curriculum in their schools (Ammah, 2006). Ethiopia and Kenya have become popular in Athletics because they put a lot of emphasis on physical exercises (NASPE Report, 2005). However, in some of the literature reviewed regarding the teaching of HPE by HPE experts like: Morgan *et. al.*,(2007), Stodden *et.al.*,(2009) and Kiganjo,*et al.*,(2005) fall short of discussing determinants that affect the teaching of Health and Physical education in schools and therefore this area is left untapped.

In Pharaoh's Egypt, schools for the scribes were established in which boys could enroll upon payment of tuition fees. Formal HPE programs were not included in these schools. However, Egyptian citizens of this period enjoyed participating in sports (Wamukoya, 1985). Swimming was one of the most popular gymnastic displays and was enjoyed by both noble and the poor and by both men and women. Wrestling was performed by experienced soldiers, the merchants and the unskilled labourers. Military men wrestled in order to condition themselves. Professional wrestlers entertained people at the festival occasions. Dancing continued in population contest, older children did tumbling and gymnastic stunts (Shehu, 2009). All these were done informally without considering factors like professional documents, teaching methods and PE equipment and facilities that influence and enhance the learning of HPE lessons.

In Kenya, Health and Physical Education existed in the form of what can be referred to as "traditional sports" Examples of such activities can be traced in 'Bull fighting' practiced by Idakho sub clan, throwing of clubs and spears contests among the Samia clan of Busia and Bukusu of Bungoma Counties, traditional wrestling, dancing, swimming among the Banyala of Busia and many varied activities in form of children

games. Most of these activities exist to-date in quite a number of communities, where they are referred to as “cultural activities” (Wahome, 1999). These cultural activities also cut across all levels of education from pre-school to higher learning institutions. In essence cultural activities are used to promote physical exercises among the youths. Wahome argues that cultural sports had a variety of equipment and facilities which they provided the youth with to use during cultural activities. These activities determined the physical fitness of the youth in the society.

During colonial days the term used was “Physical Training” and the focus was on education of the physical nature. It was a form of training or drilling whose main objective was to prepare individuals for military training, that is; to harden the body and make it flexible and adaptable to harsh working conditions of the many wars of the time. Kenya adopted the British type of physical training which was mostly drill with the HPE teacher as an instructor in the unmarked field. Teaching methods, lesson plan notes and HPE apparatus were not necessary during HPE lessons. Learners were directed to do HPE lessons in their own school uniforms or go out to the unmarked field ‘bear-chested’ (Boys) while girls used their own school uniform (Mwathi, 2005).

Little has been written about the short and long term effectiveness of HPE in addressing factors that affect the implementation of HPE curriculum in schools (Pate, 2011). The goals of Physical education in Kenya have not included determinants of HPE curriculum implementation; teachers and, pupils activities have been used as surrogates. However, some promising research work by Onywera, (2010) and Kiganjo and Kamenju (2005) have demonstrated learners are more active during HPE lessons in the field than in class.

The present level of Physical education activities among Primary school children and young adults is a problem and known contributor to the rising levels of obesity among Primary learners (Onywera, 2010). The importance of health and physical education to physical, cognitive and social aspects of child development has been acknowledged by many nations and education agencies (Stodden *et. al.*, 2009). Many countries throughout the world have offered their support and recommendations for strengthening physical education. For instance, the Institute of Medicine (2012), in its report *Accelerating progress in Obesity Prevention: Solving the weight of the Nation*, points to the need to strengthen HPE to ensure that all children engage in 60 minutes or more of physical activity per day in the school. This is contrary to the Kenyan HPE curriculum offered to the Kenyan child in the school as all HPE lessons for lower classes (1-3) lasts for 35 minutes only and 35 minutes for upper classes (4-8). These minutes are not enough to give the learner much needed exposure to strengthen their bodies.

Health and Physical Education will provide learners with a chance to find enjoyment in physical exercises by sharing their passion for physical activities and movement. Every learner in the class is unique and will be given the opportunity to test their strengths and weaknesses. The teacher should do everything within his/her ability to provide the learners with attainable goals as well as challenge them in ways that will help the class teacher observe and improve in their physical activities. Correct positive attitude and use of right assessment tools will measure the learners' progress and improve their performances during HPE instructions in the field (Shehu, 2009). Physical exercises make the learner to be active in both body and mind and be mentally alert during other lessons (2002). Kiganjo and Kamenju (2005) state that HPE plays the role of social cohesiveness among schoolmates of different ages as

well as promoting the school philosophies during inter school and colleges ballgames and athletics.

In Kenya, there are two syllabi for both lower and upper classes. In lower primary classes, the pupils are supposed to do HPE every day for 5 days. The HPE lesson for lower classes is 30 minutes, while in upper classes they do it 3 days per week. The lesson lasts for 35 minutes. The approaches cited in teaching Physical Education are good. The syllabi contain time allocation, content, teaching aids and classes to be taught but implementation determinants are missing. Some of the HPE teachers promote HPE lessons by planning physical activities to be performed by learners. Teachers try to place a strong emphasis on direct and indirect demonstration of HPE activities (Kiganjo *et. al.*, 2005). The most successful teachers apply both direct and indirect methods to generate enthusiasm for physical activities and allow learners time to play, experiment and learn from their mistakes (Akiiki, 2005). However, this is not the case with most of HPE teachers in public schools as they opt to teach examinable subjects at the expense of HPE lessons. Learners are not given enough ample time to try out and rehearse techniques/skills in contexts such as dances, gymnastic sequences and other related physical exercises. This is so since some PE teachers have negative attitude towards the teaching of HPE lessons arguing that it is not evaluated at the end of the course (Otunga, 2010). Quality Assurance and Standards Officers are tasked with the responsibility of monitoring and assessing the implementation of HPE curriculum rarely do so. This has made both learners and teachers to focus their energy of examinable subjects thus rendering HPE as a co-curricular subject (Onywera, 2010).

Since schools have been centers for the implementation of curriculum programs, the general public has also been reminded of the values of HPE through electronic and print media publicity. Health and Physical Education has always been within the context of Education. In Kenya although the same is generally true, not much literature has been discussed on some implementation determinants that can update the status of HPE curriculum instructions in Public Primary Schools. In the research carried out so far by Kiganjo *et. al.*, (2005) and Onywera (2010) concerning HPE instruction in Public Primary Schools, much is not written in relation to implementation determinants of HPE curriculum. No attempts of any kind have been made by the Ministry of Education to find out factors that affect HPE instruction in Public Primary Schools and why HPE curriculum is being ignored by both pupils and teachers in Kenya, although it is plotted on the schools master time-table.

The Quality Assurance and Standard Officers (QASO) have been deployed to monitor and evaluate the quality of the curriculum instructions in public primary schools (Otunga), yet many parents have been complaining of their children's common ailments related to lack of physical exercises. According to Sessional Paper No.1 of 2005, the government Policy places much emphasis on Health and Physical education, but not on factors that influence that enhance the teaching of the subject. The main concern of this study therefore, was to assess some selected determinants of the implementation of physical and health education curriculum in public primary schools in Nandi County.

## **1.2 Statement of the Problem**

Health and Physical Education (HPE) curriculum has for a long time been taught in all learning institutions in Kenya, from Pre- school to universities. According to

Wamukoya (1985), at Pre-school and Primary level in the 1960s and 1970s, it was referred to as PE 'drill' lesson; School children would be taken to the unmarked field with HPE teacher and asked to do some running laps while the teacher watched at a distance. The HPE teacher had no teaching notes/document to instruct his learners from. What the teacher had in his/her hand was a cane to discipline those who do not abide by his/her commands (Nteere, 1982). Times have changed and HPE is one of the compulsory subjects at secondary and teacher training colleges (Kiganjo & Mwathi, 2005). At teacher training colleges, a teacher trainee must pass in it before s/he is awarded with a P1 certificate (KNEC, 2008).

According to Sessional Paper 1 of 2005, HPE should be taught 5 times per week in lower classes (1-3) while in upper classes (4-8) it should be taught 3 times a week. At primary level, HPE lessons are performed during morning session outside the classrooms unless it is raining. The HPE teacher must have teaching notes and equipment before s/he begins a lesson as an instructor, in order to conduct HPE lesson effectively (Rink & Hall, 2008). According to Light *et. al.*, (2012), HPE teacher must have positive attitude towards the subject, so as to inculcate in his/her learner's positive attitude. In addition, the teacher must use correct teaching methods while conducting the activities (You, 2002). While conducting the physical activities in the marked field, the teacher should monitor and evaluate learners' performances by awarding them grades (Mwathi, 2005). However, failure of HPE teachers to apply all of the above cited determinants that lead to the successful implementation of HPE curriculum during the lesson has created a gap in the continuity and progressive development of HPE knowledge, skills and values among the learners in Public Primary Schools. This gap has prompted the researcher to investigate the influence of professional documents, teaching methods, teachers attitude, teaching equipment,

monitoring and evaluation on the implementation of HPE curriculum in Nandi County, Kenya.

### **1.3 The Purpose of Study**

The purpose of this study was to assess selected determinants of implementation of health and physical education curriculum in public primary schools in Nandi County, Kenya. Public Primary Schools with target population of 1290 respondents involved QASOs, head teachers, HPE teachers and classes 7 & 8 learners. Mixed research design was used in the study.

### **1.4 Specific Objective of the Study**

The main objective of this enquiry was to assess the influence of implementation determinants on HPE curriculum in public primary schools in Nandi County, Kenya and how these determinants influence the manner in which HPE teachers conduct instruction in physical Education. The study was guided by the following specific objectives:

- i) To assess the preparation of HPE teachers use of Professional documents in the implementation of health and physical education curriculum in Public Primary Schools in Nandi County.
- ii) To evaluate the effect of teaching methods used by HPE teachers in the implementation of HPE curriculum in Public Primary Schools in Nandi County.
- iii) To establish the HPE teachers attitude towards HPE instructions in the implementation of HPE curriculum in Public Primary Schools in Nandi County.



- iv) To determine the effect of HPE equipment and facilities in the implementation of HPE curriculum in Public Primary Schools in Nandi County.
- v) To establish the effect of monitoring and evaluating HPE curriculum instruction by QASOs in Public Primary Schools in Nandi County.

### **1.5 Research Hypotheses**

The main research hypotheses of the study were;-

- i) There is no statistically significant effect on the preparation and use of Professional documents in the implementation of HPE curriculum in Public Primary Schools in Nandi County
- ii) There is no significant effect on the teaching methods used in the implementation of HPE curriculum in the Public Primary Schools in Nandi County
- iii) There is no significant effect on the attitude of HPE teachers in the implementation of HPE curriculum in Public Primary in Nandi County
- iv) There is no significant effect on the use of equipment and facilities in the implementation of HPE curriculum in Public Primary Schools in Nandi County.
- v) There is no significant effect on monitoring and evaluating the implementation of HPE curriculum in public primary schools in Nandi County.

### **1.6. Significance of the Study**

Several studies pertaining to teaching of Health and Physical Education in Public Schools have been done in Eastern Africa by Madeje (1980), Akiiki (2007), Kiganjo (2005) and Onywera (2010) to name but a few. However, the government's policy on

the teaching of HPE is specified in the Sessional Paper 1 (2005), in which HPE subject is allocated 5 periods in lower primary classes and 3 periods in upper primary classes. There is need to discuss and understand determinants that enhance the teaching of HPE in public primary schools in Kenya. It is expected that this study reveals the effect of poor implementation of HPE lessons on learner's physical and social development. It is likely to alert the education stakeholders on the need to closely monitor and evaluate the teaching of HPE in all schools countrywide. This study will expose the importance of HPE lessons on the development of the learners' body and mind (Stodden, 2009). The finding of this study contributes to new knowledge for further research on the teaching approaches of HPE in schools (Bassett, 2008). The study benefits both educational policy makers and scholars in the field of education who will picture the outcome and make needed adjustment. The HPE teachers, head teachers and quality assurance and standard officers would reorganize and improve their teaching methods. The study focused on the determinants of HPE curriculum instruction in government managed schools in Nandi County.

### **1.7 Justification**

A complete curriculum reform was last done 30 years ago when 7-4-2-3 system was dropped and 8-4-4 system adopted by all schools. The 7-4-2-3 curriculum system was geared towards white-collar jobs with little emphasis on the teaching of health and physical education, while 8-4-4 system was more practical oriented (The Standard, Dec 14, 2015). Several studies have been done in USA, Europe, Asia and Africa concerning the importance of HPE to physical, cognitive and social aspects of child development (Castelli, 2003). However, there is a need to discuss some determinants that enhance the teaching of HPE curriculum to both young and adult learners in

schools. According to the Kenyan government policy (Sessional paper 1, 2005) HPE is a compulsory subject in both primary and secondary schools as well as in teacher training colleges. Many heart related ailments like diabetes, high blood pressure to name but a few are related to lack of physical exercises. PE makes one to be mentally, physically and socially alert and aware of the environment which one lives in (Schmottlach, 2006). Physical Activities like Sports and Games brings people together worldwide and enhances the spirit of socialization and interaction (Ogi, 2006). This study is necessary at this point in time in Kenya where there are several physical health related issues such as obesity, heart problems and breathing difficulties among youngsters. In a recent literature review, Bassett (2013) found out that HPE contributes to learners achieving an average of 23 minutes of vigorous physical activity daily, however the time spent on vigorous physical exercise could be increased to 40 minutes since HPE curriculum has to incorporate health topics (Onywera).

## **1.8 Limitations and Delimitations.**

This section dealt with the limitations and delimitations of the research study.

### **1.8.1 Limitations**

Initially the HPE teachers gave little cooperation to the research that impacted negatively on the response rates. This however, was improved later after intervention by the researcher with the assistance of his supervisors. The study did not incorporate Private institutions like Primary, Secondary, Colleges and Universities. Therefore the results of the studies positively reflect the HPE dynamics in Public Primary Schools in Nandi County.

Lower primary classes were not involved in the study since the research study involved focus group discussion (FGD) which needed concentration and time of discussion. However, their lack of involvement was covered their HPE class teachers

### **1.8.2 Delimitation**

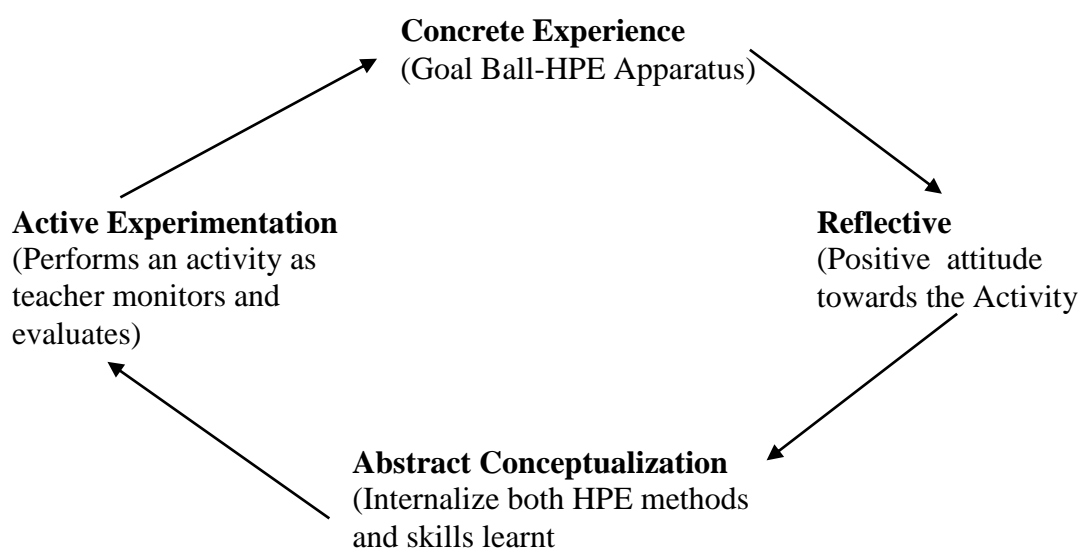
Researcher got cooperation from head teachers, Quality Assurance and Standards Officers (QASOs) and classes 7 & 8 learners. Since the researcher was dealing with Public Primary Schools where he had encountered with some primary head teachers while assessing his students on teaching practice, he never met many challenges. The researcher also used Kiswahili language to explain some points to the respondents especial classes 7 & 8 pupils who had problems in expressing themselves in English and this was an advantage to the research study.

### **1.9 Theoretical Framework**

The study adapted Kolb's Experiential Learning theory (1972), which emphasizes that learners acquire knowledge much faster through observation, doing an activity repeatedly to gain experience. Experiential learning is the process of learning through experiences. It is more specifically defined as learning through reflection of doing an activity. Experiential learning is often used synonymously with the term "experiential education". Experiential learning considers the individual's learning process. Compared to discussion method, experiential learning is concerned with more concrete/ practical method related to the learner and learning context.

The concept of learning through 'doing an activity' is an ancient one. Around 350 BC, Aristotle wrote in the "Nichomachean Ethics" that the things we do, we learn by doing them. Experiential learning focuses on the learning process for an individual. The aspects of this experiential learning theory can be seen in the use of teaching

methods applied. For instance in a HPE lesson, the teacher can apply experiential theory when s/he is teaching learners how to play a Goal ball game played by students who are visually impaired (VI). The learner is given the ball (an apparatus) to touch and feel it. The experience forms the basis for observation and reflection. The learner has the opportunity to meditate on how to make a throw (reflective observation). The student has to think of ways to improve on the throws she/he attempts, if the learner is performing an activity in a Goal-ball during HPE lesson (abstract conceptualization). Every new attempt to throw a Goal-ball is informed by a cyclical pattern of previous experience and reflection (active experimentation).



**Figure 1.1: David Kolb's Experiential Learning Theory.**  
(Source: Kolb, 1972).

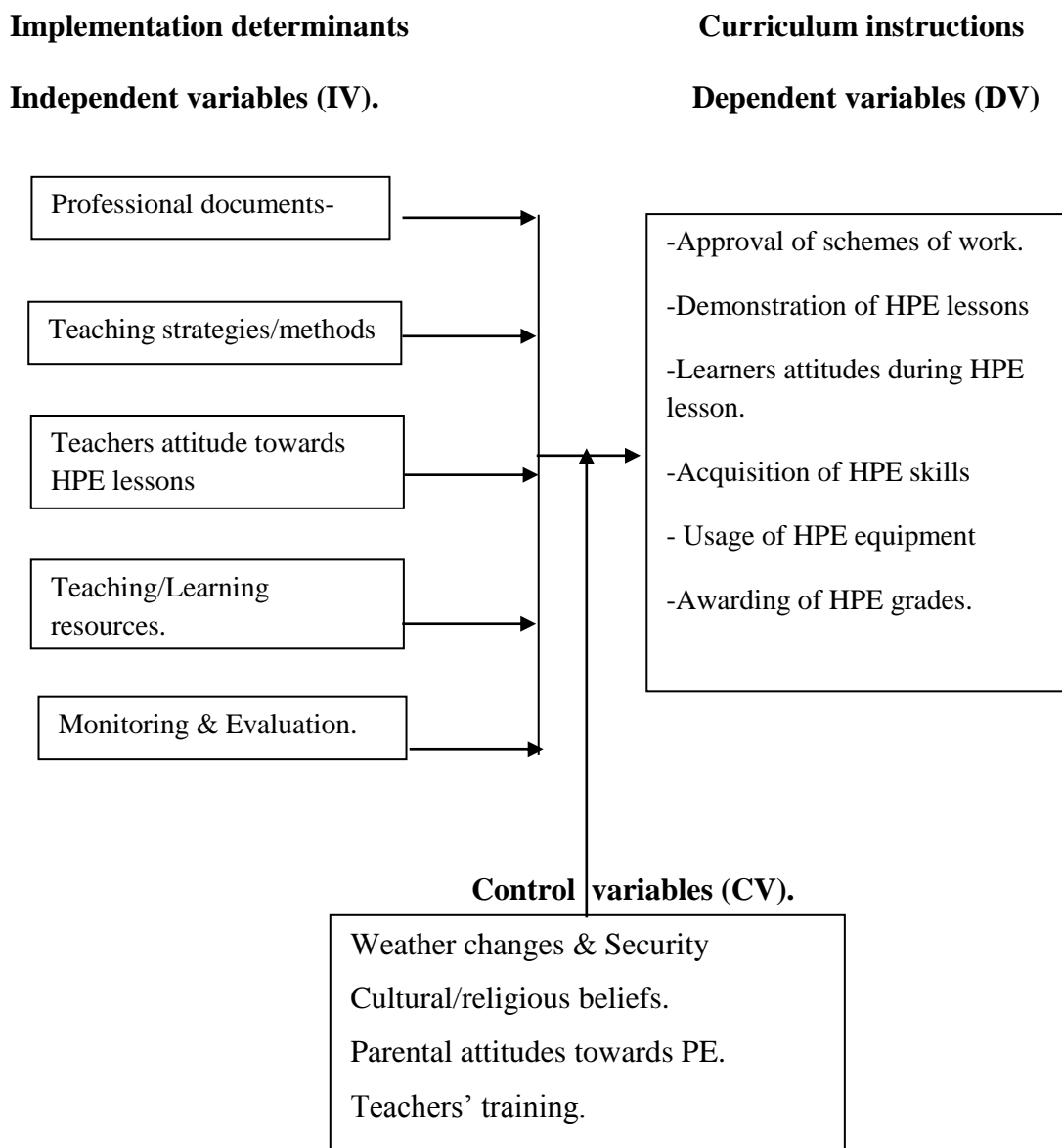
Experiential learning theory can be applied in HPE lessons since both the teacher and the learner should have positive attitude towards the activity to be learnt, as it relates solely and directly to the student's learning experiences. According to this theory for one to acquire genuine knowledge from an experience, the student must: be ready and willing to be actively involved in the lesson; be able to reflect back on the experiences; have and use analytical skills to conceptualize the experiences and have

decision making and problem solving skills in order to use new ideas acquired from experience.

Experiential learning theory is quite practical and it requires the learner to apply learning/teaching methods s/he has acquired and to do the skill practically in order to master it. The learner ought to touch the goal-ball and experience it (Concrete), take time to think about it (Reflective observation), this will be followed by internalizing the concept (Abstract conceptualization) and lastly do some activities with the ball, using the methods learnt as the HPE teacher monitors and evaluates his/her performances (Active experimentation). Health and Physical education (HPE) is much understood when both learners and HPE teacher have positive attitudes as they go to the field and apply the required skills practically (Bassett, 2013). To achieve HPE lesson objective, there must be HPE equipment (markers). Frequent assessment from all stakeholders, HPE class teachers, head teachers and QASOs ought to be carried out when the HPE lesson is being performed in the field.

