

**EXPLORING THE AVAILABILITY OF FACILITIES AND EQUIPMENT FOR  
TEACHING OF PHYSICAL EDUCATION AND SPORT IN SELECTED  
GOVERNMENT PRIMARY SCHOOLS IN SERENJE DISTRICT, ZAMBIA**

**By**

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**A Dissertation Submitted to the University of Zambia in Partial Fulfillment of the  
Requirement for the Award of the Degree of Master of Education in Primary  
Education**

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## DECLARATION

I, **Juliet Musonda**, do hereby declare that this dissertation entitled; “exploring availability of facilities and equipment for teaching of physical education and sport in selected government primary schools in Serenje district, Zambia is my original work, and has not been submitted to any institution before. All sources used have been thoroughly acknowledged.

Signed (Candidate).....

Date:.....

**APPROVAL**

This dissertation by **Juliet Musonda** is hereby approved as partial fulfilment of the requirements for the award of the degree of Master of Education in Physical Education and Sport by the University of Zambia.

**EXAMINER 1**

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## ABSTRACT

Teaching of Physical Education and Sport (PES) is important for the improvement of mental and physical alertness of children (Maher, 2016). Hence, the study explored the availability of facilities and equipment for the teaching of physical education and sport in selected primary schools in Serenje District of Zambia. It adopted an intrinsic case study design that allowed the collection of qualitative data. The sample size was 26 comprising of 25 teachers and one Education Standards Officer. Expert case purposive sampling was used to select the sample. The study findings show that facilities for teaching Physical Education and Sport were largely unavailable because only play fields were available in the five selected primary schools. Those that were available, in some schools they were not in a good condition. The poor state or lack of facilities and equipment, in the selected schools, negatively affected the teaching of physical education and sport. Some pupils even had negative attitude towards the subject. The interventions required enhancing the teaching of physical education and sport included repair: replacement of equipment by lobbying the corporate world and communities. In addition, schools suggested improvisation of facilities and equipment to include traditional forms of PES facilities and equipment. There is need for MOGE, through the District offices DEBS, to expedite the distribution of PES equipment to all the schools where PES is taught so that teaching can be enhanced. In addition, there is need for schools to improvise on certain PES facilities and equipment which they can manage.

**Keywords:** *Physical Education Facilities, Physical Education Equipment, Primary Schools*

## **DEDICATION**

This dissertation is dedicated to my parents, Father Charles Musonda and mother Mangalita Musonda for laying the educational foundation for me. To both of you, I say thank you.

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## **ABBREVIATIONS AND ACRONYMS**

CDC	Centre for Disease Control
DEBS	District Education Board Secretary
ESOGI	Education Standard Officer General Inspector
ESRI	Education and Social Research Institute
MSVTEE	Ministry of Education Science Vocational Training and Early Education
NGOs	Non-Governmental Organizations
PE	Physical Education
PES	Physical Education and Sport
PETs	Physical Education Teachers
SDGs	Sustainable Development Goals
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNZA	University of Zambia
USA	United States of America

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Overview**

The chapter comprises the background to the study, statement of the problem, the purpose of the study, the research objectives, research questions, significance of the study, limitation, and delimitation of the study, and definition of key terms. It ends with the chapter summary.

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

Schools are established for the purpose of teaching and learning. Therefore, it is pertinent that the teacher and learners be properly accommodated and equipped to facilitate the effectiveness of the teaching-learning process (Lungu & Mukandawire 2022). Several attempts have been made, by educationists and psychologists, over the years to find ways of enhancing educational outcome of learners as well as input to teachers. Many studies have shown that, among other things, school facilities enhance the teaching of physical education and sport. Eneh and Nkang (2001), in postulation of the theory of cognitive development, showed that learners function at the operational stage of mental development, and one of the characteristics of students at the stage of development, is that they hardly remember what they learn except the learning experiences are made to be in concrete form; and one way of making learning experiences concrete is to apply the appropriate school facilities and equipment in the teaching process. Generally, the aim of teaching is to develop the learners' cognitive, effective and psychomotor abilities (Ekanem, 2006). Whenever a teacher presents 'sermon' lesson, the learners' cognitive abilities are developed, while the affective and psychomotor abilities suffer flaws. This is because physical activities directly affect the cognitive processes. The teaching of Physical Education and Sport(PES) is important for the improvement of mental and physical alertness as well as the development of individual children secretion of neuropeptides, the child's self-esteem and enhance their mental functioning at school (Maher, 2016; Darst, 2014; Balsevich, 2006; Trudeau and Shephard, 2010). This argument is supported by assumptions of the 2030 sustainable development agenda which states that physical education and sport are necessary in ensuring the quality education for all.

Kirchner and Fishburne (1995), outline that Physical Education and Sport is the part of the educational process that contributes to the physical, emotional, social and mental development of learners through physical activity. Physical Education and Sport is that part of the educational experience which provides learners with the opportunity to become aware of and engage in physical activity that is whole bodied, intrinsically valuable and personally meaningful within the context of the learners' social and environmental setting. To describe Physical education, Pangrazi (2007) states that it is a learning process that focuses on increasing knowledge and affecting attitudes and behaviours related to physical activities including exercise, sport, games, dance, aquatic games and outdoor activities.

The studies undertaken in the past concentrated on unearthing the historical perspectives of teaching Physical Education and Sport(PES) and teacher's perception of Physical Education and Sport(PES) as an academic subject in Zambia's primary schools (Mubita,2017; Shimishi and Ndhlovu,2015). Other studies have emphasised the importance of Physical Education and Sport(PES) in the improvement of mental and physical alertness of individual children or learners through cognitive processes (Maher, 2016; Darst, 2014; Trudeau and Shephard, 2010; Balsevich, 2006). However, this study explored the availability of facilities and equipment in the teaching of Physical Education and Sport in the primary schools of Serenje District, Zambia.

Despite knowing the role Physical Education and Sport (PES) plays in society, the subject has been neglected in terms of its teaching in many schools in Zambia. Luckily for the subject, the 2013 revised curriculum has placed important emphasis on the integration of Physical Education and Sport(PES) as a subject under vocational career pathway and allocated a total of twelve periods per week. To accelerate the implementation of Physical Education and Sport(PES) in schools, government through the Ministry of General Education distributed facilities and equipment for all the schools where it is offered. In spite of these efforts by the government, many schools face a lot of challenges in teaching PES. Hence, there was need to embark on an empirical investigation to explore the availability of facilities and equipment for teaching physical education and sport in government primary schools in Serenje district of Zambia.

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

It has been established that Physical Education and Sport (PES) is important in the emotional and mental development of pupils which has subsequently led to its introduction in the government school curricula. The Zambian Education Curriculum Framework of 2013 provides a clear and detailed national strategy of Physical Education and Sport(PES) at all levels of education: early childhood, primary, secondary, colleges of education and universities. These strategies are set with the assumption that facilities and equipment for teaching of physical education and sport are available in schools. However, little is known about the availability of educational facilities and equipment for teaching of physical education and sport in primary schools in Zambia. This provides an opportunity to conduct a study and explore availability of facilities and equipment for teaching of physical education and sport in primary schools in Zambia. Therefore, this study explored the availability of facilities and equipment for teaching of physical education and sport in selected government primary schools in Serenje district of Zambia.

### **1.4 Purpose of the study**

This research aimed at exploring availability of facilities and equipment for the teaching of physical education and sport in selected government primary schools in Serenje District of Zambia.

#### **1.4. Objectives**

The research was guided by the following objectives:

1. To establish facilities and equipment available for teaching of physical education and sport in selected primary schools in Serenje District.
2. To ascertain the state of facilities and equipment for teaching of physical education and sport in selected primary schools in Serenje District.
3. To establish how the available facilities and equipment affect the teaching of physical education and sport in selected government primary schools in Serenje District.
4. To identify interventions that may be required to enhance the teaching of physical education and sport in selected government primary schools in Serenje District

## **1.5 Research questions**

The following study questions guided the study.

1. What facilities and equipment are available for teaching of physical education and sport in selected primary schools in Serenje District?
2. What is the state of facilities and equipment for teaching of physical education and sport in selected primary schools in Serenje District?
3. How do the available facilities and equipment affect the teaching of physical education and sport in selected government primary schools in Serenje District?
4. What interventions may be required to enhance the available facilities and equipment for teaching of physical education and sport in the selected government primary schools in Serenje District?

## **1.6 Significance of the Study**

It is hoped that the findings of this study may inform the Ministry of Education about available facilities and equipment for the teaching of physical Education and Sport in selected government schools. In addition, the stakeholders may know the available facilities and equipment for the teaching Physical Education and Sport in government schools in Zambia. It is also hoped that this study may set groundwork for more research by other researchers in the field of facilities and equipment for teaching physical education and Sport in schools.

## **1.7 Limitations of the Study**

The following were the limitations of the study:

Firstly, financial problems restricted the research to few schools only. Secondly, long distance to reach certain schools and limited time to do the research. These are in line with Kombo and Tromp (2006), who indicate that limitation of the study includes time and financial limitations that may influence the scope of the study, data inaccessibility and unanticipated occurrences.

## **1.8 Delimitations of the study**

This study was conducted in the selected primary schools in Central Province of Zambia, specifically Serenje District. The choice of Central province, Serenje District

and selected schools was because it was convenient and the sites were easily accessible and had the required population for the study.

### **1.9 Theoretical Framework**

The study was guided by the theory of cognitive development. The proponent of this theory is Jean Piaget (Miller, 2011). The theory deals with the nature of knowledge and how humans gradually come to acquire, construct, and use it. Piaget suggests that children's intelligence undergoes changes as they grow. By exposing the children to physical education and sport facilities and equipment it is hoped that they may develop their cognitive skills.

Piaget's theory of cognitive development proposes four stages of development that's Sensorimotor stage: birth to two years, preoperational stage: two to seven years, formal operational stage: ages twelve years and above. The sequence of the stages is universal across cultures, and follows the same invariant (unchanging) order. All children go through the same stages in the same order (but not all at the same rate).

This theory also contends that the appropriate and effective learning is dependent on engaging the learners in the actual use of tools, facilities and equipment. The availability of appropriate facilities and equipment creates real world experience for the learners. By using Piaget's theory in the classroom, teachers and learners benefit in several ways. Teachers develop a better understanding of their learners' thinking. They can also align their teaching strategies with their learners' cognitive level (e.g. motivational set, modeling, and assignments).

### **1.10 Definition of Terms**

The following are some of the key terms in this study and their definitions

**Physical Education and Sport:** Physical education refers to an educational course taken at all levels of learning that encourages psychomotor learning in a play or a movement exploration setting to promote good health.

**Learning:** The acquisition of knowledge or skills through study, experience, or being taught.

**PES Facilities:** refer to more permanent facilities such as play fields, shower Rooms and swimming pools

**PES Equipment:** refer to perishable items such as balls, nets, books and mattresses.

**Public Primary schools:** schools supported by the public funds from the government, parents/communities.

### **1.11 Organisation of the study**

**Chapter One:** introduces the study by giving the background of the study. The chapter also goes further to present the statement of the problem, the purpose of the study, the research objectives, and research questions, significance of the study, limitation and delimitation of the study, the theoretical framework, conceptual framework as well as definition of key terms.