### **1.10. Conceptual Framework**

It is an overview of ideas and practices that shape the way research is going to be done in a research study. When a subject is viewed as inferior to the rest in the school curriculum, the subject becomes unable to claim its full rights in the school timetable. It affects the acquisition of skills as it cannot assert its full rights. The subject becomes obsolete as both teachers and students shy away from it. This in turn affects its implementation to the required standard, thus affecting learning as a whole. The conceptual framework below explains both independent and dependant variables with control variables coming in between.



**Figure 1.2: Conceptual framework model of implementation determinants on HPE instruction.**

**(Source: The Author/ Researcher 2013)**

The conceptual framework model indicates that the delivery and success of HPE curriculum instruction in Public Primary Schools will depend entirely on the teacher's competence on: lesson preparation and delivery; demonstration method used during HPE lessons; learners' positive/negative attitude towards HPE lessons; acquisition of skills; availability and usage of HPE equipment, supervision of HPE lessons by QASOs and performance of HPE teachers in the field. However, this performance can

be interrupted with control variables like weather changes; cultural/religious beliefs, parental attitudes and teachers training which might interfere with delivery of the content. Some communities are against mixing girls with boys during physical activities, it is against the community's cultural practices.

### **1.11. Assumption of the Study**

The assumption of study was based on the principle that HPE is a subject that is lesson planned and timetabled on a master timetable by HPE teachers and is taught to learners as any other subject without any problem. All primary teachers who have undergone pre-service course are aware of objectives of teaching HPE in both private and public primary schools. They are all aware of the determinants of implementing HPE curriculum and its importance to mental, social and physical development of the learner (Stodden *et. al.*, 2009).

### **1.12 Operational Definition of Terms**

This section dealt with terms that appeared frequently in the study. They were defined in the context of the study.

**Attitude of teachers towards PE-** Feelings and emotions of the teachers towards health and physical education.

**Curriculum-** All the HPE activities that take place within the school under the guidance of teacher.

**Games –** All various activities performed by learners of HPE during the lesson.

**Gymnastics-** Sports involving the usage of skill, strength, agility and flexibility to perform HPE lesson.



**Psychomotor-** Refers to how learners used both fine and gross motor during PE activities/lesson.

**PE teacher-** A person who has successfully completed a P1/diploma course in teacher training college.

**Health and Physical Education (HPE)-** A subject incorporating healthy topics into Physical education in Primary Schools.

**Recreation-** An organized physical activity intended to revitalize one's mental effectiveness and physical faculties during available time.

**Sport –** Constitute of vigorous movement activities carried out in a restricted area and executed using tactical skills and fixed rules.

**Syllabus-** An outline of all the topics to be covered during an academic year.

### **1.13. Summary**

This chapter found out that Physical education (HPE) is a practical subject that promotes social, physical and mental development of the learner. It makes the learner to be alert and active in both body and mind. HPE curriculum is necessary as is in line with the International Charter of HPE and Sports (1978) declared access to HPE for all and it was a fundamental right for all. UN General Assembly proclaimed 2005 as an international year to focus worldwide attention on importance of sports in society and how sport and HPE programs could be used as tools to achieve MDGSS and peace. Some selected determinants are good for promoting teaching of Physical education to young Kenyans.

This chapter focused on the global, regional and Kenyan view of Health and Physical Education. It discussed some countries like USA, Britain, China Japan and Korea that have succeeded in implementing HPE curriculum in their countries. In addition, African countries like Ethiopia, Egypt, Nigeria and South Africa that have excelled in sports and games have also been discussed in this chapter.

Research objectives and hypotheses of the study and statement of the problem have been extensively discussed in regard to determinants that enhance the learning of HPE curriculum in public primary schools in Nandi County. The study adapted Kolb's Experiential learning theory (1972) .The research tried to relate this theory to research objectives.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

The literature related to the study was reviewed under the following subheadings: - Preparation and utilization of professional documents in curriculum implementation; the importance of PE to learners. An analysis of HPE curriculum for primary schools; Teaching/Learning Strategies used; HPE equipment and facilities monitoring and evaluating HPE curriculum; HPE performance in public primary schools and summary of the literature review.

#### **2.1 Preparation and Use of Professional Documents.**

In order to deliver effective HPE lessons and optimize learner progress, it is important to have purposeful and progressive structure to our HPE lessons in schools. The syllabus should have four sections to ensure all pupils learn the core skills and learn to apply them under them under no pressure. Warm – up activities do activate learners during HPE lesson (Bassett, 2013). Warm-up activities are good to mental and physical preparation for the other activities to come. We can make our learning purposeful and effective by linking the warm-up activities to the Learning Question (LQ). For instance, if our LQ is “How can I improve the dribbling of football in Soccer,” why do I often hesitate to get the learners each with the football, from the onset of developing those dribbling skills?

During lesson presentation, the main lesson is where the HPE teacher focus on the development of those key skills. Building upon the theme of the warm up, the HPE teacher can quickly and effectively provide challenge through appropriate games and activities such as dribbling the ball through marked gates typically spaced circa 1-2m

apart. As the lesson progresses observe for best practice and allow learners to model the outcomes. Ask learners to assess their own progress and the performance of others to raise performance outcome. However, this is not so in the many sampled public primary schools the research visited. It was not easy to find a pupil assessing the performances of his/her classmates during HPE lesson. In the sampled schools that research was carried out, none of the HPE teachers went to the field with professional document or sheet of assessment to award learners grades of performances in various activities.

The HPE teacher must be in possession of teaching notes during group activities. These group activities provide learners with the opportunity to challenge themselves further, putting the learned skills into action while under pressure of time allocated. Conditioned activities are helpful for learners to compete against each other according to the age and ability of the learners.

According to Bishop (1985), teachers should decide on what to teach or how to teach until they know “why” they are doing it. They need to have professional/instructional documents with them, whenever they appear in class to present a lesson. These professional/instructional documents: syllabus, Schemes of Work (SoW), lesson plan, record of work covered and progress record are important tools for the success of any lesson, (Mukwa & Too, 1999). For lesson planning to be rational it must start with clear and specific aims and objectives and then address itself to discovering the means, the content and methods in terms of which the objectives are to be achieved. There can be no curriculum implementation without the usage of instructional documents and objectives. In any institutions of learning, there must be documents of instruction such as schemes of work, lesson plan, record of work covered and student

class progress records. In some schools visited, most of the HPE teachers either had one professional document or none at all and this negates the implementation of HPE curriculum. Literature work by Kiganjo (2005) and Onywera (2010) on teaching of HPE in Primary and Secondary schools in Kenya, is so scanty they don't candidly discuss in details teaching records, which is an anomaly in their research work. The two educationists were not explicit on this area.

Curriculum planning involves a united effort by all those responsible in the organization of an education system and has at every stage of curriculum planning, financial and teaching/learning material implications (Omulando & Shiundu, 1992). In short curriculum planning outlines lesson objectives and programs for teaching. These alone are not enough as the author does not cite teaching/learning materials and methodologies to be applied during instruction. Any purposeful teaching activity in schools, whether for an individual learner or schools need 'Planning'? So the term "lesson planning" is a common term amongst teachers used to describe the organization, arrangement or a way proceeding in lesson presentation. The curriculum being the main vehicle of physical education has to be planned by HPE teachers just like any other subject on the master timetable. Physical education (HPE) planning needs to be coordinated with other subjects like Mathematics, English, Kiswahili, without which education cannot effectively achieve its objectives.

According to Hardman (2008), teachers for HPE and head teachers are not very clear about the differences between lesson planning and lesson presentation. Planning precedes lesson presentation and it sets a stage for all other teaching activities such as implementation and evaluation. Healthy and Physical Education (HPE) planning involves two major processes: Setting lesson objectives to be achieved and

establishing an efficient procedure for attaining the objectives namely: Selecting appropriate HPE topic and learning experiences; Preparing good playfield to achieve the set objectives; Selecting HPE sound methodology; Selecting appropriate PE apparatus to attain the objectives; Choosing appropriate PE time – morning session and Identifying the characteristics of the learners population.

Careful lesson planning can make difference to haphazard implementation of HPE and lead to successful learning experiences (Akiiki, 2007). Mukwa and Too (2002 p. 63) assert that the structure of the schemes of work, lesson plan and the basis for the plan should reflect the lesson objectives and the broad aims of education. Otunga (2010) concurs with the two authors in the area of lesson aims and objectives. She argues that a competent and professional teacher ought to plan ahead of time in order to deliver her/his content to the consumers/learners. The work advanced by these renowned authors concerning the structure of instructional documents and how they are used by teachers during teaching/learning session is good for scholars in the field of research but their work does not cite implementation determinants, professional documents, teaching strategies, teacher attitude and monitoring and evaluation that influence curriculum in Public Primary Schools. Looking at Kenya institute of curriculum development (KICD) syllabus, it is shallow in depth as it does explicitly outline how HPE lessons ought to be conducted both within and outside the classroom. No official format of progress record is given on how to award marks during HPE lessons. The absence of this puts HPE teachers in dilemma whenever they want to teach and award marks.

### **2.1.1 The Importance of HPE to Learners**

As a subject, HPE was for a long time considered as mere play and therefore inferior to Academic Subjects (Shehu, 2009). No one with any future plans for becoming a professional teacher dared to venture into the field of HPE for fear of losing integrity and being considered as lacking in cognitive perspective (Rink and Hall, 2008). But times have changed and HPE has gained its rightful place among other subjects and along with that there have been changes in official and personal attitude towards Physical Education (Ogi, 2006). The teacher of HPE is no longer looked down upon as it used to be in olden days (Tamwesigire, 2008). The teaching of HPE itself is no longer ignored by HPE lecturers in the teachers training colleges and universities. In teacher training colleges Health and Physical Education is a compulsory subject just as English, Kiswahili and education (Mwathi, 2005). Health and Physical Education is good for both social cohesion and emotional development of the learner. It is good for body, mind and spirit (Sallis *et. al.*, 2009) and gives endurance to learners to perform activities.

The development of HPE in Kenya cannot be seen outside the context of Education. Whatever changes have taken place in Education in Kenya both before and after independence have not affected HPE in one way or another in relation to the teaching of the subject in Primary Schools. In early 1980s former President Moi's message to Education planners and curriculum Developers (KICD) during his Madaraka Day Speech to the nation decreed that HPE ought to be taught at all levels of Education with immediate effect (Daily Nation, June 1<sup>st</sup>, 1982).

Following the presidential decree, there were extensive campaigns designed to elevate the level and status of HPE in all Educational Institutions. As a result more emphasis

was given to HPE as part and parcel of the total school curriculum with the aim of helping a Kenyan child to grow physically, socially and mentally to adjust to the changes in the society and its values, enhancing competent membership in the family and constructive citizenship in a democracy based on a realistic understanding of ethical values. However, his decree was misinterpreted as teachers handling HPE lessons concentrated on inter-school competitions at the expense of actual class course work. Health and physical education (HPE) exists in all Education Institutions as competitive type of recreation that covers institutional games and sports clubs (Onywera, 2010).

It is the emphasis on the importance of physical Activities to individual learner that the government has, since independence, given HPE curriculum a place in all institutions from the lowest level of pre-school to the universities. Through physical education programs in our institutions, Kenya has been one of the greatest sporting countries in the world of sports. In the 2011 World Youth Championships (IAAF) Medal Standing, Kenya was number 2 behind U.SA with 14 medals-5Golds, 5Silver and 4 Bronze, as it can be seen in the Kenya Standards Newspaper dating 12<sup>th</sup> July, 2011. Kenya is a power –house in sports and games and this is why it has performed extremely well in the world of sports coming 2<sup>nd</sup> after USA at the 2015 IAAF world championships in Beijing, China. Julius Yego threw men’s javelin (92.72m) to bag gold medal, David Rudisha won gold in 800m and Hyvin Kiyeng Jepkemoi got gold in 3000m steeplechase, Vivian Cheruiyot won gold in 10,000m race and Ruth Kipyegon won silver in women’s 1500m race to name but a few (Daily Nation, August, 30<sup>th</sup>, 2015).



The primary school curriculum is viewed as the foundation upon which the mastery of learning skills must be planted. In this regard, the skills of doing physical activities and self-expression through the subject must be taught to satisfactory levels to provide firm foundation in the subject (Koech, 1999). One anomaly with the primary school curriculum is that it lacks implementation determinants that enhance curriculum instructions in Public Primary Schools. Physical Education (HPE) has been and still is one of the non-examinable subjects in the primary school curriculum. The Koech commission (1999), after going around the country collecting and collating the views of Kenyans both in and out of schools, was very disappointed to find out that in some schools HPE was not taught at all while in some other schools, it was only taught once in a week. In most schools where HPE was “being taught”, the learners were left on their own to play whatever game pleased the learners. In its recommendation, the Koech commission cited the important role HPE plays in the learner’s physical and social development, considering that Kenya is a sporting nation of an international repute.

Teachers as implementers of HPE curriculum ought to know that the main goal of physical Education is to help all learners including those with special needs to live healthy satisfying and energetic lives. According to American Association for health (AAH), HPE and Creation Conference Report (1965), it was observed that HPE has five specific benefit for learners and these are: Development and maintenance of maximum physical efficiency; development useful knowledge, attitude and physical skills; to act in socially useful manner; enjoy wholesome physical recreation; to develop mental, physical, social and psychological development of the learners and to express oneself physically through games and sports.

You (2012) indicated that HPE is important to learners because it plays a major role in activating the general development of their intellectual, physicals, motor, social and moral characteristics, which might cause a problem. In addition, it assists the learners to maintain general body fitness and acts as a catalyst in providing them with skills and attitudes required for sportsmanship and employment. Many of the current international athletes like Rudisha, Vivian Cheruiyot, Bungei, Jepkosgei, Pamela Chelimo and Kipsang (Berlin Marathon World Record Holder 2013) achieved their fame because of doing HPE while at school. Uasin Bolt of Jamaica, Marion Jones of U.S.A, Gebrelessie & Dibaba of Ethiopia to name but a few acquired their skills through HPE while still at school. During the 12<sup>th</sup> IAAF world championships in Berlin, Kenya got 4 gold, 5 silver and 4 bronze medals. In the 13<sup>th</sup> world championship in Daegu, Korea, Kenya got 7 gold 6 silvers and 4 bronze (Korir, 2010).

Oliver (2002) observed that sports and games are the most effective media for socialization in all communities, especially among the students in all races world over. The researcher concurs with Oliver's observation since the East Africa Community (EAC) Countries ((Kenya, Burundi, Rwanda, Southern Sudan, Tanzania and Uganda); are promoting this social interaction through secondary schools annual games. For the last 4 years this inter-secondary school sports and Games have been held in different countries. The International Association of Athletics Federation (IAAF) has also been promoting this social interaction of youths through Athletics and games (Yonga, 2014). Hardman (2008) states that difficulties in social interaction and unhappiness in play result from poor motor-skills in children with movement problems.

He further argues that clumsy children avoid participation in social play and game situations because of their physical condition. This has made some children to totally withdraw from social play due to fear of rejection. Madeje (1980) carried out investigation on the evaluation and implementation of HPE programs in Dar-es-salaam city primary schools in Tanzania. His findings were that HPE programs were not effectively implemented as compared to other subjects like Mathematics, English on the timetable. He argued that pupils were being denied their rights of learning HPE, which was very important to their healthy mind and body. A physical exercise stirs up the brains and stimulates the muscles thus keeping the learners active the whole day. Kenya children and youth are walking less and eating more junk foods. As a result they are growing fatter, lazier and sicklier than their peer a few generations back (Onywera.2010).

This is the worrying message from a new study highlighting what students do between the end of the school day and before dinner. It warns that Kenyan children are at a higher risk of developing chronic lifestyle disease such diabetes because they barely engage in physical activity (Ogola, 2012). The study by Onywera (2010) blames this on parent predilection for technological gadgets that ensure their children spend very little energy on domestic chores and entertainment. The lead researcher says there are many energy-saving devices for children who are also eating more unhealthy foods. This turns them into junkies and dummies before puberty. The study shows that children from rural areas are more physically active than their urban counterparts. With a mean average of 14,700 steps compared to their urban peers (Onywera, 2010).

Seventy percent (70%) of urban parents and 34 percent of rural parents reported their children being more active during childhood than in their youthful stage. The study also showed that urban children and youth spend 11 hours per week watching television or playing video games, while those in rural areas spend three hours. The disparity could be due to the fact that 65 percent of children from rural areas interviewed did not have access to a TV set. The biggest threats to the youth being the usage of TVs, computers, internet, face-book and twitters (Onywera, 2010). Students spent most of their physical exercises on these gadgets, especially during the weekends. This corroborates with a World Health Organization report (2012) warning that nearly 43 million children under the age of five were overweight.” The onset of lifestyle disease in towns is worrying as people have ignored a campaign to take part in physical exercises (HPE) and eat healthy foods, this lifestyle diseases can be overcome among learners if only implementation determinants on HPE curriculum can be applied to the letter, but which is not the case. Sallis (2000), explicitly discussed the importance of HPE to young learners in schools, he did not discuss what might affect the learner who neglects physical exercises while in school.

### **2.1.2 Analysis of HPE Curriculum for Primary Schools**

Health and Physical Education (HPE) is an integral part of the education process that contributes to the total development of an individual learner through medium of movement. In HPE, well selected and suited physical activities are used to ensure that learners acquire relevant skills, knowledge and attitudes which lead to the development of physical, mental, emotional, morale and health aspects. The primary school physical education syllabus is a guide to teaching of HPE in all public and private schools in Kenya. The topics and sub-topics have been selected in cognizance of the goals of education and objectives of primary schools. The primary schools HPE

curriculum, the learners' previous experiences and health needs are all inclusive (Kiganjo, 2005). The topics provided in the syllabus should be adopted and implemented to lead to an effective and competent learner, who should cater for self and the needs of his/her nation at large.

During HPE lessons and sporting activities, learners should be sensitized on contemporary issues in the society. Some of these are emerging issues like HIV and AIDS, drug and substance abuse human rights, disaster management e.g. fire outbreak, peace initiative etc. The aim of the primary school HPE syllabus is to acquire basic skills and physical activities. This is essential for growth and development, fitness health, character formation, enjoyment, proper use of leisure and acquisition of lifestyle, sports and games (Stodden, *et. al.*, 2009). This is why health content needs to be enough space in the HPE primary syllabuses. Critical analysis of physical education for upper primary teachers' guide does not have topics on health education. This is a misnomer done by HPE curriculum developers. Both the learners' text books and teachers guide ought to contain topics on health education for effective implementation of HPE curriculum.

However, the implementation of primary school HPE education syllabus puts little emphasis on inculcation of practical skills necessary for physical development of the learner. As a result the needs of learners both in primary and secondary schools are not addressed. Health problems among school children have a burning issue in both primary and secondary (Onywera, 2010). Teachers in schools have to device ways of teaching learners skills of performing HPE since lack of it affects their academic performance (Mwathi, 2005). These problems are not only common in primary school learners but also among secondary school students.

In lower primary, level 1-3 the topics are arranged in such away that learners perform physical exercises without apparatus. Learners in classes 1-3 begin the activities on locomotion's skills; subtopics in lower classes are: Crawling, Walking, Running, Leaping, Hopping, Jumping, Stepping, Climbing and Rolling While the non-locomotives skills include: Curling, Turning, Stretching, Swimming, Swaying, Bending etc. These activities are good for strengthening learners' muscles and joint mobilization. Though these activities are useful for learners in lower classes, the teachers' guide does not explicitly give the implementation determinants of HPE curriculum instruction and the side effect of these activities and the approaches to be adapted during the lesson. The HPE teacher will need to have markers, mats or sacks in order to perform the activity.

The learner will need to utilize skills in different situations as well as to enjoy and appreciate basic body movements without apparatus. The main objective being to manipulate different parts of the body in a variety of movements and to appreciate and enjoy rhythmic movements. In this syllabus for classes 1-3 the curriculum developers (KICD) does not indicate at what time assessment of learners does take place. As regards HPE for upper classes (5-8) major topics like: body movement with and without apparatus, Gymnastic activities, Track and Field Events, Dance, Handball, Swimming, Soccer and Netball are systematically arranged with each topic being split into sub topics. Each topic has specific objective to be achieved. Learning apparatus/resources for each topic are clearly indicated for HPE teacher to use during the lesson. Unlike other subjects like sciences where assessment and evaluation are indicated, all HPE topics are not given the value of assessment. This failure to indicate assessment as tool of evaluation has contributed to a lot of negative attitude towards the teaching of this subject, as both teachers and learners shy away from it. Although it is

timetabled, it is not given the prominence it deserves as other subjects, therefore rendering it obsolete. This is shown by negative attitude. Kiganjo (2005) in his work on the teaching of HPE in upper primary classes does not cite some of the selected determinants that can promote the teaching of HPE in upper classes (4-8), nor does he categorize these determinants and discuss the merits and demerits of each of them, thus leaving the implementers in awkward position.

## **2.2 Teaching and Learning Methods for HPE**

Health and Physical Education is an integral part of the educative / learning process which uses physical activities as main means of promoting psychomotor, cognitive and socio-affective development in order to enhance the quality of the child's life (Holst, 1993). Formally HPE lessons have focused on the psychomotor domains as an aspect of learning (Poynton, 1986).

During HPE lessons, the teacher may choose HPE methods to use during the lesson. These methods are the ways of organizing and presenting the learning processes to the learners in the class. The methods range from a direct, teacher centered approach to an indirect learner centered. Traditionally, direct teacher centered approach has been used pre-dominantly during HPE lessons. According to Morgon *et. al.*, (2007), the trend has shifted towards a move indirect, learner – centered approach. The learner centered approach is more time consuming and requires more preparation by HPE teacher (You, 2002).

The method is not easy to grasp without the teaching putting more effort into it. In order for the teacher to be successful with using this method, it will take substantial practice on the part of the teacher involved (Stodden *et al.*, (2009). The teaching approaches will start with teacher centered, command approach, followed by practice,

reciprocal and finally task approach. Thereafter, it will continue with increased learner – centered approaches, such as guided discovery, problem solving and exploration. In these methods of teaching HPE, the role of the teacher becomes less and less in the decision making, and the learner becomes the prime decision maker (Morgon, 2007).