**Chapter two:** outlines a review of related literature to the problem under exploration. Literature is presented under the following sub-headings: teaching of PES in Primary Schools; PES facilities and equipment; current Status of available PES facilities and Equipment; Influence of the availability of PES and interventions to enhance the available PES facilities and equipment. The chapter concludes the summary.

**Chapter three:** provides the methodology which includes; the research design, research setting, population of the study, sample size, sampling procedure, data collection methods, data collection instruments and procedures, data analysis, pilot study, validity, reliability, securing validity and reliability, ethical considerations. The chapter ends with a summary.

**Chapter four:** presents the findings of the study. The chapter ends with a summary of the findings.

**Chapter five:** provides the discussion of the findings presented in the preceding chapter (chapter 4) in line with the research objectives. The findings are further discussed in view of the literature reviewed and the theoretical foundations that informed the study.

**Chapter six:** gives the conclusion and recommendations based on the findings. The conclusion summarises the study while recommendations provide suggestions to inform policy, practice and further research in teaching of PES.

This chapter has covered the introduction to study. The background to this study emanated from the exploring the availability of facilities and equipment for teaching Physical Education and Sport in selected government primary schools in Serenje District. This situation motivated the researcher to establish the available facilities and equipment in teaching Physical Education and Sport. In addition, the chapter covered the Statement of the problem, the purpose or Aim, Objectives and research questions. The chapter also presented, Theoretical Framework, Significance of the study and operational Definition of Terms.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Overview**

This chapter presents a review of literature related to exploring of available facilities and equipment on teaching of Physical Education and Sport in selected government primary schools of Serenje District of Zambia. The review is presented in the following subheading derived from the study objectives: available physical Education facilities and Equipment for teaching of physical education and sport, state of the available physical education facilities and equipment for teaching physical education and sport, how the available physical education and sport facilities and equipment affect teaching of physical education and sport and interventions that may be required to enhance teaching of physical education and sport. The chapter ends with a summary of the major literature reviewed and the knowledge gaps identified.

### **2.2 Available Physical Education Facilities and Equipment for teaching of Physical Education and Sport**

Physical Education facilities and Equipment have been greatly influenced by the classical study of Organ (1970) in his thesis “An Appraisal of the Physical Education and Sport Facilities and Equipment in Public Elementary Schools of Virginia”. Organ (1970), provides long lasting definitions of physical education facilities and physical education equipment. Accordingly, physical education facilities refer to those items which are of a permanent nature, such as, football grounds, swimming pools and running tracks, while physical education equipment refers to those items that are generally non-durable and of limited time use in nature such as foot balls and swimming costumes. Organ (1971), further categorises them as indoor and outdoor facilities. Outdoor facilities are described as primary outdoor facilities, outdoor climbing apparatus and upper elementary outdoor facilities. The primary outdoor facilities are swings, slides, seesaws and sandboxes. The climbing outdoor facilities are jungle gyms, horizontal ladders, climbing chins and low bars. The upper elementary outdoor facilities include horseshoe areas, high jump pits, broad jump pits target boards, basketball goals, volley goals and tetherball post. Indoor facilities comprise climbing ropes, balance beams, vaulting boxes, parallel bars, and horizontal ladders, chinning bars, bounding boards and tumbling mats. This study,

however, explored the availability of physical education facilities and equipment in the selected primary schools in Serenje District. The notable physical education indoor and outdoor equipment that needs to be available include play ground balls, game balls and equipment, jump ropes and other equipment. However, it still remains unclear about the available facilities and equipment for the teaching of Physical Education and Sport in the selected primary schools of Serenje district.

Mwashingwele (2015), conducted a study in Zambia with the aim of establishing the factors affecting the implementation of Physical Education in the primary schools in Chibombo District of Zambia. She found that 74 per cent of the respondents thought that infrastructure for teaching PES in most primary schools were inadequate. This inadequacy resulted in limiting the sport disciplines that pupils could engage in such as football and volleyball. In addition, similar results were obtained from an early survey undertaken in Ireland, which revealed that many of the primary schools did not have outdoor facilities for teaching Physical Education and Sport(PES) (INTO Report,2007).

Physical Education and Sport (PES) encompasses fitness, skills, movement, dance, recreation, health, games and sport plus appropriate values and knowledge of each. Thus, PES facility describes infrastructure designed to facilitate the teaching or provision of instructions relating to PES.PES facility excludes any spectator stands, lobbies, public restrooms, concession areas or space normally identified with serving in interscholastic and athletic programmes.

Varja (2018), investigated the impact of quality physical education on a developing nation. The study established that one the main challenges concerning the PES curriculum implementation in schools of Tanzania were non- availability of facilities and equipment Rozboril (2011), established the condition of the PES at schools in Bratislava and compared the results from year 1990. This was a mixed research study whose sample consisted of 15 state elementary grammar schools. The findings showed that all the elementary schools owned or rented at least one gymnasium, 45 per cent had athletic complexes, 55 per cent had fields for sport games, 35 per cent had football and volleyball

fields and only one elementary school owned a swimming pool. The results also showed that 40 per cent of the schools rented facilities to upgrade the teaching of PES. The rented facilities included swimming pools, gymnasiums and athletics complexes. Further, the results indicated that 85 per cent of schools had didactic facilities, 45 per cent used projectors and 30 per cent used a computer for teaching PES in elementary Schools in Slovakia. This study provided important insights in improving the teaching of PES in elementary schools by renting these facilities. However, its replicability can only be through undertaking a study in Zambian primary schools. Cash (2008), found that facility condition had a significant correlation with student achievement. He asserted that the conditions of the classroom, equipment and good state of the facilities had high levels of correlation with student achievement. As such, there was need to establish the state of the available facilities and equipment for teaching Physical Education and Sport in the selected schools of Serenje district.

Lynch and Soukup (2014), conducted a study in Britain with the aim to contend that the primary school PES curriculum is made up of six areas of activity: games, gymnastic activities, dance, aquatics (swimming), outdoor and adventurous activities and athletic activities. The results showed that these activities required alignment to appropriate facilities and equipment. Thus, this study also provides very critical insights through assumptions that teaching PES in primary schools is most effective when supported by demonstrations by the teacher or learners (children) as visual representation makes more impact than verbal input alone. However, this study was also geographically restrictive but provided an opportunity for exploiting this gap in Zambia.

Kirui and Too (2012), allude to the fact that there ought to be a commitment to work dynamically so that the position of PES, inside and outside education system is both completely acknowledged and developed-through measures to improve the curriculum, sport amenities and equipment, the position of physical education and the initial in-service training of tutors. Many researches on the equipment and facilities in teaching Physical Education and Sports have not taken into detailed consideration the constraints that surround effectiveness of teaching Physical Education and Sports in Zambian schools and Serenje

District in particular. Some past researches have not explored availability of facilities and equipment for the teaching of Physical Education and Sport in the selected primary schools of Serenje district. This knowledge gap necessitated this study.

The impending shortage of equipment and facilities estimated at more than one million by 2007 (Ingersoll 2003), could exacerbate the inequitable distribution of equipment in the coming decades unless the policy makers and educational leaders find ways of increasing the equipment and facilities and ensuring the effectiveness of teaching of Physical Education and Sports. However, the direction of this research was to address this research gap by exploring availability of facilities and equipment in the teaching of Physical Education and Sports in Selected primary schools in Serenje District.

### **2.3 State of the Available Physical Education Facilities and Equipment for Teaching Physical Education and Sport**

Pauline (2018), conducted a study in Cross River State with the aim of establishing standard facilities and equipment. The study revealed that the quality of equipment in Cross River State sports was very low.

Stephen (2015), conducted a study in Nigeria with aim of establishing the availability of facilities and equipment for sports administration at the local government areas of Delta State, Nigeria. The study revealed that local government of Delta State provided facilities and equipment for soccer, athletics, badminton, volleyball and general playing field to a high extent, while the extent of the provision of facilities and equipment for the other sports was low.

Peter Lawson (2022), conducted a study in ObioAkpor with the aim of ascertaining the availability and utilisation of sports facilities in primary schools. The findings of this study indicated that out of all the sports facilities, only soccer fields were available in all the private primary schools in ObioAkpor. However, most of the schools had a volleyball court, basketball court, and a handball court. The study also showed that soccer ball, whistle and relay batons were available in the school studied; other items that were available in most schools were volleyballs, basketballs, handballs, measuring tape and

first aid box. The result of the study indicated that soccer fields and balls, whistles and relay batons were adequately utilised in the schools. First Aid Box and a measuring tape were sparingly utilised in most of the schools.

Hardman (1999), conducted a study in Berlin with the aim to address critical status of physical education. His study revealed that the essential status of PE around the globe, in spite of the social and economic class. One of the main issues identified by Hardman (1999), were resources. According to the audit report, the reduction of funding compromised the quality and quantity of physical education programs in schools. The provision of amenities and their maintenance were insufficient in many schools across the globe. Besides, worldwide, only 31 per cent of countries have enough amenities. In the poor countries, there are major challenges in providing a full variety of amenities: But even in countries with more recognised systems of physical education programmes, there were cases of poor maintenance and loss of amenities.

Bwalya (2016), conducted a study on the status of physical education in Zambia with the aim of investigating the status of Physical Education in primary schools in Katete district of Eastern Province. In general, the findings revealed that the status of Physical Education in schools was very low, lacked of equipment and above all, infrastructure was found to be a huge challenge in the teaching of Physical Education.

Juntri, *et al.* (2021), conducted a study in Indonesia with the aim of implementing of physical, sports, and health education facilities. Results showed that the management of physical, sports, and health education facilities had not been properly implemented. The results were confirmed by the following findings: the condition of the existing physical, sports, and health education facilities was not fit for operation anymore, the number of the physical, sports, and health facilities was unfit, the inventory for the physical, sports, and health education facilities is not properly implemented, the awareness for maintaining the physical, sports, and health education facilities were low and the removal of the physical, sports, and health education was not implemented yet.

Gumbo, Magonde and Nhamo (2017), conducted a study in Zimbabwe with aim of addressing Teaching Strategies employed by physical education teachers in GokweNorth Primary School in Zimbabwe, he found that though the physical education teachers utilised many strategies, the teaching was ineffective owing to inadequate Physical Education (PE) facilities and equipment. The inadequate facilities and equipment not only demotivated the teachers but the learners as well. This study is important as it helps consolidate the understanding of the impact of the availability of Physical Education and Sport (PES) facilities and equipment on the teaching of Physical Education and Sport (PES) in primary schools. It also shows that, despite adopting the best teaching strategies, the lack or inadequate Physical Education and Sport(PES) facilities and equipment always had an adverse impact on the teaching of Physical Education and Sport(PES) in primary schools.

Tamunobelema *et al.* (2012), conducted a study in Nigeria with the aim of examining the management of physical education facilities, equipment and supplies in secondary schools in Nigeria: issues and challenges. This study exposed the problems of physical education facilities, equipment and supplies in secondary schools in Nigeria. It also discussed the poor maintenance culture of physical education facilities, equipment and supplies, and state of facilities, equipment and supplies in Nigeria public secondary schools.

Ndambo *et al.* (2018), conducted a study in Kenya to establish the influence of facilities and equipment on female teachers' management of competitive sports in secondary schools in Taita Taveta Country. Findings showed that teachers who participate in sports management considered sports equipment and facilities as important (26.7%) and very important (24.4%), unlike 7.7 per cent and 15.6 per cent respectively for those who did not participate in sports management. The study concluded that availability of sport facilities and equipment was a key factor in determining involvement in the management of sports in secondary schools among female teachers.

Gerald (2023), conducted a study in Namibia to investigate and assess the availability and conditions of sports equipment and facilities in primary schools in Katima Mulilo, in the

Zambezi Region of Namibia. Results showed that sports equipment and facilities were either unavailable or completely in a poor condition in all the primary schools under study. Globally, literature reviewed shows that so much has been written by scholars on the state of facilities and equipment for teaching of Physical Education and Sport. However, literature on the state of available facilities and equipment for the teaching of Physical Education and Sport in the selected schools in Serenje District of Zambia is not known. This knowledge gap also motivated an inquiry of this nature.

#### **2.4 How Available Physical Education and Sport Facilities and Equipment Affected Teaching of Physical Education and Sport**

Bajaya *et al.* (2018), conducted a study in Central Nepal to understand the condition of school facilities available, utilisation practice, effect on the learning environment and student's outcomes. Results showed that availability of facilities helped to enhance the students' learning. Facilities including drinking water, technology, compound wall, libraries, and emergency health services have a significant positive role on the performance of the students and their achievement. The availability and utilisation of physical facilities in a school had a significance impact on students' performance and outcomes. School facilities, in which the students learn, is very essential and without a suitable environment effective learning cannot take place. School buildings are of vital significance to the teaching and learning process. The physical condition has a direct positive and negative effects on teacher confidence, intelligence of personal security, feelings of efficiency in the classroom, and on the learning environment. In falling down schools' buildings, leaking roofs, over sun lights, and broken toilets are the offensive background for teaching and learning environment (Amanullah and Adeeb, 2014, Tanner, 2009). The question that still begged for an answer was: what is of the facilities and equipment for teaching Physical Education and Sport in the selected schools in Serenje district of Zambia? A study of this nature was therefore necessary to fill up this knowledge gap.

Tesgera (2018), conducted a study in Ethiopia to evaluate the impact of sport equipment to facilitate the teaching and learning process of Physical Education in the case of Babala High School in Ethiopia. He stated that the intention of teaching PES was to enable

individuals and societies to make all round participation in the development process by acquainting them with knowledge, ability, skills and attitudes. He further avers that teaching of Physical Education and Sport(PES) needed planning to include indoor and outdoor facilities. This study makes fundamental assumptions on the important need of making available various materials, facilities and equipment in primary schools so as build a firm foundation for high school teaching of PES. He further states that high schools should possess adequate and standard facilities that include playgrounds for major courses like tracks for athletics, football court, volleyball court, basketball court handball courts gymnasias. He also stresses the need to make available teaching materials like balls, apparatus equipment, adequate number of qualified physical education teachers, computers with internet applications and reference books. The fundamental issues raised in this study are relevant to this study but fall flat because they emphasise and are restricted geographically to Ethiopia and High schools. This is in line with third objective of this study, to establish how PES facilities and equipment affect the teaching of PES in the primary schools of Serenje District.

Ningthoram, Nangthorbam and Sunderchand (2017), conducted a study in Zambia to innovate teaching methods in Physical Education for better learning. They sought to detail the latest teaching strategies, age-appropriate equipment and health optimising Physical Education (PE) curriculum used in the field of Physical Education (PE) programme for a better teaching and learning process. They found that age-appropriate Physical Education (PE) equipment and use of innovative equipment must be based on research and the children's needs. This study is important as it still emphasises the need for making available the requisite age-appropriate equipment in teaching Physical Education (PE) in primary schools. The study also indicates that age-appropriate equipment increases fair and free practice and increases pupils' chances of active participation. However, besides being undertaken in India, the study does not indicate how the availability of the PES facilities and equipment affect the teaching of Physical Education and Sport (PES) in the primary schools of Serenje District.

Shimishi (2015), conducted a study in Zambia to establish the role that Physical Education (PE) plays in promoting academic performance of learners in primary schools. The

findings of the study revealed that Physical Education (PE) plays a role in promoting learner academic performance. It helps the body to be flexible, learners become physically fit and healthy, helps to reduce boredom that may occur because of sitting too much in class, helps to relax and refresh the brain and that it enhances the attention and concentration levels of the pupils there by affecting learning and improving pupil attendance in school.

Ochwada (2020), conducted a study in Kenya to investigate the influence of the sufficiency of physical facilities on the teaching-learning process in public primary schools in Bungoma south sub-county. Results showed that sufficiency of physical facilities-specifically adequacy of classrooms significantly affects the teaching-learning process. The study concluded that among the physical facilities, adequacy was the factor that significantly affected teaching and learning whereby adequate classrooms positively affected teaching and learning, while inadequate classrooms negatively affected teaching and learning.

Facilities must be used in a safe manner. Even the safest facility can be turned into an unsafe environment because of the manner in which a game is played, courts are laid out or human traffic is routed through it. Children are immature, impulsive and not always capable of foreseeing the likelihood of injuring themselves. (Diejomoah, Akarah & 2015).

Gerald (2023), conducted a study in Namibia to investigate and assess the availability and conditions of sports equipment and facilities in primary schools in Katima Mulilo, in the Zambezi Region of Namibia. Results showed that inadequate sports equipment and facilities were either unavailable or completely in poor condition in all primary schools under study. This resulted on poor teaching of physical education, low learner participation in sports activities, and low scouting and discovery of new talents. Despite available literature, the state of physical education and sport facilities and equipment for teaching Physical Education and Sport in the selected schools in Serenje District of Zambia is not known.

## **2.5 Interventions that May be Required to Enhance Teaching of Physical Education and Sport**

Olufunke *et al.* (2016), conducted study in Nigeria to examine the relevance of physical education facilities in enhancing the level of motivation and the academic performance of senior secondary school students in south-west Nigeria. Results showed that more priority should be given to the allocation of funds to make the public schools conducive for teaching and learning to take place; this would improve the academic standards of public schools.

Kirui *et al.* (2014), conducted a study in Kenya with the aim of assessing the adequacy of essential facilities and equipment for training pre-service teachers in physical education in Teachers Training Colleges (TTCs) in Kenya. Results showed that those concerned with curriculum design and development ought to set up a policy on minimum standards of facilities and equipment required for effective training of pre-service teachers in TTs in Kenya by doing the following: implement a well-designed curriculum in Physical Education, as in any other academic subject, shapes instruction by mapping out for teachers what students should be taught and how their acquisition of knowledge and skills should be assessed, and is designed to maximise physical activity during lessons and keep students moderately to vigorously active for at least 50 per cent of class time. Replacing games or activities that tended to provide lower levels of physical activity (e.g., softball) with activities that were inherently more active (e.g., aerobic dance, aerobic games, jump rope). Adding fitness and circuit training stations to lesson plans. Providing teachers with appropriate training and supervision. Improving the qualifications and skills of Physical Education teachers requires appropriate training and supervision. Training PE specialists and classroom teachers on ways to minimise time spent on classroom management, transitions, and administrative tasks. Providing on-site consultation and regular feedback to teachers on their instructional strategies. Training master Physical Education teachers to teach and mentor other Physical Education teachers about strategies. Getting feedback through supervision and mentoring from master Physical Education teachers.

Adedeji (2000), conducted a study in Zambia to point out that there must be sufficient motivation in the form of attractiveness of facilities, supplies and equipment to captivate athletes' interest to participate in sports or games. He further stated that the facilities and equipment in this country were simply not good enough and were hindrance to physical education and sports development. Maintenance of most public properties, which belongs to nobody, is a less concern for some citizen of Zambia. Results showed that a maintenance culture should be established by the physical education administrator, with proper repairs of physical education facilities, supplies and equipment.

Bucher and Krotee (2002), opined that equipment and facilities should always be maintained in a serviceable condition. Procedures for caring for facilities, equipment and supplies should be reutilised so that repairs are provided as needed. All used equipment and supplies should be checked and then repaired, replaced, or serviced as needed. Such used items should be cleared and stored properly.

There is strong evidence that every state of the federation spends a great proportion of her revenue to either resuscitate or maintain and improve upon the levels already attained in sports. Recognising the advantages of sports and physical education therefore, the government established sports councils, school's sports management and others sports bodies. It would be impossible for any state to win unless talents are tapped at the grassroots (primary, secondary, colleges and polytechnics /universities).

The physical education and sports administrators and organisers need to do a lot of work to raise the levels of physical education and sports in Zambia. The planners need to appreciate that the foundation of good sports development is the exposure of the youths of that nation to participate in physical education/sports programmes by provision and maintenance of standard sophisticated sports facilities, equipment and supplies for the training and participation.

Guihane (2014), conducted a study in India to expose the problems facilities and equipment in physical education colleges. Results showed that improvisation was

necessary because of the growing number of student's enrolment the reduced amount spent on facilities and equipment in physical education colleges, and recruitment of qualified facilities. The government through NCTE laid norms for standard facilities and sports equipment to make various courses available in physical education. Maintenance should be established by college administration with proper replacement of facilities and physical education equipment. Also equipment such as balls, nets, javelin, rackets, hockey sticks, bats, gymnastic and athletic (track and field) materials requires either purchasing, replacement or repairs, facilities should be well planned and constructed with an eye in the future. Facilities and equipment should always be maintained in a serviceable condition. Procedures for caring for facilities and equipment should be reutilised and all equipment should be checked and then repaired, replaced or serviced as needed and stored properly. Facilities and equipment should be very attractive and aesthetically pleasing and should be easy and economically maintained, durably the planning construction, and use of facilities should consider the following aspects: validity, utility, accessibility, isolation, departmentalisation, supervision, safety, (hygiene and sanitation) durability and maintenance, beauty, flexibility and expansibility, economic and acoustics, (Bucher & Krotec 2002). Despite available literature, the state of physical education and sport facilities and equipment for teaching of Physical Education and Sport in the selected schools in Serenje district of Zambia is not known.