The command style is the most teacher – centered method of the seven approaches (Mosston, 1992). In this method the teacher is the exclusive decision maker. Decisions on what to do, how to do and level of performance are all determined by HPE teacher (Nichols, 1994). With this method the teacher will give a demonstration of the expected performance and explains specific import and points of the activities. The demonstration gives the learner chance to see the skill performed accurately and observe the critical elements of the task. The practice approach is one of the most common teaching method used in HPE (Mosston, 1992). It is almost similar to the command style in that the teacher is the main decision maker and activities will begin with a demonstration and explanation of what is to be achieved. The demonstration may come from the teacher or the pupils. The practice approach is very useful when coaching a team of learners how to cheat pass the netball.

The reciprocal method allows for more decision making by the learners as compared to the command and practice methods which are much more teacher dominated. With this approach the teacher develops a reciprocal task sheet which describes the activity to be performed and points out what the learner should be looking for to see if his classmate is doing the activity properly.

The task approach still has the teacher deciding the content of what will be taught, though he/she allows some decision making from the learners to do the activity at



their own pace (Mosston, 1992). This type of style is good although it has some short coming as learners may go over board in doing the activity. The guided discovery approach crossed over into the learner – centered approach. This approach continues to use teacher designed movement activity. It is done in a way that allows the learners to make individual decision about how to move (Mosston, 1992). The teacher defines the intended outcome of the movements' response, but does not determine how it will be attained.

The method is good if the HPE teacher is trying to get the learners to discover the most desirable movement for a certain activity or develop a new skill (Nichols, 1994). Problem solving strategy is very similar to the guided discovery approach. With the problem solving method, many solutions can be the end results (Nichols, 1994). In problem solving, the HPE teacher will give a movement challenge that has some guidelines or rules. The guidelines may be a limitation on the utilization of space, direction, or movements permitted. The main goal is to find out single correct answers as with guided discovery style, instead the goal is for the learners to find as many different answers to the challenge as possible (Nichols, 1994). The HPE teacher has to accept any movement response that fits within the activity guidelines. The HPE teacher has to be keen in following the activities. For instance during HPE lessons, classes 5 and 7 learners did perform HPE lessons without any teacher around, see photograph 1 and 2 (Appendix F).

The exploration approach is best used with young learners involved in their first physical activity experience (Nichols, 1994). The approach allows learners to discover their hidden capabilities while working on their own, consequently, promoting the creativity within the movements. The method is arranged so that every learner can

experience instant success, therefore providing every learner with increased confidence in his/her ability to move.

The major disadvantage of this approach is the inappropriateness of it if a particular movement outcome is desired. The HPE teacher needs to gradually introduce the approach and only use it for short time, until the class feels more comfortable in exploring movement and solving problems on their own (Nichols, 1994).

In summary, it is difficult to mention which approaches offers the maximum potential for learning because not all learners will get optimal learning during the lesson by use of the same methods. For instance Akiiki (2007) and Mwathi (2005) in their work on the teaching of HPE lessons, they don't discuss explicitly on teaching methods to be used as determinants of the implementation of HPE curriculum in schools. This gap leaves an open space for HPE teachers to any method of their choice when giving instructions during the lesson. This research was to establish that specified teaching methods are vital in the implementation of HPE curriculum in public primary schools in Kenya. Certain HPE apparatus may be presented really well with one method and not as well with another. The HPE teacher must be able to determine which HPE method is most appropriate in a learning situation and apply it with determination and confidence. Teachers of HPE should be able to proficiently and effectively use all seven of the teaching methods depending on what the lesson calls for.

### **2.2.1 HPE Teaching as a Profession.**

A teacher as a professional person is expected to develop a learner holistically and not concentrating on one domain at the expense of another. A teacher is like a potter, and the way s/he trains the learner is the way s/he will be in future. Education as a profession, involves the understanding of principles as well as the acquisition of

knowledge, skills, attitude and values. It involves the whole personality (Omulando and Shiundu, 1992). Education also implies versatility on the part of the individual to the extent that, in addition to excellence in his area of specialization, s/he should have adequate functional knowledge, ability, interest and positive attitude towards the subject one teaches. Attitude is pertinent to handling HPE lesson and social areas of operations (Shehu, 2009).

Teaching is a professional human activity in which the teacher creatively and imaginatively uses his/her knowledge, skills and attitude to promote the learning and welfare of the learners which is expected to be developed in HPE instructions (PES, 2008). Omulando and Shiundu (1992) support this statement by stating that teachers are professionals capable of rational decisions. As in many other professions, where a professional whose daily work involves human interactions has to make decisions which touch on the welfare of other people, so the HPE teacher, like any other professional, gives his/her services in the capacity as one who has specialized knowledge, skills and attitude. It is assumed that his/her knowledge, skills and attitude are in demand by those learners s/he purports to teach. Teaching as a profession, therefore calls for positive attitude with much interest, competence plus use of specialized knowledge and skills on behalf of learners. Hence, for the HPE teacher to be able to perform his/her teaching duties competently, s/he must be capable of: showing positive attitude towards the HPE lesson; using a body of specialized knowledge to deliver content; making the decisions on behalf of learners and motivating learners to learn a new skill. Wamukoya (1985) and Kamenju, *et al* (2005) in their researched work, they only discuss pupils activities in the field during HPE lesson, but don't discuss the attitude of both learners and HPE teacher towards the subject. Attitude plays vital role in the implementation of HPE curriculum

Teaching facilitates acquisition of knowledge, skills and attitude in learners that assist them to perform the activity effectively during the lesson. To gain this the teacher of Physical education must possess good teaching approaches, strategies and techniques, interest and motivation inclusive. A teacher derives his title from the act of teaching, explaining the content to his/her class with confidence. The teacher of PE must equip him/herself knowledge and skills when handling a PE lesson. This stirs the learners to develop interest in Physical education lesson (You, 2012).

Although the central activity in teaching is an actual *instruction* which involves creating, using and modifying instructional strategies and tactics in the classroom, broadly teaching also covers curriculum activities outside the class namely demonstration and assessment. What this means is that the work of the teacher is not limited to the classroom, he is expected to participate in all other phases of PE curriculum development. This broad participation even makes his/her main classroom work more effective (Tinning, 2008). Physical Education is to enable the learners acquire knowledge, skills attitude and values. The last two factors are very important in enhancing the learning of PE lesson. The literature so far reviewed discuss very little about teaching methods towards the teaching of PE lessons. However efficient the teacher may be at delivering the content, if s/he does not involve implementation determinants that will contribute to understanding the HPE concept at hand, then the class may develop some negativity towards the teacher as well as the subject. Many a time teachers for HPE use old methods of teaching PE lessons which are outdate and out of touch with the modern style of handling HPE lessons. This has made learners to classify HPE curriculum as a subject of low status in comparison with other examinable subjects like Mathematics, English to name but a few. Attitude is not given prominence in the literature work written by You (2002), Morgan (2008) and

Onywera (2010) on implementation of HPE curriculum in schools, and this gap needs to be exploited by those with interests in how HPE lessons are instructed in schools.

### **2.3 Teachers Attitude towards HPE lessons**

*Education for All 2000-2015* Wanzala, (in press) 40,000 teachers skip classes: *The Global Monitoring Report* indicates that more 40,000 of 230,000 primary school teachers skip classes. This reveals that some teachers do not understand the curricular due to lack of enough knowledge from the Ministry of education, government and other Educational training institutions. The document, which was released April 2015, showed that teacher absenteeism was affecting the quality of education in Public Primary Schools as it was reducing the number of hours children were being taught. The report was based on an independent survey commissioned by UNESCO, (2015) on behalf of the international community. It involved agencies and governments.

The report states that contract teachers tend to be very effective where parental or community involvement is greater. It says the positive effects of hiring contract teachers were observed only in communities where parents were trained to monitor staff absenteeism and teacher's attitude towards certain subjects. The report indicates that Kenya lost Sh4. Billion, which was meant to fund education, due to corruption. One can confidently point out that this vice has been a thorn in the governments flesh as those entrusted with funds end up embezzling money given out to purchase teaching/learning materials, PE apparatus inclusive. "While Kenya has made education free, there is some indication of corruption regarding capitation grants," says the report. The document came in the wake of another report that was released in 2014 that indicated that 13% of teachers in the country were not reporting for duty. The Kenya Economic Report 2014 had also shown that many teachers struggle to

teach core foundational reading, mathematical and PE skills in schools. May be the Kenyan government needs to re-design the curriculum for both Public Schools and Teacher Training Colleges (TTCs) so as to inculcate into teacher trainees positive attitude.

Then Education for All 2000 – 2015 report states that the proportion of children in Kenya reaching the end of primary school increased from 42% in 2000 to 62% in 2007. At the same time, learning outcomes for children from both poor and rich households improved. “This may have been facilitated by programmes helping teachers adopt effective pedagogic approaches that ran from 2001 to 2006 for 41,000 primary school teachers” says the report. It attributes the increase to three key resource teachers from every school who were trained to lead professional development in their in their subject. Head teachers had received materials to support the key resource teachers in providing training. These key resource teachers that were identified for training did not include teachers of Physical Education. This was a misnomer as it showed that PE is given low status amongst other subjects in the school curriculum.

However, the Global Monitoring report does not point out the attitude of teachers towards these subjects that are skipped on the class timetable. Literature reviewed concerning attitude of teachers of Physical Education towards the subject most lady teachers negate HPE lessons (UNICEF Report, 1990). This is true as the researcher established this when he visited some sampled public primary schools in Nandi County to ensure that all subjects timetabled are given equal treatment. During my casual interaction with other members of the teaching staff, I tried to find out why teachers don't take HPE lessons seriously. A good number gave reasons as lack

motivation from the ministry of education, lack of playground and lack of HPE equipment & facilities. Attitude observed on the HPE teachers stirred the researcher to investigate on equipment and facilities used by them during PE lessons. Jenkinson and Benson (2010) cites negative attitude towards the teaching of PE as one of the major barriers in the implementation of HPE curriculum in most of the schools.

In conclusion, it is worth mentioning that the formation and manifestation of future HPE teachers' attitude is achieved as a process. Such a process involves: a) the acquisition of a comprehensive system of cognitions, beliefs and assumptions regarding HPE teaching profession, b) the acquisition of a comprehensive system of affective experiences regarding HPE teaching as a profession, c) formation and manifestation of appropriate behavior according to cognitions and affective HPE emotions. Referring to the conducted study, according to the available data obtained it is worth noting that practically in the process of forming attitudes, difficulties may occur at the level of integration with other steps. However, it is noteworthy that the behavioral manifestations of attitude towards the teaching of HPE may directly influence and dependent on the context. Moreover, contextualized experiences become important, in the sense that not only the context itself may influence the manifestation of attitude but also subjective experiences of individuals, determined by relative determinants of HPE curriculum (Nike, 2012).

#### **2.4 HPE Equipment and Facilities**

In the very simplest analysis, the task of HPE curriculum implementation can be said to involve the provision of learning resources/materials. If there is to be a change and improvement in physical education, there must be adequate PE apparatus. Basic to the success of any attempt at curriculum implementation is the preparation of suitable PE

apparatus, teachers' guides and any other teaching/learning materials (Kiganjo, 2005). The excellence of the PE apparatus provided by the ministry of education (MoE) is often a considerable incentive to innovation. But if an innovation is to be more than just a passing fancy it is essential that there is ready and continuing supply of PE equipment, facilities and adequate support services. This is one of the most supremely critical conditions of successful innovation and implementation (Tamwesigire, 2008). However, the provision of PE apparatus and facilities to schools without the adequate support and involvement from the ministry of education (MoE), then implementation of HPE curriculum will continue to face many unpredictable hurdles now and in the near future, since these go hand in hand with implementation determinants that influence curriculum instructions in Public Primary Schools.

Most developed countries have Resource Centres/rooms, often located in teachers training colleges, containing all the items/tools that teachers are likely to find useful in their teaching (Morgan, 2008). In Kenya most of the Resource Centers/rooms are referred to as Teachers Advisory Centers (TAC) and are located at County education office (CEO), instead of being attached to schools. Such Resource centers /Teachers advisory centers contain collections of books, reference materials, kits of newspaper articles, photographs, maps, diagrams, historical documents, journals (1985). This is contrary to advanced countries like Japan, China, USA, Russia, Korea to name but a few. These countries have conceptualized the importance of physical education and healthy to their citizen and that why they have invested heavily in PE equipment and facilities (Hardman, 2008). Such collections at TAC constitute of all education materials with an exception of HPE equipment on which HPE teachers can borrow, use and return at the end of the term.



Healthy and physical education (HPE) is commonly faced with the challenges of inadequacy of playground and equipment with poor maintenance of existing teaching apparatus. There are also marked sub-regional and intra-county differences, and there are specific facility needs, especially in non-urban/rural schools. The ICSSP and CD surveys generally showed that in developed countries, quality and quantity of facilities and equipment are regarded adequate and in some instances excellent for physical education lessons (Tinning et al, 2001)'. The inadequacy of PE equipment has hindered physical education instruction right from pre-school level to secondary level. The Sessional Paper No. 1 of 2005 gives emphasis on the teaching of HPE to all levels of education. To achieve implementation determinants on HPE curriculum instruction, the Kenyan government must take the challenge of providing PE equipment and facilities to all Public Primary School countrywide. With the proposal of 2-6-3-3-3 new system of education (Daily Nation, April 9<sup>th</sup>, 2016) the government ought to factor in the budget funds for the purchase of HPE equipment and facilities for public primary schools. The school HPE equipment and facilities are part of implementation determinants that influence curriculum instructions in public primary schools. Unlike other subjects on the school block timetable, HPE is a practical subject and it can be implemented effectively when HPE equipment are provided to schools the stakeholders (Bassett, 2013). For instance, Kiganjo, *et al* (2005) discusses HPE apparatus to be used during HPE lessons in the field, but his work is scant on how to be used by learners in the field, he is not explicit at all.

## **2.5 Monitoring and Evaluating HPE Curriculum**

Assessment is an integral part of the teaching and learning process in Health and Physical Education, as in other areas of the curriculum. The curriculum identifies the roles of assessment in HPE as providing the teacher with information which helps to

enhance the experiences of the child in health and physical education (Tamwesigire, 2008). It can help the teacher to discover what learners can do and what they know and understand. It can indicate the different rates of progress that learners are making and help to monitor the learner's achievements related to the objectives of the HPE programme (Stodden, 2009). Assessment can help the HPE teacher in planning for future work in HPE and identify difficulties which learners may be experiencing, thus helping the teacher to adapt activities for individual learner, especially for learners with disabilities in the class (Sallis *et. al.*, 2000). In addition, assessment can help schools evaluate the development of the curriculum in health and physical education (Morgan & Hansen, 2008).

The success of any curriculum innovation in any field of learning heavily depends on the ability of both Quality Assurance and Standards Officers (QASO) and the Head teachers to effectively and efficiently supervise it at all levels. There is need to set up an organized formal structure of authority through which work is done and arranged for the best achievement of curriculum objective in general. Olembo (2005) pointed out that the tasks the administration is expected to carry out while performing their administrative roles are:-To coordinate the teaching of each subject in each class to avoid clashes in timing various activities, allocation of subjects to various departments and ensuring that heads of departments (HODS) have allocated the teaching load fairly to each member of academic staff according to their qualifications.

Schools heads also have responsibility for the selection and procurement of instructional materials and facilities. They are expected to assess, supervise the use and maintenance of these materials and learning resources so as to instill quality in the

standards of performance. These roles are expected to be performed by the head teachers and HPE teachers as regards the implementation of HPE in their teaching schools.

Discussing the role of head teachers in implementation of primary science as a policy, Tamwesigire (2008) argues that head teachers need to involve HPE teachers in policy and planning, programming, procurement of HPE equipment and monitoring of academic standards. It is through the Head teachers and Quality Assurance and Standards (QASO) officers who are to provide the in-service training, motivation and expertise essential to curriculum implementation in the entire school system. Whether the head teachers were performing supervisory duties regarding the teaching of HPE lessons in their area of jurisdiction or not is what this research study sought to establish.

Under the supervision of head teachers, HPE teachers are supposed to carry out HPE programmers, purchase HPE equipment and materials as head of subject (HoS). In addition, HPE educators must play the role of instruction during the lesson in the field or play ground, and design strategies that could improve HPE performance and motivate learners to develop positive attitude towards the discipline. The present educational supervisors will continue to face criticism as they work with diverse groups of teachers. Supervisors and administrators need to be specific about their own personal platforms which guide their work in schools. They may lose some battles with those HPE teachers who hold opposing viewpoints, but at least they will be able to maintain personal integrity in this critical area of supervision.

You (2002) observed that assessment had to be carried out by both field offices (QASO) and head teachers with the aim of improving the curriculum and teaching of

physical education in Public Primary schools. This could be done by head teachers having personal contact of face-to-face assessment with HPE subject teachers. Under curriculum implementation, head teachers ought to go beyond the usual administrative matters, they ought to enhance the re-organization of the classes in terms of games and sports. Opportunities that would facilitated that the implementation of formulated HPE objectives should be provided. The head teachers are required to guide the HPE class teachers in the selection of the content, equipment, making of school master timetable and above all assess practically the teaching of HPE lessons.

Davesh and Playko (2005) stated that the duty of a head teacher is to ensure that evaluation of all school programmes both academic and non-academic were carried out effectively since there are different objectives to be achieved. These objectives range from social to vocational, sporting to cultural and academic to moral. The fact that HPE is not examined at KCPE and KCSE by the Kenya National Examination Council (KNEC) in both primary and secondary schools (Otunga, 2010), practical assessment of the HPE lesson is quite necessary if it to achieve its desired goals. The present 8-4-4 system is too much academic oriented and denies learners talents and practical skills which are very important in the present world of advanced technology. The proposed 2-6-3-3-3 system of education has addressed this anomaly (Daily Nation, April 3<sup>rd</sup>, 2016).

Olembo (2005) stated that Head teachers should have skills; knowledge and attitude to influence teachers top achieve the set goals. This can only be achieved when the conditions of work in their respective schools were conducive. Since head teachers are the Chief Executive Officer (CEOs) of the curriculum implementation in their

respective schools, they ought to emphasize the teaching of this vital subject to the young generation of the society. This study tried to find out if HPE lessons are being assessed as required by the Quality Assurance and Standards Officers (QASOs) and to what extent the assessment takes place. Curriculum instructions can be effective when both head teachers and quality assurance and standards can play their role of supervision seriously. Lack of competent assessment by both head teachers and quality assurance and standard officers has led to negative attitude towards HPE lessons by both learners and HPE teachers in public primary schools. The HPE curriculum has a variety of forms of assessment that can be used to ensure that a full range of abilities in HPE is assessed and to allow for individual learning styles (Stodden, 2009). The forms are compatible with the teaching and learning in HPE, as they can be undertaken as teaching and learning place. The HPE teacher can use the following assessment tools/forms during HPE lesson: *a) teacher observation*: the monitoring of learner's progress as the actual learning takes place in health and physical education. *b) teacher-designed tasks*: the wide range of tasks which the teacher sets for the learner to complete and can be assessed as the pupils are learning. *c) curriculum profiles*: a way in which the learner's progress can be assessed and recorded using indicators. As curriculum profiles for HPE have not yet been developed at national level (Kiganjo *et. al.*, 2005), schools should devise profiles which can meet their individual needs

In recent years, studies have highlighted concerns about the fitness and participation in physical activities of school children. Recent study of primary school children in Kenyan school children aged 7-12 reported a dramatic rise in childhood obesity amongst both boys and girls, Onywera (2010). Physical education is crucial to health fitness and well-being. All school children should benefit from positive experience of

P.E. From early age they need to experience enjoyment and success through physical activity. This will have helped them to have confidence in their capabilities and to choose activities which match their needs and interests. It will also encourage them to continue to take part in a wide range of physical activities in childhood and beyond. Experience in primary school years is of critical important, therefore, to children's development of attitudes and skills.

According to Osler (2004) in his fieldwork report in Scotland during implementation and inspection programmed, the schools inspected, learners generally achieved good or very good standards during HPE lesson. In the schools visited as examples of good practice, attainment was evaluated against National attainment levels for PE and, in a majority of these schools Osler observed that pupil's attainment was best in; Using the body: For example in movement such as running, stretching and balancing with increasing central at the early stages to throwing accurately or varying the rhythm of a dance sequence at the lower stages. Applying skills: for example in learning to make a controlled landing from a jump (somersault)early stages, to using skills in orienteering at the later stages. Developing fitness: for example in energetic movement at the early stages to demonstrating stamina and flexibility at the later stages. Evaluating: For example in observing travelling across a bench and commenting on their ideas at the early stages to using criteria to identify the strengths of a gymnastic sequence at the later stages. The instructor must teach determinants that will enable the learner to internalize the skills

Osler further observed that the work of individual schools made a considerable difference to pupil's standards of attainment in HPE. Teachers in the schools with very good standards of attainment had high expectations of what their pupils would

achieve. They shared their aims with the pupils' and expected them to achieve the standards set out in national guidelines. In the Kenyan case this is a contradictory issue in that a Kenyan child is not exposed to such activities cited above. National guideline for assessing HPE lesson in both primary and secondary schools is nonexistent. These National HPE guidelines were there in the early 1980s and mid 1990s when the Ministry of Education emphasized inter-schools PE competitions. To-date, such HPE competitions have so far been replaced with examination means score competition. HPE curriculum as it appears on master timetable has been forsaken as schools try to outdo each other in Kenya National Examinations (KCPE & KCSE) performance.

Children's performance in HPE requires varied opportunities to practice and refine techniques in order to develop high standards of sportsmanship. Schools with high standards with designed P.E programmes are those that are managed by religious organization like the Catholic, Islamic e.g. Aga-Khan, Hindu and some other Academy schools. The above cited schools emphasis strongly determinants of implementation that influence acquisition of skills and knowledge and how to apply them practically. Schools with high HPE standards make pupils acquire skills, knowledge and positive attitude towards the subject while still at school. Teachers in those schools establish basic physical skills as a foundation for more advanced skills and share with pupils the methodology to review and discuss skills how to be improved. Unlike public primary schools where there are no assessment guidelines for HPE lessons, religious (private) schools have constructive feedback to their learners from teachers. This improved their performance in physical activities. Well judged and timely intervention with individual learners and small groups made a significant impact on progress. Teachers in public primary schools lack equipment and correct

skills to provide effective HPE lessons. Many feel that their lack of knowledge about some skills hampered them in making useful and corrective comment about learner's performance.