## **2.6 Chapter summary**

The reviewed literature, shows that some physical education and sport facilities and equipment were available in schools. The state of the available physical education and sport facilities and equipment ranged from good to bad. Literature showed that where physical education and sport facilities and equipment were in good state, teaching was positively affected. On the other hand, where physical education and sports facilities and equipment were in poor condition some aspects of physical education and sport were either not taught or taught in a compromised way by improvising. As regards to interventions, literature reviewed showed that in some cases replacement, repair, rent or improvisation was required. Despite available literature, little is still known about available physical education and sport facilities and equipment for the teaching of Physical

Education and Sport, their state and how the state of the available facilities and equipment affected the teaching of physical education and sport including possible intervention to enhance the teaching of Physical Education and Sport in the selected primary schools in Serenje district of Zambia.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Overview**

Every research is based on some philosophical assumptions on what constitutes a “valid” research and what method is appropriate for developing knowledge in a given research area. This chapter presents the methodology of the study under the following sections research design, study population, sample size, sampling procedure, instruments for data collection, procedures for data collection, data analysis, trustworthiness of the data and the chapter summary.

### **3.2 Research Paradigm**

The study used interpretivism research paradigm, which is of the view that there is no single reality or truth about the social world, but rather a set of realities which are historical, local and non-generazable (Bertram & Christiansen 2016). The research made meaning out of human experiences and perspectives on exploring the availability of facilities and equipment on teaching Physical Education and Sport on selected primary schools in Serenje District. The interpretivism paradigm was mainly used to gain an insight into the perceptions and feelings of teachers and Education Standard Officer General Inspector (ESO’GI) on the availability of facilities and equipment in teaching Physical Education and Sport.

### **3.3 Research Approach and Design**

A case study was used because the study required that the units be studied in details, in context and holistically. Yin (2014), defined a case study as an empirical enquiry that investigates contemporary phenomenon within its real context, especially when limits between phenomenon and settings are clearly defined. It is a way of organising educational data and also looking at the object to be studied as a whole. The case study design was chosen because of the need to have in-depth understanding the state of the available physical education and sports facilities and equipment for teaching physical

education and sport, how they affect the teaching of physical education and sport and possible interventions to be taken in the selected primary school in Serenje district.

When choosing an appropriate case study design, two viewpoints by Stake (2006) and Yin (2014) were considered. Stake (2006), asserts that the power of case study is its attention to the local situation, not in how it represents other cases in general. However, Yin (2014) emphasises on theoretical development and the ability to explain beyond the specific cases studied.

In relation to this study, the study purpose, which was to explore availability of facilities and equipment for the teaching of physical education and sport in selected government primary schools in Serenje District of Zambia, guided the choice of the type of case study. Since the results of the study were meant to help understand availability, state, how the available facilities and equipment affected the teaching of physical education and sport and not to develop a theory, the view point of Stake (2006) guided the study.

Stake (2006), divided case studies into three types: (i) intrinsic case study – thus a single case (an individual, group, organisation, event, or other entity) important in its own right, not necessarily because of its potential powers to help develop a theory; (ii) instrumental case study-a single case where the focus is on going beyond the case to understand a broader phenomenon of interest; and (iii) collective case study– a multiple case version of instrumental where the focus is on learning about a phenomenon.

Since this study explored available physical education and sport facilities and equipment in the selected primary schools in one district (Serenje) an intrinsic case study design was chosen for this study. Further, an intrinsic case study design emphasise on what can be learned about specific case itself. As such, the research findings were meant to only be used to inform stakeholders to the selected primary schools.

### **3.3 Population of the Study**

The population of the study was all 25 teachers in the five selected primary schools, which were Ndabala, Ibolelo, Serenje Boma, Kankoso and Kamwala primary schools in Serenje district. In addition, the Education Standard Education Officer was also part of the

population. The study targeted Physical Education and Sport (PES) teachers who were trained to teach Physical Education and Sport (PES). In addition, the study selected the five public primary schools because they were easily accessible. For instance, they had the Physical Education and Sport (PES) teachers who were willing to participate in the study. The Education Standard Education Officer was included in the study as an expert to provide data on the interventions to enhance the teaching of physical education and sport in the selected schools. The researcher was interested in exploring availability of facilities and equipment for teaching of Physical Education and Sport in public primary school. Therefore, the public schools that had the largest number of pupils were appropriate for the study.

### **3.4 Sample Size**

The sample size for this study was 26. This consisted of 25 physical Education and Sport(PES) teachers and 1 Education Standard Education Officer. This sample was chosen because these were the experts in the teaching of Physical Education and Sport (PES). It was expected that since these are experts in Physical Education and Sport (PES), they were the appropriate staff to provide data on the availability, state, and effect on the available facilities and equipment on the teaching of Physical Education and Sport (PES) in the selected primary schools.

### **3.5 Sampling Procedure**

This study employed the expert purposive sampling technique to select the teachers. This procedure was used because only those teachers responsible for Physical Education and Sport and the Education Standard Education Officer in charge of sport were selected. The idea was to pick the sample with expert knowledge of Physical Education and Sport. As such 26 participants were selected for the sample (Mkandawire, 2019).

### **3.6 Coding of Participants**

The coding of participants was as follows: each teacher was coded with a number 1 to 5, while the five selected schools were coded with a letter A, B, C, D or E. For example,

teacher 1 from school A was coded as Teacher # 1 from school A. Teacher 1 from school B was coded as Teacher # 1 from school B.

### **3.7 Data Collection Method and Instruments**

Mkandawire (2019), observed that “Data in qualitative research mode of inquiry can be collected using various methods including interviews, observation, artifacts, textual analysis, focus group discussion, applied ethnography, visual methods and document analysis” (143). This study used the Interviews and Observation methods of data collection. In terms of research instruments, the researcher used the interview guide and Observation Check list. Interview guide was used to collect data from the teachers and the Education Standard Education Officer. The interview guide was chosen because it allowed the researcher to have follow up questions. In addition, it allowed the researcher to be sensitive to the participants and where necessary adjust the interview to new pathway. An Observation checklist was used to collect data which was used to counter check the data given by the teachers. In addition, a voice recorder was used to record data from the teachers. The voice recorder was chosen because it helped the researcher to accurately capture data from the participants.

#### **Sampling Techniques**

The study used Expert Purposive Sampling Procedures. Expert sampling is a type of purposive sampling technique that is used when your research needs to glean knowledge from individuals that have particular expertise. This expertise may be required during the exploratory phase of qualitative research, highlighting potential new areas of interest or opening doors to other participants. In purposive sampling, you set out to identify members of the population who are likely to possess certain characteristics or experiences and be willing to share them with you. In this way, you can select the individuals or cases that fit your study focusing on a relatively small sample. Teachers and Education Standard Officer General Inspector (ESOGI) were purposively selected because the researcher considered them to have required information (Patton, 2002)

#### **Interviews**

Semi-structured interview schedules were used in collection of data where twenty-five (25) teachers were interviewed so as to solicit their experiences and feelings about the available of facilities and equipment on teaching Physical Education and Sport. The programme had the

opportunity to modify seemingly difficult questions to provide clarity and pose more relevant questions. The other advantage of semi-structured interviews was that they were designed to gather intended information in a more systematic manner (Mkandawire2019).

### **Observation Checklist**

An observation checklist listed all of the things that observers needed to look for when conducting an observation. It was the tool that they first looked at to be able to conduct a useful and effective observation. It also helped in producing desirable and goal oriented results as the focus of the observer was directed to what was required in the observation (Mkandawire, 2019).

### **3.8 Procedure for Data Collection**

In-depth interviews were conducted with the teachers by the researcher. Semi structured or open ended interviews were conducted and helped to have in-depth understanding of the available Physical Education and Sport (PES) facilities and equipment, their state and effect on the teaching of Physical Education and Sport (PES) in the selected schools.

Observations were conducted in Physical Education and Sport lessons to get the in-depth understanding of the situation in terms of the available Physical Education and Sport (PES) facilities and equipment, their state and effect on the teaching of Physical Education and Sport (PES) in the selected schools.

### **3.9 Data Analysis**

Data analysis denotes the process of studying the presented and collected data to determine the meaning (Singh, 2006). To this end, data analysis in this study involved breaking down the collected data into codes and themes. Merriam in Engelbrecht (2003), clearly shows that data analysis is the process of making sense out of the data. Data analysis involves consolidating, reducing and interpreting what people have said and what the researcher has seen and read. It is the process of making meaning to the collected information on a particular area or study in this case. Data analysis was done using qualitative methods through thematic analysis. The purpose of transcribing the interviews was to analyse the collected data and find common themes. Coding of data was vital before

analysis. The coding required the researcher to read over the transcribed scripts several times, focusing on reoccurring and consistent ideas that would be found within the participants' responses.

Data in this research was analysed using thematic analysis. Braun and Clarke (2016), defines thematic analysis as a method for identifying, analysing and reporting pattern within data. Thematic analysis gives a qualitative research well-organised and richly described information regarding the data set. Through focusing on meaning of the dataset, thematic analysis allowed the researcher to see and make sense of the collected data. Therefore, the researcher familiarised herself with the data collected by taking notes and making comments on the data. This helped the researcher to read and understand what the collected data meant. It helped the researcher to become familiar with the content.

The researcher systematically coded the data. This was data, driven coding to capture the diversity and patterns within the data. The data was then arranged in similar themes that captured something important about the data in relation to the available Physical Education and Sport (PES) facilities and equipment, their state and effect on the teaching of Physical Education and Sport (PES) in the selected schools in Serenje district.

Data was reviewed in relation to the coded data and the entire dataset. This was done to ascertain if the themes were relevant in relation to the available Physical Education and Sport (PES) facilities and equipment, their state and effect on the teaching of Physical Education and Sport (PES) in the selected schools. The researcher defined and named the themes by summarising each one of the theme's core issue.

### **3.10 Trustworthiness**

The goal of qualitative research is not to practice generalisations, but rather generate in-depth understandings of phenomena (Leininger, 1994). Therefore, researcher rigour should be evaluated using different criteria from the positivist constructs of internal and external validity, reliability, and objectivity (Lincoln & Guba, 1985). According to Stake (2003: 134) “a good case study research follows disciplined practices of analysis and triangulation to tease out what deserves to be called experiential knowledge from what is opinion and preference”. The researcher took a long time in collecting data using

observations and interviews so as to collect rich data. Both long term involvement and interviews, enabled the researcher to collect data that was detailed and trustworthy enough to provide a full and revealing picture of what is going on (Maxwell, 2005). After collecting data, the researcher gave feedback to the people who were studied to avoid misinterpreting the meaning of what they had said and done, and perspectives they had towards Physical Education and Sport (PES) facilities and equipment in the selected primary schools.

### **3.11 Chapter Summary**

This chapter, the methodology for the research and the analysis of data collected were discussed in detail from the research design, study population, sample size, sampling procedure and instruments for data collection, procedure for data collection, data analysis and trustworthiness of the data.

## CHAPTER FOUR: PRESENTATION OF RESEARCH FINDINGS

### 4.1 Overview

This chapter presents the research findings on exploring availability of physical education and sport facilities and equipment for teaching of Physical Education and Sport in selected primary schools of Serenje District. The findings are presented in line with the following study questions: (1) what facilities and equipment are available for teaching of Physical Education and Sport in selected government primary schools in Serenje District? (2) What was the state of facilities and equipment for teaching of Physical Education and Sport in selected primary schools in Serenje District? (3) How did the available Physical Education and Sport facilities and equipment affect the teaching of Physical Education Sport in selected primary schools in Serenje District? (4) What interventions may be required to make the available Physical Education and Sport facilities and equipment enhance the teaching of Physical Education and Sport in selected primary schools in Serenje District? The chapter ends with Summary.

### 4.2 Physical Education and Sport Facilities and Equipment Available in Selected Primary Schools

A question was asked to the teachers about the facilities and equipment that were available for teaching of Physical Education and Sport in selected government primary schools in Serenje District.

#### 4.2.1 Facilities

Based on the checklist, in all the five selected schools, the facilities available were only the play fields. It was expected that the five selected schools would have shower rooms, play fields, storage rooms and swimming pools. In an interview, one of the teachers – Teacher 1 from school A had this say,

*“we only have play fields to talk about. We do not have facilities for games like shower rooms, storage room and swimming pools” (Teacher 1 from school A).*

Table 1 below shows details of the available facilities in each of the five selected schools.

**Table 1: Available PES Facilities and Equipment at Each of the Five Schools**

SCH. CODE	FACILITIES					EQUIPMENT						
	Shower Rooms	Play fields	Storage Rooms	Swimming Pools	Balls	Nets	Text books	First Aid Kits	Mattresses	Syllabi	other	Total
<b>A</b>	0	3	0	0	15	6	60	2	3	2		<b>91</b>
<b>B</b>	0	3	0	0	8	3	20	1	0	1		<b>36</b>
<b>C</b>	0	3	0	0	4	3	49	2	2	3		<b>66</b>
<b>D</b>	0	3	0	0	4	0	25	0	0	2		<b>34</b>
<b>E</b>	0	3	0	0	20	4	4	1	4	2		<b>38</b>
<b>TOTAL</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>51</b>	<b>16</b>	<b>158</b>	<b>6</b>	<b>9</b>	<b>10</b>		<b>265</b>

Sources: Fieldwork, 20..

#### **4.2.2 Equipment**

In terms of equipment, it was expected that all the five schools would have balls, nets, text books, first aid kits, mattresses and syllabi. However, the findings show that the equipment was not all available in all the selected five primary schools. All the five selected schools had balls, textbooks and syllabi. In terms of nets, first aid kits and mattresses, it was found that they were available in three of the five selected primary schools (Schools A, B and E). School B did not have mattresses. In addition, school D did not have nets, first aid kits and mattresses for the physical education and sport. To this effect, one of the teachers – Teacher 1 from school B said,

*“we do have equipment for games like basketballs, badminton rackets, nets and first aid kits but we do not have mattresses” (Teacher 1 from school B).*

Another teacher from school D also indicated what was available and was not available at his school. He said,

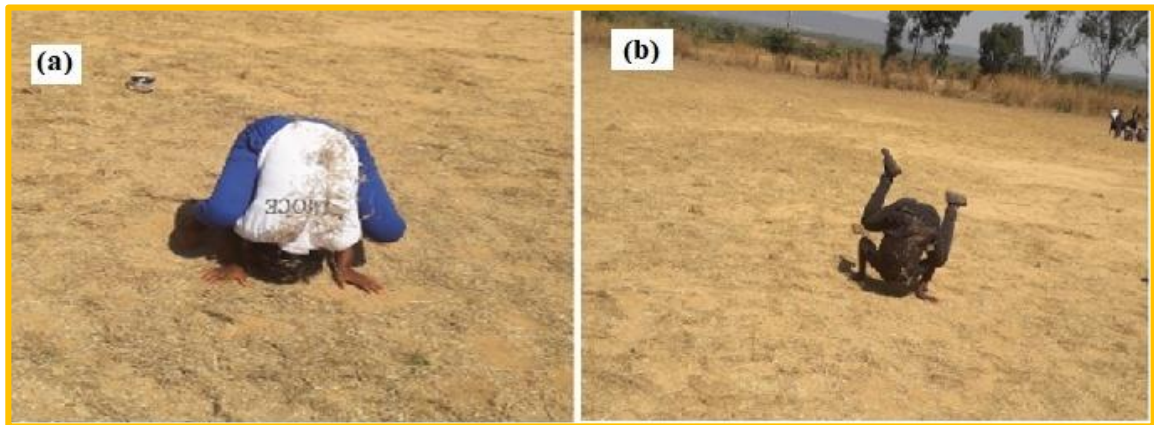
*“we have balls, text books and syllabi but we do not have tumbling mattresses for use when teaching gymnastics. In addition, at our school there are no nets and first aid kits” (Teacher 1 from school D).*

#### **4.2 State of Available Facilities and Equipment for Teaching of Physical Education and Sport in Selected Primary Schools in Serenje District**

The teachers were further asked about the state of the available facilities and equipment for teaching of physical education and sport in their primary schools in Serenje District.

### 4.2.1 Facilities

Findings indicate that in most schools the facilities (play fields) were not in good condition. At school D it was found that the state of play fields was not in good condition. It was further observed that even in schools where many PES facilities were poor, teaching and learning of PES went on. For example, the pictures below (Figure 1) show teacher 3 from school D (a) demonstrating a lesson on bare ground and the learner (b) doing the same.



**Figure 1:** Teacher 3 from school D demonstrating a lesson activity on bare ground (a) and the learner doing the activity (b).

*Source:* Kankoso Primary School.

To this effect one of the teachers said that

*“play fields at our school are not well maintained”* (**Teacher 3 from School D**).

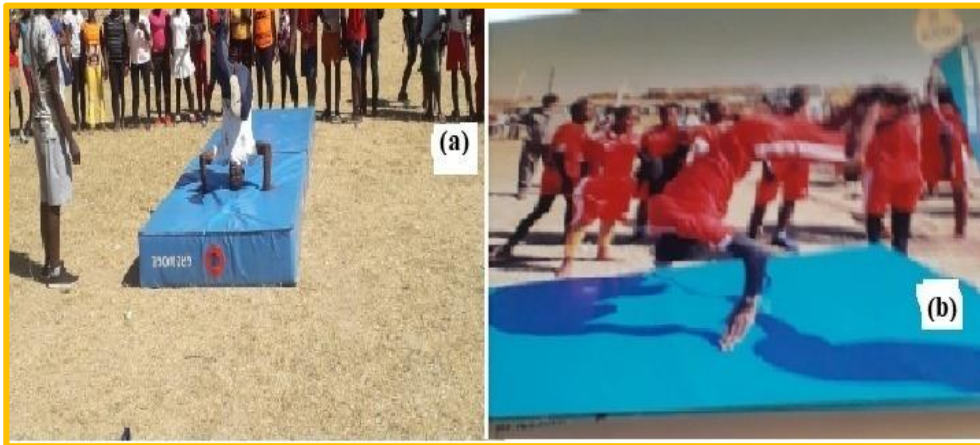
### 4.2.2 Equipment

The state of the available equipment ranged from good to poor.

#### 4.2.2.1 Good state of equipment

From the findings, only two out of the five selected primary schools (A and E) had some PES equipment which were in a good status. The equipment included balls, javelin sticks, nets, text books, first aid kits mattresses and syllabi. The two schools that had good state of equipment were those which had received equipment from the Ministry of Education

headquarters. The pictures below (Figure 2) provide examples of the state of PES equipment at two of the selected primary schools.

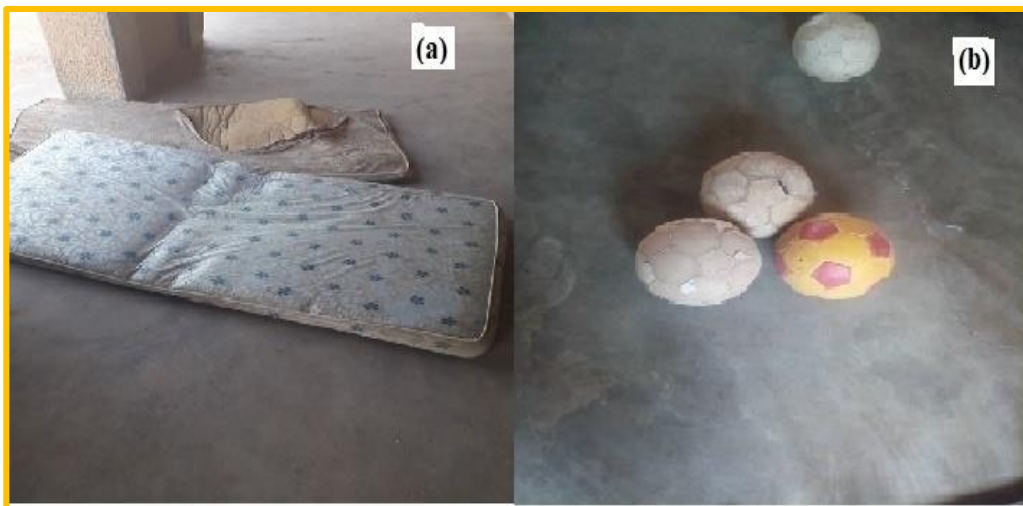


**Figure 2:** Good state of the available PES equipment at two of the five schools.

*Source:* Ibolelo and Ndabala Primary School.

#### 4.2.2.2 Poor Status of PES Equipment

On the other hand, findings showed that three out of five schools had poor state of PES equipment, for example school C from my observation had only two worn out mattresses, and school B had a few partially worn out balls as shown in figure 3 below.



**Figure 3:** Poor state of PES available equipment in schools B and C.

*Source:* Boma Primary School.

On the state of some equipment, one of the teachers - Teacher 3 from school C had this to say:

*We have some PES equipment but not in good state. We even fail to use them because they endanger the safety of the learners. We have situations where, for example, first aid kits are available but no tools inside. We do not have good state of tumbling mattresses for use when teaching gymnastics. This makes gymnastics unsafe to conduct at this school. (Teacher 3 from school C).*

#### **4.3 How the Available Physical Education Sport Facilities and Equipment Affected the Teaching of Physical Education and Sport in the Selected Primary Schools**

The available PES facilities and equipment had the potential to positively or negatively affect the cognitive, affective, and psychomotor development of the learners in the selected primary schools of Serenje District. The teaching of PES affected the development of psychomotor, affective and cognitive and mental in the learner's life such as goal setting, building self-esteem, increased alertness, cooperation, socialisation and tolerance.

The teaching of PES in primary schools' resulted in the development of the learner's gross and finer motor skills, manipulative skills, creative movements, rhythms, and game balls skills. This also helps the learners to develop positive self-worth, social skills and safety awareness.