In the early 1980s the effective use of PE competition was often associated with high standards of attainment for all participants' not just winners. These competitions motivated pupils to try hard and seek new strategies or techniques, thereby raising their level of achievement in the inter-school competition (Daily Nation, August 9<sup>th</sup>, 1980). The most successful teacher matched his/her opponents carefully and used a variety of competition techniques and placed a strong emphasis on appropriate manner and etiquette (Mcmanama, 2006). The researcher concurs with the author in that the HPE teacher must abide by strict rules of professional etiquette in order to achieve his/her set objectives in PE instructions in and outside the classroom. However, the adherence to strict rules without positive attitude and availability of teaching / learning apparatus will not enhance the implementation of HPE curriculum in public primary schools, especially in Nandi County.

Regular opportunities to practice, compete and perform in physical activities after school contribute greatly to pupils' involvement and improved their attainment. In most schools, extra circular activities and opportunities outside school work is not provided. The learners of STD 6-8 do not develop personal and social skills in HPE. Most public primary schools programmes are based on structured KICD curriculum. A few public primary schools use commercial HPE materials and equipment. Some schools supplement their HPE curriculum with specific resources to support sports and games, Gymnastics are not very much given emphasize and this could be due to either lack of skills on the subject teacher or negative attitude depicted by the HPE



teacher. The adapted HPE curriculum for learners with disabilities (especially the blind and physically challenged) is hardly emphasized by teachers during HPE lesson in the field. The researcher noted this when he took part in a HPE lesson as a participant observer in one of the sampled schools. The lesson was conducted without taking into consideration those factors that will enhance the learning of the new skills. These factors are so unique that if they are not involved in the teaching of HPE lessons, then soul, body and mind of the learner will be affected negatively. In the reviewed literature available, there is scanty information regarding the mode of assessment of HPE lessons in schools. Akiiki (2007) has written much in regard with the teaching of physical education in Uganda but has fallen short of discussing the mode of monitoring and assessing physical education lessons. Both Kiganjo (2005) and Kithuka (2006) in their literatures concerning academic performance in schools have not discussed a lot in regard with assessment of physical education. This study aims at filling the gap in the implementation of HPE curriculum.

## **2.6. Summary**

This chapter reviewed both empirical and proposition literature related to the study revealed that HPE has evolved overtime and space through research and debate (Corbin, 2002). This review also identified that learners in Public Primary schools were at a critical stage in their growth and behaviors they picked at this time would be carried on to adult life. It has further shown that there are glaring differences in HPE curriculum instruction in Kenya and the rest of the world especially in time allocations, provision of HPE equipment, and attitude of teachers handling the subject in the field and teacher status (Onywera, 2010). This chapter has also identified that the state and status of HPE in Kenyan Primary schools is subject to prevailing conditions like examination and mean scores among others. Again it emerged that the

presence of inadequate equipment and facilities, the negative attitude of PE teachers and learners, head teachers and Quality assurance and standards officers (QASO) role are the main determinants of implementing PE curriculum in any country. The new proposed 2-6-3-3-3 system of education which is replace the academic oriented 8-4-4 system of education focuses on academic, talent and Practical skills (Daily Nation, April 3<sup>rd</sup>, 2016).

Many male and female HPE teachers are not properly prepared for physical education lessons they are allocated to teach. The critical concern is that many physical education teachers are incompetent when it comes to the issue of delivering HPE content (Onywere, 2010). In addition, supervision, monitoring and quality checks by both quality assurance and standards officers are lacking not only in Nandi County but also in all Public Primary Schools countrywide. In summary therefore, this study found out that professional documents, teaching methods, teachers' attitudes, HPE equipment/facilities and monitoring and evaluation as determinants of HPE are very important in implementing HPE curriculum in all schools. However, these cited determinants are not applied to the letter as required as the researcher found out in all the sampled schools that were involved in research. In the written literature by Sallis (2000), Akiiki (2007) and Bassett (2013) to name but a few, have done research on teaching of HPE in Public school without discussing factors that influence the teaching/learning of HPE lessons both within and out of the classrooms. This gap needs to be exploited as these determinants are important for the development of HPE in all Kenyan schools.

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.0 Introduction**

The chapter presents the description of the procedures and strategies that were adopted to collect and analyze data. It focuses on among others, the research design, study location, target population, sample size and sampling procedures, data collection instruments, validity and reliability of the instruments, data analysis and ethical considerations.

#### **3.1 Research Design**

Prior to deciding on a suitable design for the study, a review of the possible paradigm within which to underpin the study was made.

##### **3.1.1 Research Paradigm**

According to Rossman and Rallis (2012), a paradigm is a world view that makes assumptions of how things work. In their view, a paradigm defines a shared understanding of reality. Neuman (2012) notes that a paradigm connects and categorizes research techniques on the basis of underlying philosophical assumptions guiding specific research processes. Consequently, each paradigm views the nature of knowledge differently.

Creswell (2013) isolates three distinct paradigms in respect to their assumptions of knowledge. According to Creswell, the post post-positivist paradigm assumes that objective truth exists and can only be unearthed by the use of quantitative approaches. A study on determinants of implementation of health and physical education curriculum no doubt assumes that such determinants do exist and can be unearthed

through scientific means. On this basis, it was prudent to situate the present study in post-positivist paradigm. However, this paradigm alone was not sufficient given that matters of health could effectively be understood through both quantitative and incisive interviews with respective participants.

The second paradigm identified by Creswell is interpretivism. According to this paradigm, an understanding and interpretation of how people create and maintain their social worlds is a result of exploring their socially constructed and meaningful actions through observation of their natural settings. An interpretation of HPE teachers' perceptions and experiences, with regards to implementation of the HPE curriculum pointed to elements of the interpretivist paradigm. The ideal paradigm was therefore deemed to be one which could incorporate tenets of both positivism and interpretivism.

Pragmatists posit that actions and consequences inform knowledge (Creswell, 2013). Pragmatists are therefore keener on solving the problem using whichever possible methods. The nature of the problem for the present study was such that an understanding of determinants of implementation of HPE curriculum required a combination of quantitative and qualitative approaches. Pragmatism was therefore deemed as the ideal paradigm to underpin the study.

### **3.1.2 Research Design**

Basing on this pragmatic school of thought, the present study adopted the concurrent mixed methods design. Under this design, both the qualitative and quantitative approaches were combined (Ayiro, 2012). The two approaches were employed in parallel so as to get a more complete grasp of determinants of implementation of HPE curriculum (Creswell & Piano Clark, 2011). Both qualitative and quantitative data

were collected concurrently, analyzed separately and results merged for interpretation as combined results.

### **3.2 Study Area**

The study was conducted in public primary schools drawn from Nandi County of the North Rift region of Kenya. Nandi county occupies an area of 2,884.4km<sup>2</sup> and as at 2009, had a population of 752,965 (KNBS, 2009). It is bordered by Kakamega County to the West, Uasin Gishu County to the North East, Kericho County to South East and Vihiga County to the South West. The County comprises of 5 sub-counties namely; Nandi Central, Kabisiet, Tinderet, Aldai/Kaptumo and Nandi Hills. Choice of Nandi County for the present study was buoyed by the interest to examine factors that influence implementation of HPE curriculum, given the successful participation of many individuals from the county in athletics both nationally and internationally. The assumption was that such talents could have been nurtured through HPE conducted at primary school level.

### **3.3 Target Population**

A target population as noted by Nworgu (2005) defines all members or elements of a well defined group with some common observable characteristics, and about which a researcher can be able to draw conclusions. Consequently, the study targeted Quality Assurance and Standards Officers (QASO), head teachers, HPE teachers and class 7 & 8 pupils drawn from public primary schools across the five sub-counties of Nandi County. The choice of these groups of individuals was based on the fact that they had the potential to have incisive views regarding implementation of HPE curriculum in public primary schools. A total of 19 QASOs, 173 head teachers, 383 HPE teachers and 715 class 7 and 8 pupils were identified from public schools in the sub-counties.

The total target population was therefore 1290 individuals, distributed as shown in Table 3.1.

**Table 3.1: Target Population**

	<b>QASOs</b>	<b>Head Teachers</b>	<b>HPE Teachers</b>	<b>Pupils</b>	<b>Total</b>
Nandi Central	5	35	77	143	260
Kabiyet (North)	4	34	76	143	257
Nandi Hills (East)	4	34	76	143	257
Kaptumo (South)	3	34	76	143	256
Tinderet	3	36	78	143	260
<b>Total</b>	<b>19</b>	<b>173</b>	<b>383</b>	<b>715</b>	<b>1290</b>

### 3.4 Sampling

Sampling is defined as a procedure for selecting a representative part of the target population, and using it to conduct research, upon which conclusions can be generalized to the entire population (Neuman, 2012). Prior to sampling, the sample size was first determined.

#### 3.4.1 Sample Size

According to Creswell (2013), a sample size should be such that it is manageable enough. Consequently, computation of the sample size for the present study was based on the sample size Table adopted from Krejcie and Morgan (1970). On this basis, the sample size for the present study was approximately 296 individuals (Table 3.2).

**Table 3.2: Table for Determining Sample Size for a given Population**

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381

Source: *Krejcie & Morgan (1970)*

### 3.4.2 Sampling Procedure

On the basis of assertions by Creswell (2013), that the research design and methods used for data analysis are crucial in decisions regarding sampling procedures, the present study incorporated both the stratified and simple random sampling techniques. First, respondents were stratified in terms of category as shown in Table 3.3. Stratification was done proportional to the population of respondents in respective categories.

Simple random sampling was next conducted to select the required number of respondents from each category. Respondents in each category were each assigned

numbers. Random numbers were then generated and used to identify the required sample of respondents.

**Table 3.3: Sample Size of Target Population**

<b>Category of Respondent</b>	<b>Number in Population</b>	<b>Number in Sample</b>
QASOs	19	$\frac{19}{1290} \times 296 = 4$
Head Teachers	173	$\frac{173}{1290} \times 296 = 40$
HPE Teachers	383	$\frac{383}{1290} \times 296 = 88$
Learners	715	$\frac{715}{1290} \times 296 = 164$
<b>Total</b>	<b>1290</b>	<b>296</b>

### 3.5 Research Instruments

Five instruments were used to collect data relevant to the needs of the study. They included: Questionnaire for HPE teachers; interview schedule for Head teachers, interview schedule for QASO; focused group discussion guide for pupils; and documents analysis.

#### 3.5.1 Questionnaire for HPE Teachers

This questionnaire (Appendix 1) was designed to contain seven sections consistent with the key constructs under study. The first section collected information pertaining to HPE teacher's background. Teacher's background information was a necessary precaution in the control of likely influences that they may pose to the study findings. The second section gathered information pertaining to preparation and use of professional documents. The information was used to give a pointer as to how HPE teachers prepare and use professional documents during HPE instruction. The third



section explored teaching strategies or methods applied during HPE instruction. The fourth section concentrated on HPE teacher's attitude towards HPE lessons. The fifth section sought information on availability of teaching and learning resources for HPE instruction. The sixth section explored strategies for monitoring and evaluation of HPE instruction. The seventh and final section collected information pertaining to implementation of HPE curriculum.

Items were measured on a 5-point likert-type scale (5-strongly agree; 4-agree; 3-moderately agree; 2-disagree; 1-strongly disagree). The questionnaire was self administered. The researcher hired a research assistant to deliver and collect filled questionnaire. Self completion was an ideal way of completing the questionnaire owing to its confidential nature.

### **3.5.2 Interview Schedule for Head teachers (IDI)**

An interview schedule for head teachers (Appendix II) was designed specifically for purposes of obtaining incisive views from head teachers regarding HPE instruction. A total of 40 interview schedules were expected to be conducted on the six key constructs professional documents; teaching strategies/methods; teacher attitudes towards HPE; teaching and learning resources; monitoring and evaluation; and implementation of HPE curriculum.

### **3.5.3 Interview Schedule for QASO (IDI)**

An interview schedule for QASO (Appendix III) was designed for purposes of collecting views from QASO with regards to monitoring and evaluation of HPE and implementation of the HPE curriculum in public primary schools in the study area. This interview schedule concentrated on two major areas: levels of monitoring and evaluation carried out for HPE instruction, and levels of implementation of the HPE

curriculum. A total of 4 interviews were arranged in line with the 4 QASO in the sample. Owing to the sensitive nature of the interviews, the researcher conducted them himself.

#### **3.5.4 Focused Group Discussions (FGD)**

Focused group (Appendix IV) discussions were conducted with sixteen groups of 10 pupils each. Choice of focused group discussions with class 7 and 8 pupils was informed by the fact that the pupils were not the principal respondents however, their views with regards to HPE instruction were necessary in examining implementation of HPE curriculum.

The focused group discussion protocol consisted of six questions relating to teaching methods used, and availability of teaching and learning resources. The researcher posed probing questions which pupils were allowed to discuss freely with the researcher. Most of the questions probed pupils on the two areas of concern. Pupils were allowed to shout out the answer in their mind.

#### **3.5.5 Document Analysis**

Document analysis was conducted ostensibly to examine existence of teachers' professional records and teaching / learning resources. A checklist was adopted from Teachers Service Commission (TSC) and modified to suit the needs of the study (see Appendix V). Professional document analyzed included; syllabus, schemes of work, lesson plan, lesson notes, records of work, and progress records. The checklist also covered resources such as fields, equipment, facilities, first aid kit, and field markers. The researcher used this checklist to verify preparation of professional records by HPE teachers and availability of relevant teaching and learning resources.

### **3.6 Data Collection Procedures**

An introductory letter was given from the School of Education, Moi University, to the Ministry of Education. This enabled the researcher to obtain a research permit from the National council for science, technology and innovation (NACOSTI) (Appendix VI) that authenticated conducting of the study. The researcher sought permission from the Nandi County Director of Education to visit public primary schools in the County for purposes of collecting data for the study. After all these arrangements, the researcher made a pre-visit to the schools and made arrangements with the principals on how to administer questionnaires and interview schedules.

### **3.7 Validity and Reliability**

Validity and reliability are considered as being vital in the measurement of study constructs. Neuman (2012) contends that constructs in social theory are not directly observable, and are also quite diverse and sometimes ambiguous. As a consequence, validity and reliability remain salient to any research. They are crucial validation techniques in establishing credibility and truthfulness of findings (Neuman, 2012).

#### **3.7.1 Validity**

Validity is viewed as the truthfulness of a measure to conceptualize the intended idea as depicted by the construct in question (Neuman, 2007). The present study validated the quantitative HPE teacher questionnaire in terms of face validity and content validity. According to Neuman (2007), face validity involves making judgment based on the suitability of the instrument in terms of design and structure. The researcher therefore sought assistance of assigned supervisors to ascertain that the HPE teacher's questionnaire was suitable both in its design as well as structure as judged by face

value. This was confirmed after a few changes were made on background characteristics to use.

The second validation technique used for the HPE teacher questionnaire was content validity. Under this validation, the researcher was keen to verify that the questionnaire covered the expected content for each construct, and that such content was justifiable by literature. The researcher asked the supervisors to critically examine the full content measuring the given constructs to verify comprehensive coverage of the content and justification in literature. Once the supervisors were satisfied, the researcher went ahead to produce the required copies of questionnaire for piloting.

With regards to the qualitative interview schedules for head teachers and QASO, together with focused group discussion protocol, for pupils, authenticity of the data was considered primal. Neuman (2007) avers that authenticity is a measure of fairness, balance and honesty exhibited on topical issues. Consequently, the researcher hoped that respondents in these categories would be truthful and avoid giving wrong information.

### **3.7.2 Reliability**

Reliability relates to the consistency or dependability an instrument has in measuring a construct (Neuman, 2007). The HPE teachers' questionnaire comprised of closed-ended questions aimed at capturing highly explicit data. Reliability of the five scales was measured by calculating Cronbach's alpha coefficients on data collected through the piloting of the developed questionnaire among five primary schools drawn from the neighboring Uasin Gishu County. Piloting was conducted in Uasin Gishu County as a precautionary step towards internal validity issues such as maturity.

Reliability coefficients of the six quantitative scales used to examine the influence of selected determinants of implementation of HPE curriculum were: Preparation of professional documents ( $\alpha = .892$ ); teaching strategies / methods ( $\alpha = 0.782$ ); teacher attitude towards HPE ( $\alpha = 0.834$ ); teaching and learning resources ( $\alpha = 0.773$ ); and implementation of HPE ( $\alpha = 0.893$ ). The implication is that the scales used in the HPE teacher questionnaires were consistent in measuring the items used. All the coefficients were above the recommended value of 0.7 (Hair *et. al.*, 2010). The reliability analysis with regards to the interview schedules and focused group discussion protocol concentrated on the establishment of credible information. Multiple accounts made by respondents at the piloting stage were examined for transferability of findings to similar settings.

### **3.8 Data Analysis and Organization.**

The raw data was first collected, coded and analyzed by the use of descriptive statistics. This involved setting up the structure of data file, coding and entering data into the SPSS software (SPSS Ver. 22), and cleaning the data for errors. Descriptive statistics were then used to explore data for prevailing level of independent and dependent variables in the study sample. Response scores from the initial scales were re-coded to suit the respective constructs. Frequencies and percentages were then used to examine the prevailing state of the constructs in the study area.

Regression analysis was used to establish which among the selected factors best determined implementation of HPE curriculum in the public primary schools. Regression analysis was used since it is known to be suitable in finding influences (Blaikie, 2003). The SPSS software was used to first generate the model summary that was used to identify the coefficient of determination. Next the regression

coefficients and associated p values were generated and used to identify the significant determinants from the selected factors. Thematic analysis was used to analyze the unstructured interviews with head teachers and quality assurance and standard officers (QASOs), as well as the focused group discussions with pupils.

### **3.9 Ethical Considerations**

The study was undertaken in consideration of ethical issues in social science inquiry. The process of collecting, analyzing, and interpreting data was done in a way that respected the rights of participants and individual respondent groups. Specifically, prior to data collection, an introductory letter was prepared for the purpose of seeking informed consent from respondents to participate in the study. Details revealing the purpose of the study and guarantee of anonymity, beneficence, non-maleficence and confidentiality were included in the letter. The research assistant was asked to show the letter to all potential respondents when soliciting participation in the research.

As indicated in the introductory letter, the right of anonymity and confidentiality was guaranteed. This included the assurance that the study was only for academic purposes and not for circulation to other parties. Anonymity was assured by concealing respondent's identities and also ensuring that the information collected was not linked to the respondent. Consequently, the respondent's name was not required. Confidentiality was assured by the researcher taking responsibility to protect all data gathered within the scope of the study. The head teachers and QASOs were interviewed at their own convenient times.

## **CHAPTER FOUR**

### **DATA ANALYSIS, PRESENTATION AND DISCUSSION**

#### **4.0 Introduction**

This study sought to establish implementation determinants on health and physical education curriculum instruction in public primary schools. This study was conducted in public primary schools drawn from Nandi County. Data for analysis was collected from PE teachers, standard seven and eight pupils, head teachers, and quality assurance officers (QASO). This was necessary so as to triangulate data sources and improve the validity of the study findings (Hussein, 2009).

In line with data analysis procedures, data were first collected and prepared. This involved setting up the structure of the data file, coding, and entering data into the SPSS software, and cleaning the data for errors. Descriptive statistics were then used to explore data for prevailing levels of the independent and dependent variables in the study sample. Regression analysis was used to establish determinants of implementation of the HPE curriculum while thematic analysis was used to analyze the unstructured interviews with head teachers and QASOs.

#### **4.1 Response Rate**

Data were collected from QASO, head teachers, HPE teachers and Std 7 & 8 pupils. Out of a sample of 296 respondents made up of 4 QASOs, 40 head teachers, 88 HPE teachers, and 164 pupils. All the 4 QASO, 35 head teachers, 80 HPE teachers and 160 pupils participated in the study. The total response rate was therefore 94.3% as shown in Table 4.1, which presents a breakdown of the response rate. This response rate was deemed adequate since as noted by Fowler (2002), the whole point of

conducting a study is to obtain useful, reliable and valid data in a format that makes it possible to analyze and draw conclusions about the target population

**Table 4.1: Response Rate**

<b>Category of respondent</b>	<b>Number in sample</b>	<b>Number that participated</b>	<b>Percentage of participants</b>
Head teachers	40	35	87.5%
PE teachers	88	80	90.9%
STD 7&8 pupils	164	160	97.6%
QASO	4	4	100%
<b>Total</b>	<b>296</b>	<b>279</b>	<b>94.3%</b>

#### **4.2 Respondents Background Information**

Respondents' background information was analyzed for the HPE teachers who were the principal respondents for the present study. The background information of the HPE teacher was assessed first in terms of gender, academic qualification, experience in teaching, and experience in teaching PE. Second, they were assessed in terms of their involvement in HPE development at the Kenya Institute of Curriculum Development (KICD).

Results of the first assessment presented in Table 4.3 revealed the following information. With regards to gender, 58.8% of the HPE teachers were female while 41.3% were male. This was an indication that in public primary schools in Nandi County, there were more female HPE teachers than male HPE teachers. Regarding academic qualification, a majority of the HPE teachers (56.3%) had a P1 qualification. HPE teachers with a diploma qualification were 20% while those who had a Bachelors qualification were 16.3%. The significance of these results is that most of the teachers handling HPE instruction had the relevant training, meaning that academic qualification could not have been a hindering factor in the implementation



of the HPE curriculum. The experience in teaching distribution revealed that 31.3% of the HPE teachers had been teaching for between 11 to 15 years; 28.8% for between 6-10 years; 21.3% for between 16-20 years; 13.8% for less than 5 years; and 5% for 20 years and more. Clearly, the results confirm that the teachers had the necessary teaching experience relevant for implementing curricula. Experience in teaching HPE indicated that 33.8 % of teachers have been teaching it for between 1 to 5 years; 25.0% for between 6 to 10 years. 16.3% for between 16 and 20 years; and only 15% for less than 1 year. This information confirms that implementation of HPE instruction in public primary schools in Nandi County had minimal chances of being constrained by teacher qualification.

**Table 4.3: HPE Teachers Background Information**

<b>Characteristic</b>	<b>Category</b>	<b>Frequency</b>	<b>Percent</b>
Gender	Male	33	41.3
	Female	47	58.8
	Total	80	100.0
Academic qualification	Masters	6	7.5
	Bachelors	13	16.3
	Diploma	16	20.0
	P1	45	56.3
	Total	80	100.0
Experience in teaching	less than 5 years	11	13.8
	6-10 years	23	28.8
	11-15 years	25	31.3
	16-20 years	17	21.3
	20 years and above	4	5.0
	Total	80	100.0
Experience teaching physical education	less than 1 years	12	15.0
	1-5 years	27	33.8
	6-10 years	20	25.0
	11-15 years	8	10.0
	16-20 years	13	16.3
	Total	80	100.0%

The implication of these results is that both female and male teachers are tasked with the responsibility of teaching HPE. The finding that a majority had P1 qualification is reflected in the experience of teaching HPE. This is so because HPE is a compulsory

subject in teacher training colleges and does not segregate between male and female students.