##### **4.3.1 Facilities**

In terms of facilities, one teacher had this to say:

*"I am scared to take learners to the play fields for games because the facilities are bad. The football ground and running tracks even have "very big potholes. These cause injuries to the pupils" (Teacher 4 from School D).*

Another teacher from school D observed that:

*“high jump stand are in a poor state and makes it difficult to conduct practical lessons like high jump” (Teacher 5 from School D).*

#### **4.3.2 Equipment**

A question was asked as to how the available equipment

To this effect, one of the teachers had this to say:

*The lack or poor state of physical education and sport equipment has contributed to learners developing negative attitude and take it that Physical Education and Sport is a waste of time. I often hear pupils say, going for Physical Education and Sport is a sheer waste of time, it is boring and a playing subject (Teacher 2 from school D).*

#### **4.4 Suggested Interventions to Enhance the Teaching of Physical Education and Sport in the Selected Primary Schools**

A question was asked to the teachers about interventions that may be required to enhance the teaching of Physical Education and Sport in the selected primary schools in Serenje District. Findings show three key suggested interventions from the participants. These were repairing and replacing some of the existing facilities and equipment. In addition, findings show improvisation as a third suggested intervention. The three suggested interventions were to be achieved through cooperate social responsibility from institutions, and Ministry of Education providing facilities and equipment for physical education and sport to all the selected schools. In addition, it was suggested that schools should improvise some of the equipment for physical education and sport. There was need for MOGE through the district offices (DEBS) to expedite the distribution of Physical Education and Sport(PES) equipment to all the schools such, balls, nets, text books mattresses, syllabi and others where Physical Education and Sport (PES) was taught so that teaching could be enhanced. There was need for government to deploy more qualified teachers for Physical Education and Sport(PES) so that the teaching of the subject was improved. There was need for schools to ensure that they improvised certain PES facilities and equipment, which they could manage. There was need for schools to lobby for some PES facilities and equipment from the business communities, local authorities and several other well-wishers including parents and companies. There was need for head teachers to

ensure that Physical Education and Sport(PES) was taught effectively in schools by ensuring that the necessary facilities and equipment were provided to the teachers in the school. There was need for teachers of Physical Education and Sport (PES) to ensure that they adhered to the demands of the curriculum.

#### **4.5 Repairing and Replacing Some Facilities and Equipment for Physical Education and Sport**

Results showed that some schools resorted to involving the parents, the community, and various institutions for help regarding repairing or replacement of PES facilities and equipment. For example, when asked to outline ways which schools put in place to ensure that the facilities and equipment, which were not available or in poor state were replaced or repaired to enhance the teaching of PES in schools, findings show that parents, community and some institutions were willing to repair and replace some facilities and equipment to enhance the teaching of physical education and sport in schools.

Concerning repairing of facilities, one of the teachers had this to say:

*“We talked to parents and some institutions to help us repair the play fields, construct shower rooms and swimming pools. The good news is that they are willing”* (Teacher 1 from school D).

With regard to equipment, one teacher from school B said:

*“some parents are willing to replace the worn out mattresses with better ones in order to enhance the teaching of physical education and sport in the schools”* (Teacher 5 from school B).

#### **4.6 Government to Provide Facilities and Equipment for Physical Education and Sport**

It was also observed that government was still in the process of supplying and providing facilities and equipment for physical education and sport to all the government schools where Physical Education and Sport was taught. It was found that even those schools that had received from the Ministry of Education did not receive all the equipment which government should supply to all the schools. It was revealed that some equipment was at

the District Education Board Secretary's office (DEBS) awaiting distribution to schools which had not received any. This came to light during in-depth interviews with the ESO GI. The following excerpts represent the ESO GI's explanation:

*We do not have budget as the District office, but since the curriculum was revised in 2013, the Ministry of Education sourced funds to buy equipment that can be used in schools that are offering Physical Education and Sport. So far we have collected the equipment that was ordered by Ministry Headquarters. Four (4) schools have benefited and some equipment is yet to be distributed to other schools. (ESO GI).*

#### **4.7 Improvisation of Some Facilities and Equipment for Physical Education and Sport**

It was observed that some schools which lacked PES facilities and equipment improvised some equipment to ensure that teaching and learning of PES went on in the schools. Some teachers were seen actively involving learners in playing traditional games like 'Insolo'. When asked during in-depth interviews what interventions they took to ensure that PES lessons went on in schools despite lacking some facilities and equipment, one of the teachers – Teacher 2 from school C had this to say:

*“we improvise. For example, chiyenga and Insolo. These are traditional games. We pick small stones and dig small halls on the ground and start playing” (Teacher 2 from school C).*

The following pictures (Figure 4) show the improvised high jump stand at school C in (a) and learners playing traditional games (Chiyenga and Insolo) in (b).



**Figure 4:** Improvised high jump stand at school C in (a) and learners playing Insolo at school B in (b).

*Source:* Boma and Kankoso Primary School

#### **4.8 Chapter Summary**

The study findings show that the PES facilities that were available at the time of the study were only play fields. There were no shower rooms, storage rooms, and swimming pools in the selected five schools. In terms of equipment, some schools had balls nets text books first aid kits mattresses and syllabi. The available PES equipment in the selected primary schools varied among the selected primary schools because no single school had the complete expected range of equipment. As regards the state of the available facilities and equipment, in some schools they were in a good condition but in other schools they were in a poor condition. The interventions required to enhance the teaching of PES included lobbying the corporate organisations to help replace, repair the facilities and equipment in the primary schools. This was besides the suggested creativity by schools to improvise by including traditional forms of PES facilities and equipment such as *insolo*.

## **CHAPTER FIVE: DISCUSSION OF FINDINGS**

### **5.1 Overview**

This chapter discusses the findings presented in chapter four. The discussion was guided by the study objectives which focused on establishing facilities and equipment available for teaching of physical education and sport, ascertaining the state of facilities and equipment for teaching of physical education and sport establishing how the available facilities and equipment affected teaching of physical education and sport, identify interventions that may be required to enhance teaching of physical education and sport in selected primary schools in Serenje district. The chapter ends with summary.

### **5.2 Physical Education and Sport Facilities and Equipment Available in the Selected Primary Schools.**

In terms of facilities available, some schools had the facilities while other schools did not have. For example, school A,B,C,D and E had no shower rooms, no physical education and sport storage rooms, no swimming pools., but all the schools had play fields.

The results obtained from organ (1970), provide long lasting definitions of physical education facilities and equipment. Accordingly, physical education facilities are of more permanent of fixed nature, while physical education refers to those items that are general non- durable and of limited time use. This study, categorised them as indoors and outdoors facilities, while it described outdoor facilities as primary outdoor facilities, outdoor climbing facilities and upper elementary outdoor facilities. The primary outdoor facilities were, swings, slides, seesaws and sandboxes. The climbing outdoor facilities were jungle gyms, horizontal ladders, climbing chins and low bars. Upper elementary outdoor facilities included horseshoes areas, high jump pits, broad jump pits, target boards, basketball goals, volleyball goals and tetherball post. Indoor facilities comprised climbing ropes, balance beams, vaulting boxes, parallel bars, horizontal ladders, chinning bars, bounding boards and tumbling mats. Results obtained from Rozboil (2011) showed that all the elementary schools own on rent at least one gymnasium, 45 per cent had athletics complexes, 55 per cent fields for sports games, 35 per cent had football and volleyball fields and only one elementary school owned a swimming pool. He also showed that 40

per cent of the school rented facilities to upgrade the teaching of physical education and sport. The rented facilities included swimming pool, gymnasiums and athletics complexes. Further, the result indicated that 85 per cent of schools had didactic facilities, 45 per cent used projectors and 30 per cent used a computer for teaching physical education and sport in elementary schools in Slovakia. This study provided important insights in improving the teaching physical education and sport in elementary schools by renting these facilities. Peter Lawson (2022), showed that soccer balls, whistle and relay batons were available in the school studied; other items that were available in most schools were volleyball, basketball, handballs measuring tape and first Aid, However, its replicability can only be through undertaking a study in Zambian primary schools. Regarding available equipment, some schools had equipment while other schools had no equipment. For example, all schools had balls, only 4 schools had nets, all schools had textbooks for physical education and sport, only 3 schools had mattresses, 4 schools had physical education and sport kits, 4 schools had syllabi while only 1 school had no nets, physical education and sport kit and mattresses. Only school A and E had pool tables, tennis tables, mattresses, javelin sticks that are in a good condition which they received from the government. Therefore, the minimum number of expected facilities and equipment for the school to teach physical education and sport effectively was 128. However, the effectiveness of the school was determined by how many of these 128 facilities and equipment were available in the schools, while the number of facilities and equipment absent out of 128 represented not effective. The study findings show that the Physical Education and Sport (PES) facilities that were available at the time of the study were only play fields in the selected five schools. Regarding equipment available, no single school had the complete expected range of equipment.

### **5.3 State of the Available Physical Education Facilities and Equipment for Teaching Physical Education and Sport.**

With regard to the state on the available physical education and sport facilities and equipment, three out of five schools had poor state of physical education and sport facilities, for example, school C from my observation had only two worn out mattresses, and school B had few partially worn out balls, while two out of five primary schools (A and E) had good state of some physical education and sport facilities and equipment.

These were the same schools which were moderately equipped in terms of physical education and sport because they received equipment from the Ministry of general education headquarters. They had some good mattresses, javelin sticks, balls, nets and other equipment,

Results obtained from Pauline (2018) showed that the quality of equipment in Cross River State sport was low. Also results from Stephen (2015) showed that local government from Delta State provided equipment for soccer, athletics, badminton, volleyball and generally playing field to a high extent, while the extent to the other sports was low.

Lawson (2022), indicated that out of the sport facilities and equipment only soccer fields were available in all the private schools in ObioAkapor. However, most of the schools had volleyball courts, basketball courts, handball courts respectively. Which indicated that out of all the sports facilities soccer field, balls, whistles, and relay batons were adequately utilised in schools. First Aid box and measuring tape were sparingly utilised in most of the schools. Results obtained from Gerald (2023) showed that facilities and equipment were unavailable or completely in poor condition in all primary schools under the study.

Results obtained from Juntri *et al.* (2021), in Indonesia on the condition of the existing physical, sport, and health education facilities indicated that they were not fit for operation anymore, the number of the physical, sport, health education facilities was unfit, the inventory for the physical, sports, and health education facilities was not properly implemented, awareness for maintain the physical sports, and health education facilities were low, and the removal of the physical, sport, and health education was not implemented yet.

Results obtained from Tamunobelema, *et al.* (2012), exposed the problems of physical education facilities, equipment and supplies in secondary schools in Nigeria. It also discussed the poor maintenance culture of physical education facilities, equipment and supplies in Nigeria's public secondary schools.

Results obtained from Ndambo *et al.* (2018), showed that teachers who participate in sports management consider sports equipment and facilities as important (26.7%) and very important (24.4%), unlike 7.7 per cent and 15.6 per cent respectively for those who do not

participate in sport management. The study findings show that the state of available facilities and equipment in some schools were good but in other schools were not well maintained.