When asked their involvement in HPE activities at the Kenya institute of curriculum development, results revealed that a large number of teachers are not involved in any area of HPE activities at KICD. However, 6.3% of the respondents indicated that they teach other HPE teachers during workshops; 2.5% are involved in assessments during practice; while 5.0% teach during workshops and also assess during practice. These results are summarized in Table 4.4.

**Table 4.4: HPE Teacher Involvement in HPE Activities at KICD**

PE area involved in	Yes		No	
	frequency	percent	frequency	Percent
Teaching other PE teachers in workshop	5	6.3	75	93.8
Assessing during practice	2	2.5	159	97.5
Both teaching and assessing	4	5.0	154	95.0

The implication of these results is that many HPE teachers' are involved in teaching in assigned workshops and assessing other fellow teachers'.

### **4.3 Professional Documentation in HPE**

Objective one sought to find out the role of professional documentation in HPE on implementation of the HPE curriculum. Preparation and use of professional documentation among HPE teachers was considered as a step in the process of implementation of the HPE curriculum. Assessment of preparation and use of

professional records done via HPE teacher questionnaire, head teacher interviews, and analyzing existing documents.

#### **4.3.1 HPE Teacher Preparation and use of Professional Documents for HPE Instruction**

Teachers preparation and use of professional records was measured using eight items reflecting on scheming, lesson planning and lesson notes. HPE teachers were asked to indicate their level of agreement or disagreement to preparation and use of the documents highlighted in the eight items during HPE instruction. Responses were elicited on a 5-point scale ranging from 1-strongly disagree to 5-strongly agree. The 5-point scale was then re-coded into a 3-point scale for which code 1 composed of strong disagreement, and disagreement and indicated non preparation and use of professional documents. Code 2 comprised of undecided and indicated mild levels of preparation and use of professional documents. Code 3 comprised of agreement and strong agreement, and indicated adequate preparation and use of professional documents.

Results presented in Table 4.5 indicate that preparation and use of professional records during HPE instruction in public primary schools in Nandi County was mostly inadequate. Although there was adequate preparation and use of schemes of work (86.3%), and which were adequately maintained at the HODs office (75%), most aspects of professional records were inadequate. HPE teachers conceded among others that; their preparation and use of lesson plans was inadequate (56.3%); there was inadequate catering of slow learners when planning for HPE lessons (60.0%); there was inadequate consideration for resources for learners with disabilities

(68.8%); and that their preparation and use of lesson notes during HPE instruction was inadequate (67.5%).

**Table 4.5: Preparation and use of Professional Documents for HPE Instruction**

<b>Professional Documentation</b>	<b>Inadequate</b>		<b>Moderate</b>		<b>Adequate</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
1. Preparation and use of schemes of work	11	13.8	0	0.0	69	86.3
2. Preparation and use of lesson plans	45	56.3	17	21.3	18	22.5
3. Catering for individual activities for slow learners when planning	48	60.0	6	7.5	26	32.5
4. Taking into consideration number of lessons allocated on time table	51	63.8	6	7.5	23	28.8
5. Putting into consideration resources for learners with disabilities	55	68.8	6	7.5	19	23.8
6. Planning for teaching aids	41	51.3	20	25.0	19	23.8
7. Preparation and use of lesson notes	54	67.5	6	7.5	20	25.0
8. Maintenance of copies of professional by the H.O.D	4	5.0	16	20.0	60	75.0

These results confirm that despite HPE teachers in public primary schools in Nandi County taking cognizance of the need to prepare and use professional documents in HPE instruction, they are not keen on most of the requirements of preparation and use of these documents. It would appear that they mostly prepare these documents as a requirement but they have not recognized their importance in curriculum implementation.

#### **4.3.2 Head Teachers Perceptions on Preparation and use of Professional Documents.**

Head teacher perceptions on preparation and use of professional documents for HPE instruction were assessed using one item on the head teacher's interview schedule. Head teachers were asked whether teachers prepare and use the relevant professional

records for HPE lessons, and the significance of such records in HPE instruction. Responses were examined for prominent and recurrent themes. Thematic analysis was conducted with the goal of processing data inductively rather than deductively as suggested by Seidman (2013). Thematic analysis of the question requiring head teachers to give the significance of teacher preparation on HPE instruction revealed five key themes as shown in Table 4.6.

**Table 4.6: Head teachers Perceptions of HPE Teachers Preparation and use of Professional Documents**

Question	Response	
Do HPE teachers prepare and use professional records adequately?	Yes (n=5, 14.3%) No (n=30, 85.7%)	
Question	Theme	Explanation
In your view, what is the significance of preparing and using professional documents during HPE instruction?	<b>Safety</b>	<ul style="list-style-type: none"> <li>• Be familiar with curriculum policies on safety practices regarding equipment, clothing, facilities, special rules, and supervision for all activities.</li> <li>• Liaise with the head teacher in cases where students are unable to participate in daily physical activity or are able to participate only to a limited extent (e.g., owing to illness or injury).</li> <li>• Be aware of the process for students to resume physical activity.</li> </ul>
	<b>Inclusion of all pupils</b>	<ul style="list-style-type: none"> <li>• Be aware of pertinent information about any physical limitations a pupil may have and adopt appropriate strategies to ensure that all pupils can participate in daily physical activity.</li> <li>• Acquire information on requirements for pupils with special needs.</li> <li>• Plan activities that ensure that the activity and facility are appropriate for every pupil.</li> </ul>
	<b>Scheduling and Timetabling</b>	<ul style="list-style-type: none"> <li>• Include daily physical activity in the long-range plans and integrate it into unit plans and lesson plans in various subject areas, as appropriate.</li> <li>• Include daily physical activity time on class schedules.</li> </ul>
	<b>Use of Facilities</b>	<ul style="list-style-type: none"> <li>• Be aware of all of the school and community facilities that are available for physical activity.</li> <li>• Be aware of safe practices for all facilities used for physical activity, and identify any safety concerns.</li> </ul>
	<b>Assessment</b>	<ul style="list-style-type: none"> <li>• Identify the health and physical education curriculum expectations that relate to pupil performance in physical activity.</li> <li>• Gather information and assess pupil progress in relation to the pupil's initial fitness level.</li> <li>• Encourage pupils to assess their own progress.</li> </ul>

### Theme 1: Safety

The first theme common to the participating head teachers as an impact of preparation among HPE teachers was the need for safety of the pupils. Respondents observed that preparation enables the teachers to be familiar with curriculum policies on safety

practices regarding equipment, clothing, facilities, and supervision of activities. Besides, it allows the HPE teachers to liaise with head teachers in cases of children who are unable to participate in physical activities as well as those who can only participate minimally.

### **Theme 2: Inclusion of all Pupils**

The second theme emerging from head teachers in regards with teacher preparation is inclusion of all pupils. Respondents observed that preparation enables the teacher to be aware of pertinent information about physical limitations of pupils and hence adopt appropriate strategies that can take care of the limitations. In addition, PHE teachers are able to acquire information on requirements for pupils with special needs. This in essence allows them to plan activities that ensure the activity and facility are appropriate for every pupil.

### **Theme 3: Scheduling and time tabling**

Respondents noted that preparation allows HPE teachers to include daily physical activities in the long range plans and integrate them into unit plans and lessons plans in various subject areas as appropriate. Further, teachers are able to include daily physical activity time on class schedules.

### **Theme 4: Use of facilities**

The fourth theme recurring among respondents was use of facilities. It was indicated that preparation for HPE lessons enabled teachers to be aware of all the school and community facilities that are available for daily physical activities. In addition, teachers are made aware of safe practices for all facilities used and are able to identify all safety concerns.

## **Theme 5: Assessment**

The fifth and final theme cut across the need for teachers to identify the health and physical education curriculum expectations that relate to pupil performance in physical activity. Teachers are therefore able to gather information and assess pupil progress in relation to pupil's initial fitness level. Besides, it encourages pupils to assess their won progress.

### **4.3.3 Document Analysis**

A checklist of teacher professional documents adopted from the Teachers Service Commission (TSC) and modified to suit the study was used to assess if every HPE teacher had complied with the required documentation standards. HPE teachers were rated on seven items with a maximum possible score of 5 each. The average scores for each of the items after analysis of the documents are presented in Table 4.7. Results from the document analysis corroborate the inadequate preparation and use of professional documents among HPE teachers in public primary schools in Nandi County. Records indicated that syllabus for teaching HPE and approved schemes of work were all available and attracted the maximum assessment marks each. On the contrary, maintenance of current time table and weekly checking of records of work attracted average assessment marks of 2 each indicating minimal use of them. Updating of lesson plans, updating of lesson notes and maintaining of HPE activity records each attracted an average assessment score of 1, indicating that these records were hardly used.



**Table 4.7: HPE Teacher Professional Documentation**

Documents	Max. Marks	Average Assessment Mark
1. Current Personal Timetable	5	2
2. Syllabus for teaching HPE	5	5
3. Approved Schemes of work	5	5
4. Updated lesson plans	5	1
5. Updated lesson notes	5	1
6. Records of work checked weekly	5	2
7. HPE activity records	5	1

Collated results from document analysis and analysis of HPE teachers and head teachers perceptions revealed that preparation and use of professional records is a determinant of implementation of HPE curriculum in Nandi County. Despite being provided with the required HPE syllabus, and preparing schemes of work, the teachers hardly take note of the day to day documents such as lesson plans, lesson notes, and record of work done, which are crucial for curriculum implementation. In such an environment, it is plausible that the HPE curriculum cannot be effectively implemented.

#### **4.4 Teaching methods used by teachers of HPE**

The second objective sought to find out effectiveness of teaching methods used by HPE teachers in public schools in Nandi County and their effect on implementation of the HPE curriculum. Methods used by HPE teachers were assessed through the teacher questionnaire, head teachers' interviews and focused group discussions with pupils.

#### **4.4.1 Effectiveness of HPE Teachers Use of Appropriate Methods in HPE Instruction**

A total of seven items were used to examine effectiveness of methods used by teachers of HPE. Teacher respondents were asked to indicate agreement or disagreement with the items. The 5-point scale used to capture HPE teachers' levels of agreements or disagreements was then re-coded into a 3-point scale. New code 1 composed of strong disagreement and disagreement and indicated ineffectiveness of methods used in HPE instruction. New Code 2 comprised of undecided and indicated moderate effectiveness of methods used. Code 3 comprised of agreement and strong agreement, and indicated effectiveness of methods used in HPE instruction.

Results presented in Table 4.8 indicate that HPE teachers' use of the various methods for HPE instruction was largely ineffective. Results for instance, show that HPE teachers in public primary schools in Nandi County were ineffective in employing a variety of methods during HPE instruction (67.5%); they were ineffective in assessing pupils in the field (62.5%); their demonstrations were inefficient (67.5%); practical field lessons for HPE were ineffective (70%); theoretical HPE lessons were also ineffective (67.5%); and health content was ineffectively integrated in HPE lessons (61.3%).

**Table 4.8: Effectiveness of HPE Teachers use of teaching Methods for HPE Instruction**

	ineffective		moderately effective		very effective	
	n	%	n	%	n	%
1. Employing a variety of instructional methods in HPE instruction	54	67.5	8	10.0	18	22.5
2. Assessment of learner participation in the field	50	62.5	10	12.5	20	25.0
3. Teacher demonstration of HPE activities	54	67.5	8	10.0	18	22.5
4. Practical field lessons for HPE	56	70.0	8	10.0	16	20.0
5. Theoretical PHE lessons	54	67.5	0	0.0	26	32.5
6. Integration of health content in the HPE lessons	49	61.3	6	7.5	25	31.3

These results imply that teaching methods are factors that determine implementation of HPE curriculum in primary schools in Nandi County. Teachers handling HPE are not using the required methods of HPE instruction effectively and this could be a contributing factor to the implementation of the HPE curriculum in schools in the County.

#### **4.4.2 Head teachers perceptions of HPE teachers use of Methods of HPE Instruction**

Head teacher perceptions of teachers' use of teaching methods for HPE lessons were measured using two items on the head teachers' interview schedule. First, respondents were asked whether teachers were combining a variety of methods, and whether they were actively involved in HPE activities during instruction. The head teachers' narratives clearly indicated that most teachers hardly used a variety of methods and appeared to let pupils go through routine activities on their own. One head teacher for instance remarked;

*"...I sometimes wonder what is wrong with these teachers...(sic) imagine you find children in the field un attended to! What if they were to get hurt eeh? PE here is for pupils to run aimlessly without order" IDI 7*

Another head teacher added

*“I don’t know what we shall do to make our teachers take HPE serious? You know this idea of this subject not being examined has really watered its teaching down. Most of my teachers claim that they let pupils to attend HPE on their own, so that they can cover the syllabus in examinable subjects” IDI 30*

Second, head teachers were asked to enumerate factors that would inform choice of teaching method in HPE instruction. Factors shown in Table 4.9 were recurrent among head teacher respondents with regards to the informers of teaching methods to use in HPE instruction.

**Table 4.9: Head Teachers Perception of Factors that inform Selection of Teaching Methods for HPE Instruction**

Question	Criteria	Explanation
What in your view informs the selection of teaching methods for HPE instruction?	<b>Expectations for pupil Learning</b>	<ul style="list-style-type: none"> <li>• Clear goals and objectives for pupil learning and performance are communicated to pupils.</li> <li>• Pupils are held accountable for these expectations through various strategies (e.g., goal setting, teacher monitoring, assessment and evaluation).</li> </ul>
	<b>Class Organization</b>	<ul style="list-style-type: none"> <li>• Teachers form pairs, groups and teams in ways (e.g., randomly, by fitness or skill level when appropriate to the lesson's goals, or by a class system) that preserve every pupil's dignity and self-respect.</li> </ul>
	<b>Lesson development</b>	<ul style="list-style-type: none"> <li>• The physical education class begins with an anticipatory set and physical warm-up, proceeds to the instructional focus and fitness activities, and closes with a physiological cool down and a review of instructional objectives.</li> <li>• Stretching, if included in the lesson, occurs only after an appropriate general warm-up activity and is appropriate and beneficial for maintaining and improving flexibility.</li> </ul>
	<b>Learning Time</b>	<ul style="list-style-type: none"> <li>• The teacher plans for skill and concept instruction and provides adequate time for practice, skill development and feedback based on appropriate skill analysis.</li> <li>• The teacher plans lessons that revisit skills and concepts learned previously.</li> </ul>
	<b>Teaching/ Learning methods</b>	<ul style="list-style-type: none"> <li>• The teacher uses a variety of direct and indirect teaching methods to provide for pupil success, depending on the lesson objectives and content and pupils' varied learning styles.</li> <li>• The teacher allows pupils guided choices (limitation method) in matters such as equipment, rule modification and type of skill practice.</li> </ul>

From Table 4.8, head teachers perceive the following factors as being used to inform selection of teaching methods for health and physical education (HPE). The first factor identified relates to expectation for pupil learning. Respondents observed that teachers often communicate clear goals and objectives for learning and performance to pupils. Pupils are then held accountable for those expectations through various strategies adopted by the teacher and which include goal setting, teacher monitoring, assessment and evaluation.

Class organization was the second factor identified by respondents. They noted that learners form pairs, groups or teams during HPE group activities in ways that preserved every pupil's dignity and self-respect. The third factor identified was the lesson development. Respondents indicated that teachers often begin physical education classes with compensatory set of physical warm up activities for body and joint mobilization, before proceeding to the focus on group and class activities. The sessions usually ended with a physiological cool down (relaxation activities) and a review of instructional objectives. They further noted that stretching up and curling down activities included in the lesson usually occurs only after all class and group activities have been done so as to relax body muscles and improve flexibility.

Another factor identified through thematic analysis of head teachers' responses is learning time. Head teachers noted that teachers plan for skills and concept instruction in advance and provide adequate time for practice, skill development and feedback based on appropriate skill analysis. In addition, it has reported that the teacher plans lessons that revisit skills and concepts learned previously. Teaching /learning styles also came out as a key factor used by HPE teachers when selecting methods to teach the subject. Head teachers reported that teachers use a variety of direct and indirect teaching styles to provide for pupil success, depending on the lesson objectives and content and pupils' varied learning styles. In addition, teachers allow pupils guided choices in matters such as equipment, rule modification and type of skill to practice.

Thematic analysis results are consistent with results from the analysis of teacher respondents and clearly show that methods used for HPE instruction are largely ineffective perhaps because teachers don't treat the subject with the seriousness it

deserves. There however exist factors that if considered can form a good basis for keen selection of teaching methods in HPE instruction.

#### **4.4.3 Focused Group Discussion on HPE Teaching**

Effectiveness of methods used for HPE instruction was also examined through a focused group discussion with pupils. Each group comprised of 10 pupils, and there were sixteen groups in total. The focused group discussion protocol had three probing questions. First, group members were asked to state the highlights/positives they gain in HPE lessons. Several narratives from participants drawn from various groups indicated that teachers were not so keen on HPE lessons for class 7 and 8 pupils. Some teachers use this time for completing the syllabus while others just keep off.

Samples of the narratives as cited verbatim were:

*“HPE time is a time of lazing around since the teacher hardly comes, we sit in groups and enjoy storytelling and relaxing from the busy classroom schedule” FGD participant from group 10*

*“Which HPE time are you talking about? Our teacher comes to teach us science during PE time. He says that we need to cover the syllabus, and that is the only time we can do so” FGD participant from group 6*

*“I always look forward to PE time when we can have all the freedom to play on our own. We go to the games store and pick a ball which we then play” FGD participant from group 14*

The second point of discussion was how helpful teachers are during HPE lessons. Most narratives reiterated the fact that teachers were mostly not there in the first place. Teachers who attended just asked students to engage in activities of their choice with minimal involvement. One participant remarked that:

*“aaah...hawa wasee hawashuguliki na sisi. We just organize ourselves and pick on an activity to participate in. Hata mastud wengine hawakuji” FGD participant from group 2*

Another student shouted this:

*“The teacher comes but lets us choose what we want to do. Yeye anakaa tu akitutazama. After the lesson ends he tells us to go back to class” FGD participant from group 10*

The third question on the focus group protocol was whether the teachers use a variety of methods to teach HPE. Once again, the emerging picture was that teachers rarely exposed pupils to many methods. Pupils noted that they normally observe teachers on practice teaching many activities in a single HPE lesson but their teachers never do that. Prominent narratives included:

*“Our teacher always asks boys to play football, while girls always play netball and sometimes cha katii” FGD participant from group 3*

*“I don’t know why our teacher does not put us in different groups to play different games the way I see teachers from Mosoriot do for class two , three and four” FGD participant from group 1*

Collated results from focused group discussions, head teacher interviews, and HPE teacher questionnaire confirmed that teaching methods are among key determinants of implementation of HPE curriculum in public primary schools in Nandi County. The apathy shown by teachers handling HPE together with the lack of diversity in methods used, no doubt, suppresses desired objectives for HPE instruction, and interferes with effective implementation of the curriculum.

#### **4.5 Teacher Attitude towards HPE Instruction**

Objective three sought to determine teacher attitude towards HPE and its effect on implementation of the HPE curriculum. Teacher attitude towards HPE instruction was assessed through HPE teacher questionnaire, interviews with head teachers, and interviews with QASO.



#### **4.5.1 Descriptive Analysis of Teacher Attitude towards HPE**

A total of ten items were used to assess teacher's attitude towards HPE instruction. Respondents were asked to indicate their agreements or disagreements with the items selected to reflect attitude towards the teaching of HPE. Their response scores were elicited on a 5-point scale with 1-strongly disagree; 2-disagree; 3-undecided; 4-agree; and 5-strongly agree. The response scores were then re-coded with old codes 1-3 being re-coded into 1 and signifying positive attitude, while old codes 4-5 were re-coded into 2, signifying negative attitude.

Results presented in Table 4.10 showed that HPE teachers had a largely negative attitude towards most aspects of HPE as a subject. HPE teachers exhibited negative attitude towards: physical education profession (93.8%); becoming a physical educational teacher (82.5%); HPE infrastructure in the public primary schools (81.3%); efforts being made to introduce modern technology and techniques in the profession (80%); and funds being provided by the authorities for physical activities and sports (70%). Besides, HPE teachers were of the view that head teachers attitude towards HPE is also negative (91.3%), as is the society's attitude towards HPE (76.3%).

**Table 4.10: Attitude towards HPE instruction**

	Positive		Negative	
	n	%	n	%
1. Attitude towards Physical Education profession	5	6.3%	75	93.8%
2. Attitude towards becoming Physical Education teacher	14	17.5%	66	82.5%
3. Head teachers attitude towards physical education	7	8.8%	73	91.3%
4. Attitude towards HPE infrastructure of the institution	15	18.8%	65	81.3%
5. Attitude towards funds provided by the authorities for physical activities and sports	24	30.0%	56	70.0%
6. Attitude towards efforts to introduce modern technology and techniques in the profession	16	20.0%	64	80.0%
7. Attitude towards the ability of the profession to provide the opportunity for attainment of respect in society	77	96.3%	3	3.8%
8. Attitude towards belonging to the HPE teaching profession	71	88.8%	9	11.3%
9. Attitude of the Society towards Physical Education Teachers	19	23.8%	61	76.3%

The implication of these results is that teachers in Nandi County have a negative attitude towards HPE instruction. This may be due to a host of reasons, key among them being that HPE teachers do not enjoy the respect and prestige from the society. Most of the HPE teachers have no achievements to show out of the profession besides other teaching subjects they teach. More importantly, most of the teachers were of the view that they are not comfortable as PE teachers, having joined the field by chance. Besides, the poor infrastructure in the schools is a contributing factor to the negative attitude towards HPE instruction. In addition, most of the HPE teachers hold the view that head teachers perceive HPE as a subject negatively.

The negative attitude exhibited by HPE teachers may be contributing to poor implementation of the subject in public primary schools in Nandi County. Several studies point to teacher factors such as attitude as being major causes of poor

implementation of PE (Barroso, McCullum-Gomez, Hoelscher, Kelder & Murray, 2005; Morgan & Hansen, 2008). According to these studies, possession of low levels of confidence or interest in teaching physical education coupled with personal negative experiences in physical education are major barriers to implementation of HPE instruction. This could therefore account for the poor implementation of HPE instruction in the study area.