#### **5.4 How the Available Physical Education and Sport Facilities and Equipment Affect Teaching of Physical Education and Sport**

Regarding how the available physical education and sport facilities and equipment affect the teaching of physical education and sport, those schools with less physical education and sport facilities and equipment did not adequately teach the subject as a result. It was also observed that school C had a challenge in terms of play fields because they shared the playfields for football and netball with a nearby secondary school. These playfields were actually for the primary school. Hence school C faced difficulties when the secondary schools wanted to use the same playfield at the same time. It was observed that school D had twenty balls. However, all the balls were just for football which were wrongly used to play volleyball, netball, and basketball instead of using the right balls all the disciplines. Concerning the effectiveness of physical education and sport teaching and learning in those schools, the minimum number of facilities and equipment required for the school to effectively handle physical education and sport was pegged at 128. This number of facilities and equipment was determined by the researcher by looking at the size of the schools involved, the number of physical education and sport teachers and learner involved at the physical education and sport disciplines offered by sampled schools. This was done after the researcher's extensive consultations and searching for the minimum international standard concerning the minimum number of physical education and sport facilities and equipment. This showed that the effectiveness of the school was determined by how many of these 128 facilities and equipment were available in the school, while the number of facilities and equipment absent out of 128 represented the "not effective". For example, for school A it meant that 91 facilities and equipment were present out of the Minimum 128 facilities and equipment required, and 37 facilities and equipment were absent. Hence, the schools effectiveness was pegged at 91 and not effective at 37.

Results obtained from Bajaya *et al.* (2018), showed that the availability of facilities helped to enhance the teaching of the students. Facilities including drinking water, technology compound wall, libraries, and emergency health service have a significant positive role on the performance of the students and their achievement. School facilities, in which the students learn, is very essential and without a suitable environment effective learning cannot take place. The school building is vital significance to the teaching and learning process. Physical condition has direct positive and negative effects on teacher confidence, intelligence of personal security, feelings of efficiency in the classroom and on the learning environment. In failing down schools buildings, leaking roofs, over sum lights, and broken toilets the offensive background for teaching and learning environment.

Results obtained from Ochwada (2020) showed that sufficiency of physical facilities specifically adequacy of classrooms significantly affected the teaching-learning process. Physical facilities adequacy was the factor that significantly affected teaching and learning, whereby adequate classroom positively affected it, while inadequate classrooms negatively affected teaching and learning of physical education and sport. Even the safest facility can be turned into an unsafe environment because the way a game is played counts are laid out or human traffic is routed through it. Children are immature impulsive and not always capable of foreseeing the likelihood of injury themselves.

Results obtained from Gerald (2023) showed that inadequate sports equipment and facilities were either unavailable or completely in poor condition in all primary schools under study. This resulted on poor teaching of physical education and Sport, low level participation in sports activities and low scouting and discovery of new talent. The study findings show that lack or inadequate Physical Education and Sport (PES) facilities and equipment has contributed to negative development of psychomotor, affective, mental, increased alertness, cooperation socialisation and tolerance of the pupils. It has also negatively affected the teaching of Physical Education and Sport (PES) resulting in negative emotional mental development of pupils. The situation in schools contradicts the theory of Jean Piaget which suggests that children's mental development undergoes changes as they grow

### **5.5 Interventions that May Be Required to Enhance Teaching of Physical Education and Sport.**

In terms of interventions what may be required to enhance teaching of physical education sport. It was observed that the parents, the community various institutions needed to help regarding physical education and sport facilities, equipment and attire. For example, when asked to outline ways which schools put in place in ensure that there was effective teaching of physical Education and Sport in Schools. The government should provide physical education and sport facilities and equipment to all schools thereby improving some physical education and sport facilities and equipment. There is need for MOGE through the district offices (DEBS) to expedite the distribution of Physical Education and Sport (PES) equipment to all the schools such, balls, nets, text books mattresses, syllabi and others where Physical Education and Sport (PES) is taught so that teaching can be enhanced. There is need for government to deploy more qualified teachers for Physical Education and Sport(PES) so that the teaching of the subject is improved. There is need for schools to ensure that they improvise on certain PES facilities and equipment which they can manage to improvise There is need for schools to lobby for some PES facilities and equipment from the business communities, local authorities and several other well-wishers including parents and companies. There is need for head teachers to ensure that Physical Education and Sport(PES) is taught effectively in schools by ensuring that the necessary facilities and equipment are provided to the teachers in the school. Facilities such as, shower rooms, storage rooms, swimming pools, playfields should be available in schools. There is need for teachers of Physical Education and Sport (PES) to ensure that they adhere to the demands of the curriculum

Results obtained from Olufunke *et al.* (2016), showed that more priority should be given to allocation of funds to make the public school conducive for teaching and learning to take place; this will improve the academic standard of public schools.

Results obtained from Kurui *et al.* (2004), showed that those concerned with curriculum design and development ought to set up a policy on minimum standards of facilities training of pre-service teachers training in Kenya. Implement a well-designed curriculum in Physical Education, as in any other academic subject, the curriculum shapes instruct by mapping out to the teachers what students should be taught and how their acquisition

of knowledge and skills should be assessed, and is designed to maximise physical activity during lessons and keep students moderately to vigorously active to at least 50 per cent of class time replacing games or activities that tended to provide lower levels of physical activity for example soft ball will activities that were in healthy more activities. For example, aerobic dance, fitness and circuit training stations to lesson plans provided teachers with appropriate training and supervision. Improving the qualifications and skills of physical Education Teachers requires appropriate training and supervision. Training physical Education Specialists and classroom teachers on ways to minimise time spent on classroom management, transitions and administrative tasks. Providing onsite consultant and regular feedback to teachers on their instructional strategies. Training Master Physical Education teachers to teach and mentor other physical Education teachers about strategies. Feedback through supervised and mentoring from master Physical Education teachers.

Results obtained from Gurhare (2014) showed that improvisation is very necessary because of the growing number of students, the reduced amount spent on facilities and equipment in physical education colleges and recruitment of qualified facilities. The government through NCTE laid norms of standards facilities and sports equipment to make available for various courses in physical education. Maintenance should be established by college administration with proper replacement of facilities and equipment for physical education and also equipment such as balls, nets, javelin sticks, rackets, hockey, bats, gymnastic athletic (track and field) materials required either purchasing, replacement or repairs, facilities should be well planned and constructed with an eye in future. Facilities and equipment should always be maintenance in a serviceable conduct procedures for caring facilities and equipment should be reutilised, and all requirements should be checked and items repaired, replaced or serviced as needed and stored properly. Facilities and equipment should be very attractive and aesthetically pleasing and should be easy and economically maintained. The study findings on the interventions required included, lobbying the corporate organisations to help replace and repair the facilities and equipment in the primary schools. Improvise traditional forms of Physical Education and Sport (PES) facilities and equipment for *Ichiyenga* and *Isolo*, where you dig holes on the ground and pick some small stones and put them on the hole for play for the mental development of the pupils.

## **CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS**

### **6.1 Overview**

This chapter presents a conclusion and recommendations of this dissertation and is aligned to the research objectives of this study. The objectives of this study were to establish facilities and Equipment available for teaching of Physical Education Sport in selected primary Schools in Serenje District, to ascertain the state of facilities and equipment for teaching of Physical Education Sport in selected Primary schools in Serenje District, to establish how the available facilities and equipment affected teaching of Physical Education Sport in Selected primary schools in Serenje District, to identify interventions that may be required to enhance teaching of Physical Education and Sport in selected primary schools in Serenje District. The framework of this chapter encompasses the conclusion and recommendations. The chapter ends by suggesting further research on PES curriculum in Primary schools of Serenje District.

### **6.2 Conclusions**

The framework comprises of conclusions related to availability of the PES facilities and equipment; current status of the PES facilities and equipment; how the available PES facilities and equipment affect teaching of PES in selected primary schools of Serenje District and interventions required, if any, to address any negative effect of the available PES facilities and equipment in enhancing, teaching of PES in selected primary school.

#### **6.2.1 PES Facilities and Equipment Available in Selected Primary Schools**

About the availability of the PES facilities and Equipment in the selected primary schools of Serenje, the study established that there was a variation in availability of the PES facilities and Equipment among the selected primary schools. There was no uniformity as the availability of the PES facilities and equipment in the primary schools. This was mainly due to lack of clarity in the policy governing the availability of the PES facilities and Equipment. The policy did not clearly state what PES facilities should be made available at a primary school. The other factor contributing to the variation in what PES facilities and equipment were available was the differences in the resource endowments and location of the primary schools.

### **6.2.2 State of the PES Facilities and Equipment**

The study established that the current status of the PES facilities and equipment was not very good. This was attested by close 62 per cent of the respondents. This was due to lack of a maintenance policy within the primary schools, inadequate and lack of funding by central government. This made it difficult to conduct daily maintenance for purposes of keeping the PES facilities in good state. In some instances, these PES facilities and Equipment did not exist because they had never been provided by central government.

### **6.2.3 How the Available Facilities and Equipment Affected Teaching of Physical Education Sport in Selected Primary Schools in Serenje District**

The study also established how the available PES facilities strongly affect the teaching of PES in the selected primary schools in Serenje District. The effect was either negative or positive. Where it was positive, the pupils were fit and had respect for all people, rules pertaining to various disciplines and turned out to be good leaders.

### **6.2.4 Interventions Required to Make PES Facilities and Equipment Enhance the Teaching of PES in Selected Government Primary Schools**

The study found that the interventions required to make PES facilities and equipment enhanced the teaching of PES in the selected government primary schools also help could come through of schools themselves undertaking income generating ventures that could help the primary schools to repair or replace facilities and equipment not in very good state. The other intervention suggested by the respondents was the lobbying of the corporate world and engagement of the local communities to help in construction, provision and maintenance of the PES facilities and equipment. Additionally, the study established that the other interventions could be in form of improvising the PES facilities and equipment. Here, an example of engaging the learners in in “*ichiyenga* and *Isolo*” could be very helpful in mitigating the PES facilities and equipment.

## **6.2 Recommendations**

The following recommendations were made in the light of policy, practice, and further research:

### **6.2.1 Policy**

- 6.2.1 There is need for MOGE through the district offices (DEBS) to expedite the distribution of Physical Education and Sport(PES) equipment to all the schools such, balls, nets, text books mattresses, syllabi and others where Physical Education and Sport (PES) is taught so that teaching can be enhanced.
- 6.2.2 There is need for government to deploy more qualified teachers for Physical Education and Sport(PES) so that the teaching of the subject is improved.
- 6.2.3 There is need for schools to ensure that they improvise certain PES facilities and equipment which they can manage to improvise.
- 6.2.4. There is need for schools to lobby for some PES facilities and equipment from the business communities, local authorities and several other well-wishers including parents and companies.