The findings which show among others that HPE teachers have a negative attitude towards the infrastructure for HPE in the study area and laxity to introduce modern technology and techniques for HPE instruction are supportive of findings which have categorized gender stereotyping of activities, perceptions of the value of HPE, difficulty of providing safely planned and structured lessons, and high level accountability for other subjects among key barriers to implementation of HPE curriculum (DeCorby, Halas, Dixon, Wintrup & Janzen, 2005; Dwyer *et al.*, 2003).

#### **4.5.2 Head teachers and QASO Views on HPE Teachers Attitude towards HPE**

The researcher also sought head teachers and QASOs perception of HPE teacher attitude towards HPE instruction. In this regard, two interview items were posed to head teachers and two to QASOs. First, head teachers were asked their opinions on the attitude of teachers towards HPE instruction. Second, they were asked to assess lady teacher's attitude towards teaching PE in the field. On the other hand, QASOs were asked to state the general attitude of most teachers towards the teaching of HPE and whether head teachers held positive attitude towards the teaching of HPE in their schools.

Thematic analysis results presented in Table 4.11 revealed that on the overall head teachers, and QASOs observed that PHE teachers have a negative attitude towards the

subject. They however, identified three major causes of the often perceived negative attitudes among teachers towards the subject. These were institutional related, teacher related and student related.

**Table 4.11: Head Teacher and QASOs Perceptions of Teacher Attitude towards HPE**

Question	Response	Explanation
What are the teachers attitudes towards HPE instruction?	<b>Largely negative</b>	<ul style="list-style-type: none"> <li>• Most teachers have been trained in PHE but do not access professional development</li> <li>• Some complain that they do not receive the recognition that they receive and that the society looks down upon them</li> <li>• Some head teachers were found to undervalue the subject mainly because it is not examinable</li> </ul>
What would you attribute the observed apathy towards HPE as a subject to?	<p><b>Institutional related causes</b></p> <p><b>Teacher related causes</b></p> <p><b>Learner related causes</b></p>	<ul style="list-style-type: none"> <li>• Access to and lack of facilities as well as lack of equipment</li> <li>• Lack of time as a result of the crowded curriculum</li> <li>• Funding is minimal due lack of Support from administration. This means that teachers cannot access professional development</li> <li>• PE/Sport not priorities in school. Other teachers fail to support HPE teachers</li> <li>• Insufficient infrastructure and poor quality of facilities</li> <li>• School executive attitudes toward HPE due to Lack of performance measures for HPE.</li> <li>• Insufficient number of HPE staff</li> <li>• Lack of training and knowledge</li> <li>• Difficulty of providing safely planned and structured lessons</li> <li>• Gender stereotyping of activities</li> <li>• Perceptions of the value of HPE</li> <li>• High level of accountability for other subjects</li> <li>• Confidence in teaching HPE</li> <li>• Interest in/enthusiasm for HPE</li> <li>• Expertise/qualifications.</li> <li>• Lack of pupil engagement</li> <li>• Expressed dislike for activity</li> <li>• Lack of intrinsic and extrinsic motivation</li> <li>• Intrapersonal barriers</li> </ul>

Key among the institutional factors that were noted to be responsible for the apathy shown towards PHE include: access to and lack of facilities and equipment for teaching the subject. Most teachers rely on improvisations of required facilities and hence this does not auger well with them. The crowded curriculum and lack of performance measures for HPE was also noted as a key factor which their means that not enough time is available for the subject. QASOs noted that some head teachers do not prioritize PE/sport in their schools. Hence there is insufficient infrastructure and poor quality of facilities. Besides, in some schools the number of HPE staff is insufficient and this contributes to the negative feelings about the subject.

Among the key teacher related factors reported is lack of training and knowledge. It was observed that most of the HPE teachers rely on the training they received in TTCs. This is because lack of finding implies that they do not access professional development in the subject. Further, lady teachers handling HPE are at times affected by gender stereotyping of activities like forward roll and backward roll. The societal perception of the value of HPE is another factor attributed to teachers and which impacts negatively on the teaching of the subject. The high levels of accountability for other subjects emerged as another factor that affects teacher's attitude towards HPE.

The third category of causes was learner related. Respondents observed that teachers of HPE often perceived the subject negatively as a result of among other learner factors; lack of pupil engagement; expressed dislike for activities; lack of motivation and pupil's interpersonal barriers.

Results of the descriptive and thematic analyses of teacher attitude towards HPE lessons in Nandi County reveal that teachers in the county have a negative attitude towards the subject. While most of them were trained in PE, several contextual factors

combine to negate their attitude. Factors coming out strongly as being responsible to this attitude are mainly lack of administrative, support, poor infrastructure and facilities and the negative perception of the society towards the subject.

#### **4.6 Adequacy of HPE Equipment and Facilities**

The fourth objective for the present study sought to establish whether HPE equipment and facilities in primary schools in Nandi County were adequate and how this impacts on implementation of the HPE curriculum. Assessment of adequacy of HPE equipment and facilities in primary schools in Nandi County was conducted via HPE teacher questionnaires, focused group discussion with pupils and interviews with head teachers.

##### **4.6.1 HPE Teachers Views on Equipment and Facilities for HPE Instruction**

Teacher perceptions of adequacy of HPE equipment and facilities were measured using six questionnaire items. Respondents were asked to indicate their agreements or disagreements to the six items selected to reflect teaching equipment and facilities. Responses were elicited on a 5-point scale ranging from 1-strongly disagree to 5-strongly agree. The agreement scale was further re-coded into 2-point scale with old codes 1-3 being re-coded into 1 signifying inadequacy, and old codes 4-5 being re-coded into 2 signifying adequacy.

Results presented in Table 4.12 revealed that on the overall, teachers perceived equipment and facilities for HPE instruction as inadequate. More specifically, teachers were of the view that learning materials and equipment for HPE were inadequate (71.8%); that playgrounds for various activities were inadequate (68.4%). Other areas of concern and which were deemed inadequate were: Government supply

and maintenance of equipment (95%); secure storage of equipment in school (98.8%); and first aid equipment (98.8%)

**Table 4.12: Adequacy of HPE Equipment and Facilities**

	Inadequate		Adequate	
	n	%	n	%
1. Learning materials and equipment	56	71.8%	22	28.2%
2. Playgrounds for various activities to be undertaken in lessons	52	68.4%	24	31.6%
3. Government supply and maintenance of HPE equipment	76	95.0%	4	5.0%
4. Secure storage of equipment in school	79	98.8%	1	1.3%
5. First aid equipment	79	98.8%	1	1.3%
6. Security of equipments and materials used during HPE instruction	40	51.3%	38	48.7%

These results clearly indicate that HPE teachers in Nandi County find equipment and facilities inadequate for HPE instruction. This may impact negatively on the implementation of the HPE curriculum. Indeed, Jenkinson and Benson (2010) contend that lack of equipment and limited access to facilities are top barriers to implementation of HPE programmes.

Clearly emerging from the teacher's responses is the fact that the Government does not supply HPE equipment to primary schools. Besides, most schools do not have storage space for any materials available. More worryingly, lack of first aid equipment is seen to expose pupils to danger. It is important to point out that without proper facilities and equipment, implementation of HPE in Nandi County will remain a mirage. The importance of materials and equipment in effective instruction has been highlighted in several empirical studies. For instance, Gogo (2002) in a study conducted in the then Rachuonyo district, recommends that in order to provide quality education the availability of relevant teaching/learning materials and facilities is

crucial. Muthamia (2009) on his part argues that teachers can only be effective and productive in their work if they have adequate and relevant facilities.

The large class sizes occasioned by the FPE perhaps complicates the resource situation even more. Indeed, Hardman (2008) captures the situation and sustainability of physical education in schools by noting that concerns continue to embrace implementation of PE in schools in many contexts. Key among mentioned concerns includes inadequate provision of facilities and equipment and teaching materials attributed to underfunding and to some extent large class sizes.

#### **4.6.2 Pupil's Perceptions of HPE Equipment and Facilities**

Pupil perceptions of adequacy of HPE equipment and facilities were assessed using focused group discussions. Adequacy of equipment and facilities was measured using five items on the focused group protocol. The protocol had three questions with which to probe adequacy of equipment and facilities. First, group members were asked to state whether they are able to access equipment, facilities and fields whenever need arises. Narratives from participating pupils drawn from various groups indicated that fields were always accessible but equipment and facilities were not easily accessible.

One pupil remarked that;

*“...yes the fields are always available anytime and we can use them whenever we need. As for equipment, even the school does not have. We just make our own footballs from papers and use them to play”*  
FGD participant from group 1.

Another one added;

*“The school has some balls which are not enough. They are only used during games time by pupils who participate in games”* FGD participant from group 16

On the question of whether there were suitable materials for specific activities, there was a resounding no. A participant noted the following:



*“The activities we do involve playing in the field just chasing each other or playing football. Girls play “cha katii”. The materials we use are made by ourselves” FGD participant from group 11*

The third question on the focused group discussion protocol was to find out adequacy of equipment. Pupils were asked to state whether in general, the equipment and fields were adequate. Their responses confirmed that whereas fields were adequate, equipment was inadequate.

*“I have no issues with fields since the school has them. Equipment is not enough for us. Sometimes we go for PE and we have to scramble for one ball. Those who want to engage in athletics lack equipment such as discuss” FGD participant from group 9*

*“Most of us don’t have games kits to use for PE lessons. We end up playing in our school uniforms making them dirty and to get torn” FGD participant from group 3.*

The implication of these results is that pupils share HPE teachers’ views that equipment and facilities for HPE instruction are inadequate. Inadequacy of equipment and facilities no doubt compromises implementation of the HPE curriculum. Lack of the necessary gear to use for PE for instance, means that pupils have to use their school uniform both for PE lessons and for other subjects. This in turn tends to compromise the health component of the HPE curriculum.

#### **4.7. Head Teachers’ Perceptions of Adequacy of HPE Equipment in Primary Schools in Nandi County.**

In order to establish head teacher perceptions of adequacy of HPE equipment and facilities, two items on the head teacher interview schedule were used. First, respondents were asked to state whether the school receives any HPE equipment from the MoE. Second, they were asked whether they have enough HPE equipment / facilities.

Results of thematic analysis of head teacher responses indicated that schools hardly receive HPE equipment from the MoE. Initially supplies were regular but only for facilities such as balls. However, many schools are now not receiving these equipments. On the question, regarding adequacy, head teachers observed that HPE equipment in primary schools were scarce. They identified lack of funds and maintenance culture as the key challenges in trying to secure HPE equipment (Table 4.13).

**Table 4.13: Head Teacher Perceptions of Adequacy of HPE Equipment in Primary Schools in Nandi County**

Question	Response	
Does your school receive any HPE equipment from MOE?	<b>No (n=35, 100%)</b> Used to receive some equipment such as balls regularly but this does not seem to be the case anymore We rely mainly on well-wishers and politicians for the equipment we have	
Question	Theme	Explanation
Do you have enough HPE equipment/apparatus for the whole school?	<b>No (n=35, 100%)</b>	<ul style="list-style-type: none"> <li>Equipment is very few that teachers have to do with improvisation. We even improvise balls.</li> <li>PHE lessons in most cases appear like break time sessions since every group of pupils appear to be engaged in different activities.</li> </ul>
<b>Comments</b>	<b>Funding challenge</b>	<ul style="list-style-type: none"> <li>Lack of funds means that, determination, allocation and development of funds for the achievement of the school PHE programmes is constrained.</li> <li>The programme requires a large amount of money every year for construction and maintenance of facilities. Also equipment and supplies such as balls, nets, javelin, rackets, hockey sticks, bats, gymnastic and athletic (track and field) materials require either purchasing, replacement or repairs.</li> </ul>
	<b>Maintenance culture</b>	<ul style="list-style-type: none"> <li>There is no clear maintenance culture. Hence no proper repairs of physical education facilities, supplies and equipment is conducted.</li> <li>Procedures for caring for facilities, equipment and supplies have no proper routine. This means that repairs are not provided as needed.</li> <li>All used equipment and supplies are hardly checked and then repaired, replaced, or serviced as needed.</li> <li>Lack of storage implies that such used items are not stored properly.</li> </ul>

Consistent with teacher and pupil perceptions, head teachers also concurred that most primary schools in Nandi North County lack adequate equipment for HPE. Nothing that the HPE programme requires a large amount of money to run throughout the year, they decried lack of funding as a major cause of inadequate HPE equipment in primary schools in Nandi County. Lack of a maintenance culture was also identified as a major contributing factor to inadequacy in HPE equipment. It was pointed out that due to there being no clear maintenance culture, no proper repairs of physical education facilities, supplies and equipment is conducted. In addition, lack of storage facilities in the schools means that used items are not stored properly and this leads to their disappearance or wastage.

These findings point to inefficient implementation of HPE in public schools in Nandi County occasioned by inadequacy of facilities and equipment. This supports findings reported by other scholars and which reveal that implementation of the PE curriculum was not effectively done owing to among other reasons, inadequacy of PE equipment and materials purportedly due to lack of funds (Kahiga, Rintaugu & Gatumu, 2015, Jenkinson & Benson 2010; Gogo 2002).

#### **4.8 Monitoring of HPE lessons in Primary Schools in Nandi County**

The fifth and final objective of the present study sought to find out how HPE instruction is monitored and evaluated in primary schools in Nandi County, and the effect such monitoring has on implementation of HPE curriculum. Assessment of monitoring and evaluation of HPE instruction was conducted via teacher questionnaire and interviews with Quality Assurance and Standards Officers (QASO).

#### **4.8.1 Teachers perceptions of Monitoring and Evaluation of HPE Instruction**

Teachers' perceptions of monitoring and evaluation of HPE instruction were measured using six questionnaire items. Respondents were asked to indicate their agreement or disagreement with the items selected to reflect monitoring and evaluation activities. The 5-point scale used to capture agreements and disagreements was further re-coded into a 2-point scale used to report whether or not HPE instruction is monitored and evaluated. Old codes 1-3 were re-coded into code 1 signifying lack of monitoring and evaluation, while old codes 4-5 were re-coded into code 2 signifying existence of monitoring.

Results revealed that in the views of HPE teachers, monitoring and evaluation of the HPE curriculum is not done in primary schools in Nandi County (Table 4.14). In particular, respondents noted the following: QASOs were not proactively involved in assessment of HPE instruction (71.8%); monitoring of challenges HPE teachers face in integration of health and PE is not done (66.2%); QASOs support to teachers in terms of advice on proper practices is not done (97.5%); assessment of documents prepared by teachers for HPE instruction is hardly done (96.3%); assessment of HPE teachers progress in HPE instruction is not done (96.3%); and HPE is not evaluated during examinations (96.3%).

**Table 4.14: Teacher Perception of Monitoring and Evaluation of HPE Lessons**

	Not done		Done	
	n	%	n	%
1. QASOs are proactively involved in assessment of HPE instruction	56	71.8%	22	28.2%
2. QASOs monitor challenges teachers face in integrating health with PE	51	66.2%	26	33.8%
3. QASOs support teachers with relevant advice on proper practices	78	97.5%	2	2.5%
4. HTS often assess PE documents prepared by teachers	77	96.3%	3	3.8%
5. Head teachers assess progress of PHE instruction with a view to identifying problems encountered	77	96.3%	3	3.8%
6. HPE is evaluated during examinations	77	96.3%	3	3.8%

The implication of these results is that monitoring and evaluation of HPE instruction in Nandi County is very poor. It is clear from the teacher perspectives that QASOs are mainly not present to assess, advice, and help with challenges encountered in the process of teaching HPE. The bottom line is that monitoring and evaluation is among the factors that determine implementation of HPE curriculum in public primary schools in Nandi County. Besides, results indicated that head teachers hardly assess progress of HPE lessons. Indeed these findings regarding monitoring inability among head teachers reflect the findings by Mosiori and Thinguri (2015). In a critical analysis of school head teachers' capacity in provision of quality education in primary schools in Kenya, these authors recommended that head teachers be equipped with leadership, management and administrative skills as well as excellent pedagogical skills.

It sure is a matter of concern if head teachers in the study area are not pro-active in the rolling out the HPE curriculum. This is because as pointed out by Mosiori and Thinguri (2015), monitoring and evaluation is a key responsibility of head teachers. The perception among teachers regarding head teachers monitoring of HPE in Nandi

County therefore goes against the assertions which require that head teachers need to work with all stakeholders to create an environment of professional learning development (DuFour, DuFour, Eaker & Karhanek, 2010). Poor implementation of HPE in the County is therefore consistent with views by Blankstein, Houston and Cole (2011) that monitoring and evaluation must be done if head teachers have to be successful.

#### **4.8.2 QASO Perceptions on Monitoring of HPE Instruction in Primary Schools in Nandi County.**

Three items on QASOs interview schedule were used to assess their perceptions on monitoring and evaluation of HPE instruction in public primary schools in Nandi County. First, respondents were asked the frequency with which they visit schools for purposes of supervision and assessment of HPE instruction. Second, they were asked whether they assess PE demonstration lessons in the field. Third, they were asked to state whether HPE should be examined in KCPE.

Analysis of the responses by QASOs revealed that they rarely pay visits to public primary schools in the County for purposes of supervising and assessing physical education lessons. One participating QASO candidly said that;

*“To be honest, we hardly visit primary schools to supervise HPE. Mostly, we are keen on assessing examinable subjects like Mathematics, English, Kiswahili, Science and Social studies” IDI 3*

On the question of assessing HPE demonstration lessons in the field, a participant remarked

*“Ayi no...I don't remember any one of us who has ever assessed a PE lesson in the field. In most cases, we ask teachers for their professional documents and peruse them” IDI 2*

Results of thematic analysis of QASOs responses as to whether the Kenya National Examinations Council should test HPE curriculum at the end of 8 years of study, revealed that most of the QASOs were not for the idea. Most narratives cited different reasons like negative attitude from both teachers and learners, which could interfere with the schools, mean score at the end of the programme.

QASOs perceptions regarding monitoring by of HPE instruction in public primary schools in Nandi County corroborate teachers' perceptions which show that these officers rarely visited schools and whenever they did, they concentrated more on examinable subjects. These findings are consistent with a host of studies that have questioned quality officers' preparation to do their work. Indoshi (2001) argues that despite efforts to train QASOs through INSET, doubts linger over the relevance of the INSET course content. Wanzare (2006) and Kithuka (2006) contend that very seldom are structured surveys undertaken to identify needs of teachers and head teachers needs for evaluation.

Ajuoga, Indoshi and Agak (2010) conclude that teachers perceive QASOs as average on issues of human relations, subject matter, supervisory approach, report writing and action research which goes to show that they are not trained in those skills. The bottom line of these findings is that monitoring of implementation of HPE curriculum in Nandi County is perceived to be poor both at head teacher's level and at the QASOs level. This is impacting negatively on implementation of this curriculum since monitoring is vital for continued planning for materials, equipment, infrastructure and instruction. The existing literature confirms the importance of supervising and assessing teachers work in the schools (Mosiori & Thinguri, 2015; Cole, 2011).

### **4.8.3 Summary**

The descriptive analysis revealed that factors such as professional documentation, instructional methods, teacher attitude, adequacy of equipment and facilities, and monitoring and evaluation are potential determinants of implementation of HPE curriculum implementation. To establish the actual determinants and their respective impact on HPE curriculum implementation, multiple regression analysis was run. According to Blaikie (2003), regression is a sure way of examining the influence of one variable on another.

### **4.9 Determinants of Implementation of Health and Physical Education Curriculum Instruction.**

The purpose of the current study was to assess the influence of selected determinants of implementation of HPE curriculum instruction in public primary schools in Nandi County. In this regard, multiple regression models were used to examine the predictive powers of the conceptualized determinants. This was necessary since multiple regression models have ability to establish the influence of each factor when others are kept constant (Blaickie, 2003). The multiple regression model summary and regression coefficients were used to examine the predictive power of the conceptualized selected factors on implementation of the health and physical education curriculum, and the best predictors of implementation of health and physical education curriculum respectively. This was necessary so as to inform on efforts to be addressed on individual determinants.

Results of the model summary from the regressions analysis and presented in Table 4.15 revealed that the adjusted R square value of the potential determinants was 0.613. This implies that a combination of professional documents; teaching strategies;



teacher attitude; PE equipment and facilities; and monitoring and evaluation account for up to 61.3% of the variance in implementation of health and physical education curriculum.

**Table 4.15: Model Summary for Potential Determinants of Implementation of HPE Curriculum**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.791 <sup>a</sup>	.626	.613	.34679	1.659

a. Predictors: (Constant), Monitoring and Evaluation, Teaching Strategies, Teacher Attitude, Teaching Equipment, Professional Documents

b. Dependent Variable: Implementation of HPE Curriculum;

Results of the regression coefficients presented in Table 4.16 further revealed that professional documents ( $B=0.482$ ,  $p<0.05$ ); teaching strategies ( $B=0.332$ ,  $p<0.05$ ); teacher attitude ( $B=0.204$ ,  $p<0.05$ ); and teaching equipment ( $B=0.822$ ,  $p<0.05$ ) were significant determinants of implementation of HPE curriculum. The implication is that while holding other determinants constant, 1 percent improvement in professional documents is likely to result in 0.482 percent improvement in implementation of HPE curriculum. Similarly, holding other determinants constant, 1 percent improvement in teaching strategies would result in 0.332 percent improvement in implementation of HPE curriculum; 1 percent improvement in teacher attitude would result in 0.204 percent improvement in implementation of HPE curriculum; and 1 percent improvement in teaching equipment would result in 0.822 percent improvement of HPE curriculum.

On the basis of t-values, teaching equipment ( $t = 9.654$ ), was found to be the main determinant of implementation of HPE curriculum in schools. The implication is that PE can be conducted effectively when the instructor is utilizing equipment during the

lesson. This was followed by Teaching Strategies ( $t = 5.435$ ), which implies that teaching methods/strategies are indeed determinants of implementation of HPE curriculum. Professional documents ( $t=5.088$ ) was the third determinant of implementation of HPE curriculum. Teacher attitude ( $t = 3.524$ ) was ranked as the fourth in determination of implementation of HPE curriculum among the five selected factors. Monitoring and Evaluation was not a significant determinant of implementation of HPE curriculum ( $B=0.004, p>0.05$ ).

**Table 4.16: Determinants of Implementation of HPE Curriculum**

Model	Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
1 (Constant)	2.543	.285		8.930	.000		
Professional Documents	.482	.095	.393	5.088	.000	.431	2.323
Teaching Strategies	.332	.061	.351	5.435	.000	.615	1.625
Teacher Attitude	.204	.058	.231	3.524	.001	.596	1.677
Teaching Equipment	.822	.085	.507	9.654	.000	.928	1.078
Monitoring and Evaluation	.004	.060	.003	.066	.947	.985	1.015

Source: Survey Data (2016).

a. Dependent variable: Implementation of HPE Curriculum.

Basing on these results, implementation of HPE curriculum can be modeled as a function of the determinants identified in the following way.

$$Y = 2.543 + 0.482X_1 + 0.332X_2 + 0.204X_3 + 0.822 X_4 + 0.004 X_5.$$

Where Y= implementation of HPE curriculum

$X_1$  = professional documents

$X_2$  = teaching strategies

X<sub>3</sub> = teacher attitude

X<sub>4</sub> = teaching equipment

X<sub>5</sub> = Monitoring and Evaluation

These findings showing that both institutional and teacher factors significantly determine implementation of HPE curriculum supports a plethora of studies reporting the same. Morgan and Hansen (2008) classify determinants of successful implementation of physical education programs into institutional and teacher-related. Scarce resources, reduction in time provisions in the curriculum, crowded curriculum, and lack of facilities and equipment have also been found to be among institutional determinants of successful implementation of curricula (Hardman, 2008; Le Masurier & Corbin, 2006; Morgan & Hansen, 2008).

This indeed reflects the findings in relation to Nandi County. This is compounded by the fact that HPE is not examinable and therefore there is a tendency to use time allocated to the subject for other examinable subjects. This is critical considering that lower priority given to the subject, absence of performance measures for HPE, and insufficient infrastructure have been noted as barriers to implementation of HPE (Dwyer *et al.*, 2003). The finding that teacher attitude is a significant determinant of implementation of PE instruction is consistent with findings which identify possession of low levels of confidence and interest in teaching HPE as key teacher-related barriers to implementation of the curriculum (Barroso *et al.*, 2005; DeCorby *et al.*, 2005; Morgan & Hansen, 2008).

**Table 4.17 Hypothesis Results**

Hypothesis	Results
H <sub>01</sub> – There is no significant effect on the use of professional documents on implementation of HPE curriculum	P = .000 - Rejected
H <sub>01</sub> – There is no significant effect on the teaching methods on the implementation of HPE curriculum	P = .000 – Rejected
H <sub>01</sub> – There is no significant effect of the attitude of teachers attitude on the implementation of HPE curriculum	P = .000 – Rejected
H <sub>01</sub> – There is no significant effect in the use of HPE equipment and facilities on implementation of HPE curriculum	P = .000 – Rejected
H <sub>01</sub> – There is no significant effect in monitoring and monitoring and evaluating HPE curriculum	P = .947 – Accepted

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

The purpose of the present study was to assess some of selected determinants of implementation of health and physical education curriculum in public primary schools in Nandi County. The study therefore examined pupil's and teacher's perceptions on selected determinants that influence implementation of HPE curriculum in the County. In addition, the study explored perceptions of head teachers on the same issue. This chapter therefore presents summarized results of the study together with conclusions made thereof. The chapter also gives recommendations for theory and practice as well as for potential future research.

#### 5.2 Summary of Findings

In an effort to establish the influence of selected determinants on implementation of health and physical education curriculum instruction in public primary schools in Nandi County, five research questions were posed. With regard to preparation and utilization of professional documents, the results confirmed that most HPE teachers undertake their work in a professional manner and dully maintain the required professional records. They adhere to the KICD recommended government syllabus. They lesson plan their work according to the schemes of work which is derived from the national syllabus. Professional documents like the syllabus, schemes of work, lesson plan, record of work and class progress record cannot negate the implementation of the HPE curriculum (Mukwa, and Too, 2002). The professional documents positively influence implementation of HPE curriculum in public primary schools ( $B=.482, p>.05$ ).

From research the results indicated that HPE teachers use a variety of teaching methods to cater for both disabled and non-disabled learners. They usually use theory but to some extent they used “adopted” practical methods for physically impaired learners, based on learner’s expectations, lesson development, class organization and time allocation for each activity. In addition, teachers for HPE use “direct and indirect” methods to provide for pupils success, depending on the lesson objectives and PE equipment in use (Barroso, *et al.*, 2005). Teaching methods positively and significantly influence implementation of the HPE curriculum ( $B=.332, p>.05$ ).

Concerning teachers’ attitude, the result revealed that most HPE teachers in Nandi County have a negative attitude towards HPE lessons. A host of reasons were given, key among them being that PE teachers are not comfortable teaching PE lessons due to its practical activities involved, poor school infrastructure such as lack of PE playground which is the contributing factor to the low status of HPE curriculum. The findings indicate that teacher attitude impacts negatively on implementation of HPE curriculum in Nandi county ( $B=.204, p<.05$ ). On the issue of equipment and facilities, the findings clearly indicated that equipment and facilities in public primary schools in Nandi County are inadequate mainly due to challenges in limited supply of HPE equipment by the government, poor maintenance, lack of storage rooms and PE uniforms.

Without proper facilities and equipment, implementation of HPE in Nandi County will remain a mirage. Lack of HPE equipment influences negatively on the implementation of HPE curriculum since equipment and facilities have positive and significant influence on implementation of HPE instructions ( $B=.822, P<.05$ ). Finally on monitoring and evaluation, the findings revealed that Nandi county public primary

schools suffer from poor monitoring and evaluation of the teaching of HPE subject. Monitoring and evaluation of PE lessons is perceived to be ineffective. The study revealed that quality assurance and standards officers (QASOs) rarely pay visits to their schools of jurisdiction to supervise, assess and provide professional advice to teachers on challenges encountered in the process of teaching HPE lessons. In a nutshell therefore, lack of monitoring and evaluation has significant influence in implementation of HPE curriculum ( $B=.004<.005$ ).

### **5.2.1 Professional Documents and Implementation of the Health and Physical Education Curriculum**

With regards to preparation of professional documents in teaching health and physical education, the study established that most teachers handling health and physical education hardly prepared and used required professional documents thereby, compromising implementation of the HPE curriculum. Further, using regression analysis, the study identified professional records as a significant determinant of implementation of the health and physical education curriculum. These findings supported several other findings which show the need to prepare and maintain professional records among teachers.

### **5.2.2 Teaching Methods and Implementation of Health and Physical Education Curriculum**

With regards to the influence of teaching methods, the study revealed that health and physical education teachers rarely varied techniques and strategies for HPE instruction. In fact, the study established that HPE teachers often left pupils to organize themselves and select whichever activities they wanted. Furthermore, through multiple regression analysis the study established that the teaching method

used was a significant determinant of implementation of health and physical education curriculum in public primary schools in Nandi County. The findings are consistent with others that highlight individual differences among pupils and differences in learning styles as being bases for diversity in teaching methods.

### **5.2.3 Teacher Attitude and Implementation of HPE Curriculum**

Findings relating to teacher attitude towards HPE instruction showed that teachers in Nandi County were largely negative towards HPE instruction. Among key reasons cited for this were institutional related such as lack of facilities and equipment and poor infrastructure, teacher related causes such as difficulty in providing safely planned and structured lessons, gender stereotyping of activities, and lack of enthusiasm. Multiple regressions analysis further revealed that teacher attitude was a significant determinant of implementation of health and physical education curriculum in public primary schools in Nandi County. These findings lend support to a plethora of studies that posit teacher attitude as an important factor in implementation of educational curricula.

### **5.2.4 Adequacy of Equipment and Facilities and Implementation of HPE Curriculum**

The fourth research objective focused on determining the influence of adequacy of equipment and facilities on the implementation of HPE curriculum. The study found out that HPE teachers in Nandi County find equipment and facilities inadequate for use in HPE lessons, and this impact negatively on the implementation of the curriculum. Further the study established that pupils lack the necessary gear to use for PE, meaning that, pupils have to use their school uniform both for PE lessons and in



class. The study found out that most public primary schools in Nandi County lack adequate equipment for HPE and this could be attributed to lack of funding.

Moreover, the multiple regression analysis confirmed that equipment and facilities are significant determinants of implementation of HPE curriculum in public primary schools in Nandi County. Several studies reflect these findings by faulting availability of resources and equipment relevant for several subject areas.

### **5.2.5 Monitoring of HPE Lessons in Primary Schools in Nandi County**

Research objective five sought to establish the influence of monitoring and evaluation of HPE instruction on the implementation of the curriculum in public primary schools in Nandi County. The study established that teachers of HPE perceive monitoring and evaluation in the subject as being poor. QASOs are mainly not present to assess, advice, and help with challenges encountered in the process of teaching HPE. Interviews with QASOs confirmed that they hardly paid visits to schools to supervise and assess physical education lessons. The study further revealed that they are more interested in assessing examinable subjects like Mathematics, English, Kiswahili, Science and Social studies than physical education lessons. The findings regarding poor monitoring and evaluation of HPE curriculum added to existing studies showing the same trend.

### **5.3 Conclusions**

In view of the above findings, the main conclusion drawn is that implementation of HPE curriculum in public primary schools in Nandi County is mainly hampered by the negative attitude teacher's possess towards the subject, coupled with lack of essential facilities and equipment together with the laxity in monitoring and evaluation. More specifically, the study reaffirmed that health and physical education

teachers do prepare instructional/professional documents which are checked and verified by either head teacher or deputy head teacher. This confirms that HPE teachers take their work in professional manner maintaining professional records. However, lack of utilizing these documents in actual HPE instructions negates the implementation of health and physical education curriculum.

Health and physical education teachers are well aware of the need to employ a variety of teaching methods in order to cater for pupil's individual differences in the large classes. More importantly, head teachers are also aware of the criteria teachers use to settle on particular strategies. This in essence implies that on the basis of teaching methods, it would be expected that implementation of HPE curriculum in public primary schools in Nandi County could be effective. Teacher attitude towards HPE as a subject remains largely negative and this tends to impact negatively on the implementation of the curriculum in this subject area. HPE teachers feel that they are looked down upon by the larger society as well as by their teaching colleagues. This is confounded further by the poor infrastructure in public primary school that fails to motivate instruction in the subject.

The lack of relevant facilities and equipment for practical orientation of the subject means that the subject can only be taught theoretically. HPE teachers are therefore not able to apply skills acquired in practical contexts. Besides, lack of modern facilities renders HPE teachers' obsolete in the present technological era. Monitoring and evaluation of implementation of the HPE curriculum in the County is poor. Most head teachers and QASOs concentrate more on monitoring examinable subjects and ignore the relevance of HPE in the physical conditioning of the pupils. In the absence of monitoring and evaluation, it remains difficult to ascertain how relevant the HPE curriculum is in public primary schools in the County.

#### **5.4 Recommendations of the Study**

In view of the conclusions made above, the following recommendations were made.

The main recommendation of this study is that the HPE curriculum for public primary schools could be effectively implemented in Nandi County so long as selected determinants of implementation such as teacher attitude, facilities and equipment, and monitoring and evaluation are adequately addressed. More specifically:-

- i) The observed adherence to professionalism through maintenance of professional records should be sustained since they provide a sure way of HPE teachers to plan, implement and evaluate their approach to HPE instruction.
- ii) There is need to take advantage that when teachers take learners to the field for PE lessons, they use both direct and indirect teaching methods depending on the lesson objectives.
- iii) Stakeholders should strive to bring out the relevance of HPE in children's' growth so that the public can embrace the subject fully thereby motivating HPE teachers to feel proud of the subject.
- iv) Practical resources for teaching HPE though very important are also not readily available. There is need therefore to encourage use of local, contextual and sustainable human and material resources to help pupils to develop, utilize, and share materials for use in these scenarios.
- v) The lack of monitoring and evaluation in the implementation of the HPE curriculum does not portend well for the practical nature of HPE. There is need to lean more on a formative framework of assessment that is continuous and administered throughout the course.

#### **5.4.1 Recommendations for Further Studies.**

The researcher recognizes that while the findings show that selected determinants of implementation of HPE curriculum negate its effective implementation, the findings may have been influenced by the context in which this study was conducted. The researcher therefore recommends that similar studies should be replicated in public primary schools in other Counties so as to improve on external validity of the findings.

The current study employed an analytic approach that assumed that implementation of HPE curriculum was a function of selected institutional and teacher related factors. In order to have a thorough understanding of determinants of implementation of HPE curriculum, future studies should consider using the synthetic approach that would treat the issue of implementation of the HPE curriculum from a holistic perspective.

## REFERENCES

- Abbot, C., & Borden, N. (2005). *Research methods*, London: Oxford press.
- Ajuoga, M.A., Indoshi, F.C., & Agak, J.O. (2010). Perception of quality assurance and standards officers about their competence: Implications for training. *Educational Research* Vol. 1(4) pp. 112-117.
- Akiiki, (2007). *Teaching of physical education in primary in East Africa*, Kampala: Kampala Publishers.
- Ammah, J.O.A (2006). PE in Ghana. Inc P. Uwe & M. Gerber (Eds), *International Comparison of PE: Concepts, Problems, prospects*. New York: Meyer & Meyer.
- Anderson, D. (2008). *The discipline and the profession foundations of Canada P.E, Recreation and Sports studies*: Canada W, M; C, Brown Publishers.
- Ayiro, L. (2012). *Functional Approach to Educational Research Methods and Statistics: Qualitative, Quantitative and Mixed Methods Approaches*. USA, NY: Mellen Press
- Barroso, C. S., McCullum-Gomez, C., Hoelscher, D.M., Kelder, S.H., & Murray, N.G. (2005). Self-reported barriers to quality physical education by physical education specialists in Texas. *Journal of School Health*, 75(8), 313-319.
- Bassett, S (2013). *Importance of Physical Activities to School Children*: Illinois. Waveland Press Inc.
- Bell, J. (2005). *Doing your Research Project, A guide for 1<sup>st</sup> time Researchers*, New York: Grow Publishers.
- Ben, F.M., (2010). *Physical Activities for Young learners in USA*. New York: Corwin Press.
- Bishop, G. (1985). *Curriculum development*. Oxford press, London.
- Blaikie, N. (2003). *Analyzing Quantitative Data from Description to Explanation*. SAGE Publications London. Thousand Oaks New Delhi
- Blankstein, A.M., Houston, P.D., & Cole, R.M. (2010). *Data enhance leadership*. Thousand oaks, C.A: Corwin press
- Borich, G.D. (2007). *Effective teaching methods*, Unit and Lesson Planning, six edition, Pearson, Merrill Prentice Hall, Ohio.
- Bredeson, P.V. (2000). The school principal's role in teacher professional development, *Journal of In-Service Education*, 26:2, 385-401, DOI:10.1080/13674580000200114
- Buhere, K. (2007). *Drilling killing quality education*. The Standard, Oct31, 2007.

- Burris, C.C., & Welner, K.G. (2005). Closing the achievement gap by detracking. *Phi Delta Kappa*, 86(8), 594-598.
- Castelli, D., (2003). *Physical Education in Elementary Schools in Canada*. Thousands Oaks, Sage.
- Children's Act, (2001). *Child's right to Education*, Nairobi: JKF.
- Cox, W. J. (2008). *Experiments of Formula TV Owing in Acquisition of Skills*, London: Bells sons Ltd.
- Creswell, (2010). *Qualitative and quantitative research methods*, London: Oxford Press
- Creswell, (2013). *Revised Edition, Qualitative and Quantitative Research*. London: Oxford Press.
- Daresh, J.C. and Playko M.A. (2005). *Supervision as a Proactive Process. Concepts and Cases*, Illinois: Waveland Press Inc.
- Dauver, C. (2008). *Role of Head teachers in Policy Implementation*, London: Longman Ltd.
- Davesh, F. C., & Playko, M. A. (2005). *Supervision as A Proactive Process. Concepts and Cases*, Illinois: Waveland Press Inc.
- De Corby, K., Halas, J., Dixon, S., Wintrup, L. & Janzen, H. (2005). Classroom teachers and the challenges of delivering quality physical education. *The Journal of Educational Research*, 98(4), 208-220
- Denscomber, B. (2005). *Importance of PE to learners*. Oxford Press, London.
- Education" Act (1968). Nairobi: JKF.
- DiFiore, G.J. (2010). *The teaching of PE, health & wellness programs in high need middle schools* (Doctorial Dissertation, New York, 2010).
- DuFour, R., DuFour, R., Eaker, R., & Karhanek, G. (2010). *Raising the bar and closing the gap: Whatever it takes*. Bloomington, IN: Solution Tree.
- Dwyer, J.J.M., Allison, K.R., Barrera, M., Hansen, B., Goldenberg, E., & Boutilier, M (2003). Teachers' perspective on barriers to implementing physical activity curriculum guidelines for school children in Toronto. *Canadian Journal of Public Health*, 94(6), 448-452
- Fernie, D. (2006). *Nature of Children's Play*, New York: Longman Publisher.
- Gogo, K.S. (2002). "Input of cost sharing on access, equity and quality of secondary education in Rachuonyo District" *Unpublished Thesis*, Kenyatta University.

- Gomez, F.G.,(2005). *School Childrens' Physical Exercises in elementary schools in USA*. Boston: OUP.
- Government of Kenya, (2005). *Sessional paper 1of 2005*. Nairobi: Government printer.
- Hardman, K., Morgan, J., Hansen, W., Le Masurier & Corbin, T. (2008). *PE in schools: A global perspective*, Kinesiology, 40(1), 5-28.
- Henson, K.J. (2003). *Curriculum Planning*, Long Grace II Boston: Waveland Press.  
<http://www.ualberta.ca/ckreberpaperszak.utm> retrieved on 10/4/2016
- Houston, R., & Cole, F. (2011). *Games and Athletics in Schools*. Boston: Waveland.
- Humpkin, A. (2006). *Physical Activities for young learners*, Boston: OUP.
- Hussein, S. (2009). *Importance of doing physical exercises*. Lagos: Oxford press.
- Indoshi, F.C. (2001). *Towards a Model for In-service Education and Training of Teachers in Kenya*. Maseno J. Educ. Arts Sci. 4(4):17-27
- Ingule, F., & Gatimu, J. (1996). *Essentials of Education Statistics*, Nairobi: East African Education Publishes.
- Jacobs, N. (1985). PE instruction guidelines for Schools in Denmark. *Denish Journal of physical education*, 25(3), 125.
- Jenkinson, K.A., & Benson, A.C. (2010). Barriers to providing physical education activity in Victorian state secondary schools. *Australian Journal of Teacher Education*, 35(8):1
- Kahiga, R.M., Rintaugu, E.G., & Gatumu, J.C. (2015). *The efficiency of the Implementation of the Physical Education Curriculum in Nairobi County and Nyeri County Preschools, Kenya*. IFE Psychology IA. Vol23, No1
- Hardman, K. (2008). Situation and Sustainability of Physical Education in Schools: A Global perspective. *Spor Bilimleri Dergisi Hacettepe Journal of sports sciences*, 19(1), 1-22.
- Kenya Institute of Curriculum Development (2002). *P.E in primary schools*, Nairobi: JKF Publisher.
- Kenya Institute of Curriculum Development (2006). *PE Handbook*, Nairobi: K.I.C.D.
- Kenya Institute of Curriculum Development (2012). *HPE Teachers' Guide*, Nairobi: K.I.C.D.
- KNBS (2009). *Kenya Population and Housing Census*, Kenya National Bureau of Statistics, Nairobi.

- Kenya Secondary School Sports Association Report* (9<sup>th</sup> ed.). (2014). Nairobi: JKF.
- Kiganjo, S., & Kamenju, W. (2005). *Physical Education for Secondary Schools*, Nairobi.
- Kirk, M. (2005). *PE in elementary schools in UK*, London: Oxford Press.
- Kisilu, K. (2006). *Proposal and Thesis Writing*, Nairobi: Paulines Publication Africa.
- Kithuka, M. (2006). *Effect of inspection on academic performance in the secondary schools Curriculum in Kenya*. Unpublished PhD Thesis, Egerton University.
- Koech, D. (1999). *Report of the commission of inquiry into the education system Kenya*, Nairobi: JKF.
- Kolb, D. (1972). *Experiential learning model*, London: Oxford Press.
- Kombo, and Tromp, D. L.A. (2006). *Proposal and Thesis working*, Nairobi: Paulines Publications, Nairobi.
- Kothari, C.R. (2004). *Research Methodology: Methods and Techniques*, New Delhi: Oxford Press.
- Light, W., & Fawns, H. (2012). *Physical education & Recreation*. New York: McGraw Hill Company.
- Macphail, J. (2002). *PE and Sports in Schools*, California: California Press.
- Madeje, S. (1980). Implementation of PE programs in Dar-es-salaam primary schools. *Journal of physical education issues*, 6(2), 1-5.
- Mehan, H. (2007). *Restructuring and reculturing schools to provide students with multiple pathways to college and career*. Los Angeles: University of California Institute for Democracy, Education and Access.
- Morgan, P. J., & Hansen, V. (2008). Classroom teachers' perceptions of the impact of barriers to teaching physical education on the quality of physical education programs. *Research Quarterly for Exercise and Sport*, 79(4), 506-516.
- Mosston, W.W.(1992). *Childrens'Plays and Games*. California: California Printers.
- Mosiori, E.M., & Thinguri, R.W. (2015). A critical analysis of the school head teachers' capacity in provision of quality education in primary schools in Kenya. *International Journal of Education and Research*. Vol.3 No.7
- Mowling, C.M., Brock, S.J., Eiler, K.K. & Rudisill, M.E., (2004). Student motivation in physical education. *Journal of Physical Education, Recreation & Dance*, 75(6), 40-51



- Mugenda, O., & Mugenda, G., (2004). *Research Methods: Qualitative and Quantitative Approaches*. 227pp. Nairobi: ACTS press.
- Mukwa, C. & Too, S. (2002). *General Instructional Methods*. Eldoret: Moi university press.
- Muthamia, H.N. (2009). *Factors affecting Adult Education Learners recruitment programme in Kakamega south district, Kenya*. Unpublished Thesis, Masinde Muliro University
- Mwathi, L. (2005). *PE Teachers Guide for Form 4*, Nairobi: JKF.
- Neuman, W. (2012). *Basics of Social Research*. (3rd Ed.) Boston: Pearson/Allyn and Bacon
- Neuman, L. (2007). *Basics of social research: qualitative and quantitative approach*. Boston: Pearson.
- Nichols, T. D. (1994). *Physical Activities for Young Learners*. New York: Sage Printers.
- Njagi, M. (2001). *Teaching of PE in Primary schools*, Nairobi: KLB.
- Nsubuga, T.H. (2000). *Physical and healthy education in Uganda*, Kampala Publishers.
- Nteere, S. (1982). *Teaching PE in Primary schools*. Nairobi: KU Printers.
- Nworgu, B. G (2005). *Education Research: Basic Issues and Methodology*. Ibadan: Wisdom Publishers Ltd.
- Ogi, A. (2006). *A report on power of sports and PE in building a better world*. A report presented on April 4, 2006. New York.
- Ogola, D. (2012). *Physical Education and Healthy*, Nairobi: JKF.
- Ogula, P. (1998). *Educational Research*. Nairobi: KLB.
- Oliver, R. (2002). *Teaching of PE in elementary schools*, London: Thousands Oaks, Sage publishers
- Onywera, S. (2010). *PE teaching in Primary Schools Journal*, Nairobi: KU Press.
- Osler, R. (2004). *Learning PE Skills*, London: Oxford Press.
- Otunga, R. (2010). *Curriculum & instructions*, Eldoret: Moi University Printers.
- Penney, P. (2007). *Physical & Healthy Education*, New York: Sage Printers.
- Poynton, S. (1986). *Psychomotor domains of learning*. London: London OUP.

- Rink, J.E., & Hall, T. J. (2008). Research on effective teaching in elementary school physical education. *The Elementary School Journal*, 108(3), 207-218
- Rossman, G. B., & Rallis, S. F. (2012). *Learning in the field* (3rd ed.). Los Angeles: Sage Printers.
- Sallis, B. et al., (2009). *Games and Sports in Schools*. Boston: Boston Publishers.
- Schmottlach, N., & Mcmanama, J. (2006). *The P.E handbook*. 9<sup>th</sup> edition, Florida: Allyne and Bacon Printer.
- Seidman, I. (2013). *Interviewing as qualitative research. A guide for researchers in education & the social sciences* (4th ed.). New York, NY: Professors College Press.
- Shehu, E. (2009). *Health and Physical Activities for school children*. Unpublished seminar paper. Lagos: Oxford press.
- Sherar, L.B., Gyurcsik, N.C., Humbert, M.L., Dyck, R.F., Fowler-Kerry, S. & Baxter-Jones, A.D.G (2009). *Activity and Barriers in girls (8-16 years) based on grade and maturity status*. *Medicine & Science in Sports & Exercise*, 41(1), 87-95.
- Standards Newspaper July 12, IAAF *World Youth Championships* 2011.
- Stodden, F. W. (2009). *Teaching Physical Activities in an Elementary schools*. New York: Grow Publishers Ltd.
- Sunday Daily Nation Oct 3, (2010). 19<sup>th</sup> *Commonwealth Games* Delhi, Oct 3-14, 2010
- Tamwesigire, T. (2008). *Education Report on PES in Uganda*, Kampala, Kampala Printer.
- UNESCO (2002, 2005 & 2015). *Higher Education in Developing Countries*. Geneva: UNESCO.
- Vanderbitt Television News Archive <http://trnew.Vanderbittedu/program.pl?ID-493834>
- Wahome, G.S. (1999). *Teaching of P.E in schools*: Nairobi: Kenya Literature Bureau
- Wamukoya, E. K. (1985). "An investigation on attitudes of secondary school students towards participation in P.E" Unpublished M.Ed. Thesis Kenyatta University, Nairobi.
- Wanzare, Z.O. (2006). *Rethinking School Inspection in the Third World*: Unpublished case study. Cape Town: Oxford press.
- You, S. K. (2002). *Sports and Physical Exercises in Korea*. Hong Kong: Hong Kong Printers.

## APPENDICES

### **Appendix A: Questionnaires: Research Questionnaire For Health And Physical Education Teachers**

#### **Introduction**

The researcher is PhD student with Moi University doing research on the implementation of Physical Education Curriculum in Public Primary Schools in Kenya. This study is to investigate the role of HPE Teachers in implementing Physical Education (P.E) Curriculum. The reason why the researcher has decided to carry out research on the teaching of HPE as a subject is because of the less emphasis shown by teachers towards the teaching of HPE lessons.

Kindly respond to all the questions. Respond as honestly as possible. All the information you provide will be treated as strictly confidential. Do not write your name.

#### **Part 1 Background Information**

Please, indicate with a check (√) as applicable in the box provides.

1. Indicate your Gender                      Female ( )                      Male ( )

2. What is your highest academic qualification?

Masters ( ) Bachelor ( ) Diploma ( ) PI ( ) Others ( )

Please specify area of specialization (e.g. physical education, administration, curriculum, none at all, etc).....

3. How many years have you been in the teaching profession?

Less than 1 year ( )                      6-10 years ( )                      11- 15 years ( )

16- 20 years ( )                      20 years and above ( )

4. How many years have you taught in the public primary schools?
- Less than 1 years ( )      1-5years ( )      6- 10 years ( )
- 11- 15 years ( )      16- 20 years ( )      20 years and above ( )
5. How many years have you taught physical Education (HPE)?
- Less than one year ( )      1-5 years ( )      6-10 years ( )
- 11-15 years ( )      16-20 years ( )      20 years and above
6. Which other subjects do you teach? .....
7. Which classes are you currently teachings?
- Lower primary ( )      Upper primary ( )
- Both upper and lower classes ( )
8. In which area of HPE in the Kenya Institute of Curriculum Development (KICD/KIE)are you involved in?
- a) Teaching other HPE teachers in workshop ( )
- b) Assessing during teaching practice ( )
- c) Both (a) and (b) ( )
- d) None ( )

**PART II ADEQUACY OF THE HEALTH AND PHYSICAL EDUCATION  
PREPARATION BY PRIMARY SCHOOL TEACHERS**

Below are statements on some lesson planning, Teachers attitudes, teaching Methods, PE equipment and facilities and role of QASO and Headteachers. Which are required of a qualified P.E teacher so as to handle P.E in general classroom. Indicate with a check (√) the adequacy of the lesson planning for the HPE curriculum. The alternatives are: Very adequate (VA, Adequate (A), Undecided (U), Inadequate (IA) and very inadequate (VI)

**P.E Lesson Preparation**

**Adequacy**

<b>Statement</b>	<b>VA</b>	<b>A</b>	<b>U</b>	<b>IA</b>	<b>VI</b>
9. HPE topics allocated for each class are adequate					
10. Preparing a lesson plan for over 35 pupils in a class					
11. Preparing individual education programme (IEP) for disabled/ slow learners					
12. Number of HPE lesson per week					
13. Number of PE Apparatus for learners with disabilities					
14. Time allocated for HPE lesson is enough.					
15. One P.E teacher is adequate to handle one class alone					

i) **Teaching Methods****Adequacy**

<b>Statement</b>	<b>VA</b>	<b>A</b>	<b>U</b>	<b>IA</b>	<b>VI</b>
16. Instructional strategies used during HPE lessons					
17. Assessment methods used during PE lesson in the field.					
18. Are HPE practical/ field lessons adequate for pupils?					
19. HPE approaches during indoor lessons					
20. Number of HPE demonstration lessons per week					
21. Integration of Health content into HPE syllabus					

ii) **Teachers attitudes****Adequacy**

<b>Statement</b>	<b>VA</b>	<b>A</b>	<b>U</b>	<b>IA</b>	<b>VI</b>
22. The general attitude of both male and female teachers towards HPE lessons.					
23. Evaluation of HPE lessons per week					
24. Headteachers' attitude towards the teaching HPE lessons					

**HPE equipment and facilities****Adequacy**

<b>Statement</b>	<b>VA</b>	<b>A</b>	<b>U</b>	<b>IA</b>	<b>VI</b>
25. Learning materials and equipment for HPE lesson					
26. Number of HPE playgrounds in your school					
27. Governments provision of HPE equipment and maintenance					
28. Storage and security of equipment in the schools					
29. Utilisation of HPE Apparatus					
30 Security of pupils in using HPE equipment during the lesson.					

The following statements express the role played by both Quality Assurance and Standards Officers (QASO) and head teachers in assessing HPE Curriculum in public primary schools. Indicate with (√) the alternative that best express the extent of your agreement on each statement. The alternatives are: Strong Agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly Disagree (SD).

**iii) Role of QASOs and Head teachers**

<b>Statement</b>	<b>SA</b>	<b>A</b>	<b>U</b>	<b>D</b>	<b>SD</b>
31. Assessment of HPE lessons by QASO					
32. Assessment of HPE documents by head teacher					
33. HPE should be should be examined in KCPE.					
34. Assessment of HPE equipment and facilities					

by QASO in schools					
--------------------	--	--	--	--	--

**PART III: GENERAL OPINION ABOUT HPE CURRICULUM IMPLEMENTATION.**

The following statements express opinions about HPE curriculum in public primary school. Indicate with (√) the alternative that best express the extent of your agreement on each statement. The alternatives are: Strong Agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly disagree.

Statement	SA	A	U	D	SD
35. Teachers should learn as much as possible about P.E skills					
36. Teachers should learn more on how to handle learners with negative attitudes about HPE					
37. Learning HPE should be optional for primary pupils					
38. More topics should be included in the HPE curriculum					
39. The HPE curriculum should adequately prepare teachers to handle pupils with negative attitude towards P.E in the general classroom.					
40. The HPE curriculum should offer practical experience to learners during P.E teaching time.					

The statement below express an opinion or feeling on teaching children with social/historical background in regular primary schools classroom. Indicate with a check (√) the extent of your agreement on each statement based on the teaching of P.E



lessons in primary school. The alternative are: Strong Agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly Disagree (SD)

<b>Statement</b>	<b>SA</b>	<b>A</b>	<b>U</b>	<b>D</b>	<b>SD</b>
41 Teaching children with different social background in regular classroom is too demanding for public primary school teacher					
42 HPE teachers are better trained to teach learners with different social/ historical background.					
43 Only minor adjustments would be needed to teach the majority of the learners in the regular classrooms.					
44 The social and emotional needs of children with different backgrounds are better met in special HPE classes					
45 The academic needs of the majority of children doing HPE cannot be met in the regular classroom					
46 Children with much interest in HPE should be taught by HPE experts					
47 Every female trained teacher can teach HPE					
48 Children with much interest can achieve their potential in a special HPE classroom.					

How do you assess the adequacy of the primary HPE curriculum generally in providing competencies to learners in the following areas? The alternative are: Very Adequate (VA), Adequate (A), Undecided (U), Inadequate (IA), and Very Inadequate (VI)

Statement	VA	A	U	IA	VI
49 Knowledge on P.E					
50 Skills on P.E					
51 Positive attitudes on health and P.E					

**PART IV: GENERAL QUESTIONS**

52 Does the primary teacher training curriculum prepare teacher trainees adequately to handle learners with different social, physical and emotional needs in public Primary Schools?

- Yes ( )
- No ( )

Please give reasons for your answer above

- i) .....
- ii) .....
- iii) .....
- iv) .....

53 What challenges do you experience during HPE lessons when teaching female (girls) students in your class in the field?

- i) .....
- ii) .....
- iii) .....

iv) .....

54 What improvements would you suggest that can be made on the HPE curriculum in order to provide students teachers adequately with competencies on Health and Physical Education (HPE)?

i) .....

ii) .....

iii) .....

iv) .....

**THANK YOU FOR YOUR COOPERATION, BE BLESSED**

**Appendix B: Focused Interview Scheduled For Quality Assurance and Standard Officers (QASO)**

**SECTION A**

- 1. What is the number of public primary schools in division?

.....

How many T.S.C teachers do you have in your division?

.....

- 2. Do HPE teachers lesson plan the P.E lesson before they go out to teach it?

.....

**SECTION B**

- 3. Do most schools have enough play fields where HPE lessons can be performed?

.....

- 4. Does the ministry of Education (MEO) provide P.E Equipment and materials to public primary schools?

.....

- 5. How is the security of learners provided during a HPE lesson?

.....

How often do you go out to the field assess HPE lessons per term?

.....

**SECTION C**

What are your comments on the following areas:-

- 6. What is the general attitude of most teachers towards the teaching of HPE to learners?.....

- 7. What are your remarks concerning the teaching of HPE by lady teacher

.....

- 8. Do most Headteacher have positive attitude towards the teaching of HPE in their schools.....
- 9. Should HPE be examined in KCPE just like other core subject  
.....
- 10. In our pinion what would you suggest to be done so as to improve the teaching of HPE in schools

**Appendix C: Focused Interview Schedule For Public Primary Schools Head Teachers.**

1. Do your teachers scheme and Plan for HPE lessons?
  
2. What are the most common teaching methods used in teaching learners during HPE lessons?
  
3. In your opinion, what are the feelings of learners towards learning HPE lessons?
  
4. From your experience, how do you assess the attitude of lady teachers towards teaching PE lessons in the field?
  
5. Does your school receive any HPE equipment from the Ministry of Education (MoE)?
  
6. Do you have enough HPE equipment/apparatus for the whole School?
  
7. How often do Quality Assurance and Standards Officers (QASOs) visit your School for supervision and assessment?
  
8. Do QASOs assess PE demonstration lessons in the field?
  
9. Should HPE subject be examined in KCPE?
  
10. How can the Ministry of Education promote / enhance the learning of HPE subject in Public Primary School?

**Appendix D: Research Questions for Std 7 and 8 Pupils. Do Not Write Your Name.**

**PART A: Background information:**

**Please indicate with a (√) in the box provided.**

1. Please indicate your Gender

Girl

Boy

2. Your present class    Std 7                       Std 8

3. Please specify the Area you love most during co-curricular activities:

Games

Sports

None of the above

4. Tick (√) your P.E class teacher :    Male                       Female

**PART B : Preparation Teaching and Evaluation of P.E preparation**

5. Do you put on P.E uniform during P.E lesson?

Yes

No

6. Does your P.E teacher accompany you to the field during HPE lesson?

Yes

No

7. Do you use P.E apparatus during P.E lesson

Yes

No

8. How many times per week do you go out for a P.E lesson

Once

Twice

Thrice

Not all

9. Does your P.E Teacher give you grades/ marks during a P.E lesson.

Yes

No

**PART C: GENERAL COMMENTS (write either in English or Kiswahili)**

10. Should P.E subject be examined in KCPE?

.....  
.....

11. Give 2 reasons why P.E is not liked by learners

.....  
.....

12. Do parents/ school provide you with P.E Kits /uniform?

.....  
.....



**Appendix E: Observation Marklist.**

<b>Dimension</b>	<b>Yes</b>	<b>No.</b>
1. Pupils wear PE kits.		
2. Pupils enter PE field in a file		
3. Pupils accompanied by PE teacher to the field		
4. PE equipment used during the lesson		
5. Teacher uses PE teaching points during the lesson		

**Appendix F: STD 5 Pupils Performing PE Lessons at St. Marys Sugut Primary School**



**Not attended to by relevant PE teacher as seen in the photograph 1 above.**

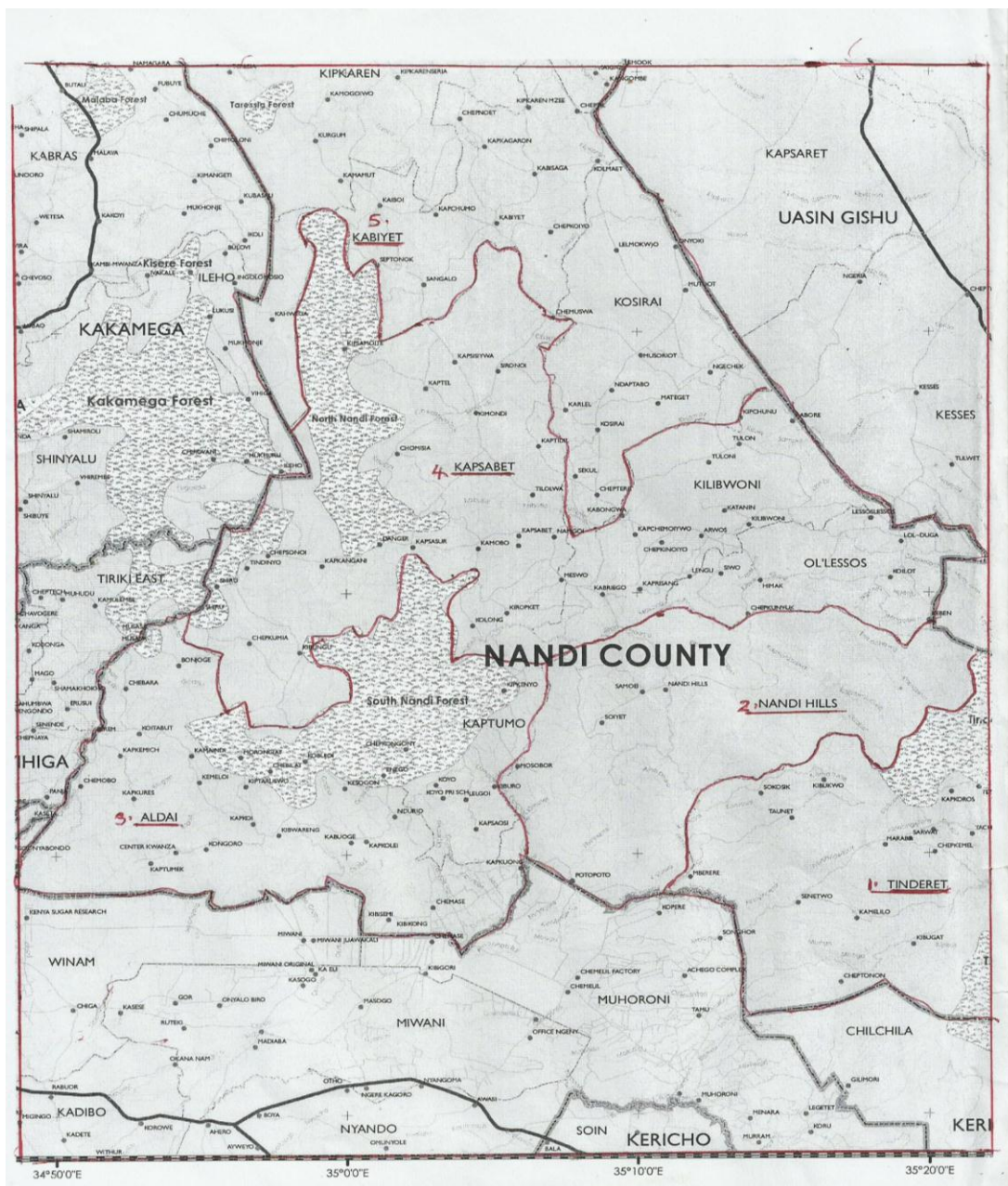
**STD 7 Pupils Performing PE Lessons at Namgoi Primary School.**

**Photography 2.**



**Not attended to by relevant PE teacher as seen in the photograph 2 above.**

Appendix G: Study Area Map



(Source: Nandi County Commission Office, 2016)



## Appendix H: Research Authorization – Nandi County

### MINISTRY OF EDUCATION

Telephone: Kapsabet 0773044624  
 E-mail: [cdenandicounty@yahoo.com](mailto:cdenandicounty@yahoo.com)  
 Fax: 05352084  
 When replying please quote



County Director of Education  
 Nandi County,  
 P. O. Box 36,  
KAPSABET,  
 1/8/2014

**Ref: NCD/CDE/GEN/1/VOL.1/138**

Josphat Agengah Malingu  
 Moi University  
 P.O Box 3900-30100  
ELDORET

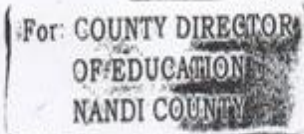
#### RE: RESEARCH AUTHORIZATION

The above named person has been given permission by the CDE to carry out research on "**IMPLEMENTATION OF HEALTH AND PHYSICAL EDUCATION CURRICULUM IN THE PUBLIC PRIMARY SCHOOLS: A STUDY OF NANDI COUNTY, KENYA,**".  
 In Nandi County.


Kindly provide him all the necessary support he requires.

**ARITA BWANA**

**FOR: COUNTY DIRECTOR OF EDUCATION  
NANDI COUNTY.**



## Appendix I: Research Authorization – NACOSTI



**NATIONAL COMMISSION FOR SCIENCE,  
TECHNOLOGY AND INNOVATION**

Telephone: +254-20-2213471,  
2241949, 310571, 2219420  
Fax: +254-20-310245, 310249  
E-mail: secretary@nacosti.go.ke  
Website: www.nacosti.go.ke  
When replying please quote

9<sup>th</sup> Floor, Utako House  
Uhuru Highway  
P.O. Box 10271-00100  
NAIROBI KENYA

Ref. No. \_\_\_\_\_ Date: \_\_\_\_\_  
**10<sup>th</sup> January, 2013**

**NACOSTI/P/13/7894/423**

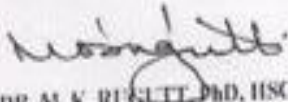
Josephat Agengah Malingu  
Moi University  
P.O.Box 3900-30100  
ELDORET.

**RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on  
*"Implementation of health and physical education curriculum in the public  
primary schools: A study of Nandi County, Kenya,"* I am pleased to inform  
you that you have been authorized to undertake research in Nandi County for  
a period ending **31<sup>st</sup> December, 2014.**

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

On completion of the research, you are expected to submit **two hard copies  
and one soft copy in pdf** of the research report/thesis to our office.

  
**DR. M. K. RUGUTT, PhD, HSC,  
DEPUTY COMMISSION SECRETARY  
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION**

Copy to:


The County Commissioner  
The County Director of Education  
Nandi County.

National Commission for Science, Technology and Innovation is ISO 9001:2008 Certified

**Appendix J: Research Permit**

**THIS IS TO CERTIFY THAT:**  
**MR. JOSEPHAT AGENGAH MALINGU**  
**of MOI UNIVERSITY, 0-30800 Eldoret, has**  
**been permitted to conduct research in**  
**Nandi County**  
**on the topic: IMPLEMENTATION OF**  
**HEALTH AND PHYSICAL EDUCATION**  
**CURRICULUM IN THE PUBLIC PRIMARY**  
**SCHOOLS: A STUDY OF NANDI COUNTY,**  
**KENYA.**  
**for the period ending:**  
**31st December, 2014**

**Permit No : NACOSTI/P/13/7894/423**  
**Date Of Issue : 10th January, 2014**  
**Fee Received : Kshs ksh2000.00**



*Agengah Malingu*  
**Applicant's Signature**

*M. Mwangi*  
**Secretary**  
**National Commission for Science, Technology & Innovation**

**CONDITIONS**

- 1. You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit**
- 2. Government Officers will not be interviewed without prior appointment.**
- 3. No questionnaire will be used unless it has been approved.**
- 4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.**
- 5. You are required to submit at least two(2) hard copies and one(1) soft copy of your final report.**
- 6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.**

  
**REPUBLIC OF KENYA**  
  
**National Commission for Science, Technology and Innovation**

**RESEARCH CLEARANCE PERMIT**  
**Serial No. A 821**  
**CONDITIONS: see back page**