### **6.3 Practice**

- 6.3.1 There is need for head teachers to ensure that Physical Education and Sport(PES) is taught effectively in schools by ensuring that the necessary facilities and equipment are provided to the teachers in the school. Facilities such as, shower rooms, storage rooms, swimming pools, playfields.
- 6.3.2 There is need for teachers of Physical Education and Sport (PES) to ensure that they adhere to the demands of the curriculum and teach all the 12 periods for Physical Education and sport(PES).
- 6.3.3 There is need for external and internal supervision to be rigorously intensified in schools to add value to both teaching and the learning of Physical Education and Sport(PES).

### **6.4 Contribution to the Field of PES**

Worldwide, this study has also made an academic contribution to the body of knowledge regarding research exploring availability facilities and equipment for teaching of physical education and sport in selected government primary school in Serenje district, Zambia. The

study made contributions by revealing the requisite quality of Physical Education and Sport facilities and Equipment to ensure that the right effect is obtained from teaching Physical Education and Sport in the primary schools. This also confirms that Jean Piaget theory of cognitive development as being true in this regard.

## **6.5 Further Research**

- 6.5.1 There is need to examine the relationship between educational facilities and examination performance in Physical Education and Sport.
- 6.5.2 There is need to explore learners' views on the teaching and learning of Physical Education and Sport considering educational facilities and equipment.
- 6.5.3 There is need to examine the influence of educational facilities and equipment on learner interest and participation in PES lessons.

## REFERENCES

- Almond, L. (1997). **Physical Education in Schools** (2<sup>nd</sup> Ed.). London: Kogan Page Ltd.
- Arabaci, R. (2009). **Attitude toward Physical Education and Class Preferences of Turkish Primary and High School Students**. *Elem. Educ. Online* 8 (1): 2-8.
- Atencio, M., Yi, C., Wee, T., and ZYi, L. (2014). **Using a Complex and Nonlinear Edagogical Approach to Design Practical Primary Physical Education Lessons**. *European Physical Education Review*. Australian journal of Teacher Education Vol. 35,8, December 2010.
- Balsevich, V. (2006). **Sport Vector of Physical Education in the Russian Schools: Monograph. Moscow: Theory and Practice of Physical Culture and Sport**.
- Barroso, C.S., McCullum, G.C., Hoelscher, D.M. Kelder, H & Murray, N.G. (2005). **Self-Reported Barriers to Quality Physical Education-by-physical Education Specialists in Texas**. *Journal of School Health*, 75 (8).
- Bucher, A.C., and Krotec, L.M (2002). **Management of Physical Education and Sports** (12<sup>th</sup> Ed) New York: McGraw Hill.
- Boyle, S.D., Jones, G.L. and Walter, S.J. (2008). **Physical Activity Among Adolescents and Barriers to Delivering Physical Education in Cornwall and Lancashire, UK: A Qualitative Study of Heads of PE and Heads of Schools**. *BMC Public Health*.
- Blair, L. (1998). **Constructing Knowledge by Design**. Southwest Educational Development Laboratory News. Published in SEDL Letter for Vol. No. 4, September 1998, Building for Learning.
- Bless, C. and Higson-Smith, C. (1995). **Fundamentals of Social Research Methods: An African Perspective**. 2<sup>nd</sup> Edition. Cape Town: Juta.
- Block, M. (2000). **A Teacher's Guide to Including Students with Disabilities in General Physical Education** (2<sup>nd</sup> ed.). Baltimore: Paul H. Brookes.
- Bryman, A. (2012). **Quantity and Quality in Social Research**. London: Scientific Research Publishing [https// www. Scirp.org](https://www.Scirp.org).
- Bwalya, J. (2016). **The Status of Physical Education in Zambia: Katete District of Eastern Province**.
- Routledge Capel, S. (2010). **Moving Beyond Physical Education Subject Knowledge to Develop Knowledgeable Teachers of the Subject**. *Curriculum Journal*.
- Caine, R. N., and Caine, G. (1990). **Understanding a Brain-based Approach to Learning and Teaching**. *Educational Leadership*.

Chan, T.C. (1996). **Environmental Impact on Student Learning**. Valdosta, GA: Valdost State College, School of Education. (ERIC Document Reproduction Service No. ED 406 722).

Coombs, P.H. (1970). **The World Educational Crisis: A System Analysis**. New York: Oxford University Press.

Crum, B.J (1990). **Shifts in Professional Conceptions of Prospective Physical Education Teacher Under the Influence of Pre-service Professional Training**. Finland University of Jyväskylä.

Culpan, I. (1996/97). **Physical Education; Liberate it or Confine it to the Gymnasium? Delta.U.S. Department of Education (.gov)**.

Curry, C. (2012). **Physical Education and the After-school Sport Program in Australian Schools: Barriers and Challenges for the New Century**. The national Academies Press <https://www.nap.ed>.

Chedov, K. (2004). **Sport-oriented Physical Education in the Context of Training the Olympic Reserves. Physical Training: Education, Upbringing, Training U.S. Department of Education (.gov)**.

Creswell, J. (2012). **Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research (4thed.)**. Upper Saddle River, NJ: Pearson Education.

Darst, P.W. (2014). **Dynamic physical education for primary school students**.

Dayati, J. Sumanyanto and Nanda, F.A. (2021). Implementation of Physical, Sport, and Health Education Facilities.Pearson. Research Gate <https://www.researchgate.net>

Deforche, B., Van Dyck, D., Deliens, T., and De Bourdeaudhuij, I. (2015). **Changes in Weight, Physical Activity, Sedentary Behavior and Dietary Intake During the Transition to Higher Education: A Prospective Study. The International Journal of Behavioral Nutrition and Physical Activity**.

Dr. Prof. T.F Gulhane Rajiv Gandhi College of Engineering Research and Technology, Chandra pur, Maharashtra, India. 2014. Education; *international Journal of Physical Education*.

Dolzhikova, T.A. (2011). **Differentiated Physical Education of Middle School-age Children Having Different Physical Fitness Levels: PhD Thesis in Pedagogy**. Krasnodar.

Frolov, S.S. (2009). **Information and Computer Technologies Aimed to Improve the Educational Process on the Subject "Physical Training" at School: PhD Thesis in Pedagogy**. Tambov.

- Gavrilov, D., Komkov, A., and Malinin, A. (2005). **Innovative Technology Aimed at Psychophysical Diagnostic of Students: Methodological Recommendations**. St. Petersburg: NO-IFC.
- Goranko, M.I., Kulnazarov, A.K., Kanagatov, E.B., and Koshaev, M.N. (2006). **Presidential Physical Fitness Tests – the Fitness Basis of the Population of the Republic of Kazakhstan**. Almaty: al Farabi, p 68.
- Gordiyash, I.A. (2009). **The Model of Educational Process Aimed at the Development of Personal Physical Education in High School Students**: PhD Thesis in Pedagogy. Volgograd.
- Gråstén, Arto. (2015). **Primary School Students' Physical Activity Participation Across Physical Education Classes**: The Expectancy-Value Theory Approach. *Physical Educator*.
- Gritskov, P.M. (2006). **Pedagogical and Metrological Conditions of Improving the Regulatory Framework of Physical Fitness of Middle School-age Children in the Primary School**: PhD thesis in Pedagogy. Tambov, p187.
- Jakimovich, V. (2002). **Designing the System of Physical Education of Children and Youth Based on Personality-oriented Education** (Doctoral dissertation).
- Moscow. DeCorby, K., Halas, J., Dixon, S., Wintrup, L., and Janzen, H. (2005). **Classroom Teachers and the Challenges of Delivering Quality Physical Education**. *The Journal of Educational Research*, 98(4), 208-220.
- Decorby, K., J Dixon. S, Wintrup, L., Janzen H., (2005). **Preparing Elementary and Early Childhood Majors to be Movement Educators**. A Home-school Approach. *JOPERD- the Journal of Physical Education, Recreation and Dance*, Vol. 79, No. 3 March 2008.
- Donabedian, A. (2003). **An Introduction to Quality Assurance in Health Care**. Washington, DC Oxford University Press.
- Duncan, S.C (1993). **The Role of the Cognitive Appraised and Friendship Provisions in Adolescence Affect and Motivation Toward Activity in Physical Education**. *Research for Exercises and Sport*. <https://www.researchgate.net>.
- Drewe, S.B. (2001). **Socrates, Sport, and Students. A Philosophical Inquiry into Physical Education and Sport**. New York: University Press of America.
- Dwyer, J.J.M., Allison, K.R., Barrera, M., Hansen, B., Goldenberg, E. and Boutilier, M. (2003). **Teachers' Perspective on Barriers to Implementing Physical Activities Curriculum Guideline for Schoolchildren Toronto**. *Canadian Journal of Public Health*, 94 (6), 448.

- Evenson, K.R., K. Ballard, G. Lee, and A. American (2009). **Implementation of A School Based State Policy to Increase Physical Activity**. *Journal of School Health* 79 (5) 231-238.
- Faber, L., Hodges Kulinna, P. and Darst, P. (2007). **Strategies for Physical Activity promotion Beyond the Physical Education Classroom** *Journal of Physical Education, Recreation and Dance*.
- Gatman, V. (2005). **Physical Activity and Physical Education within Health and Physical Education in the New Zealand Curriculum: A Primary Teacher's Perspective** in PE. 45.
- Gitonga, E. R, Andanje, M, Wanderi, P.M and Bailasha, N. (2012). **Teachers' Trainees' Attitudes Towards Physical Education in Kenya**. Kenyatta University.
- Gourneau, B, (2005). **Five Attitudes of Effective Teachers: Implications for Teacher Training**. *Essays in Education*, Vol. 13.
- Goodwin, L. Watkinson, J. (2000). **Inclusive Physical Education from the Perspective Students with Physical Disabilities**. *Adapted Physical Activity Quarterly*.
- Gregson, J. F, and Colley, A. (1986). **Concomitants of Sport Participation in Male and Female Adolescents**. *International Journal of Sport Psychology*.
- Green, k. (2008). **Understanding Physical Education**. London SAGE Publication LTD.
- Hardman, K. and Marshall, J. (2000). **The State and Status of Physical Education Worldwide**. Luxembourg: Routledge.
- Hardman, K. (1999). **An Up-Date on the Status of Physical Education in Schools Worldwide: Technical Report for the World Health Organisation**. Retrieved on: March 2014, from ICSSPE Website: <https://www.icsspe.org>.
- Jenkinson, K.A. and Benson, A.C. (2009). **Physical Education, Sport Education and Physical Activity Policies: Teacher Knowledge and Implementation in their Victorian State Primary School**. *European Physical Education review*, 15 (3), 365- 388.
- Journal for Studies in Management and Planning*. Effect of School's Physical Facilities on Learning and Outcomes of Students 2018, Bijaya N. A. and Ramkrishina M.
- Journal of Sports and Physical Education (IJSPE)* Vol. 4, No.4, 2018, pp.37-42.doi: hpp://dx. Doi. Org/ 10.2043;/20546380.0404006.
- Journal of Education* P-ISSN: 2162-9463 E-ISSN: 2162-8467 2014; 4 (3) 67-73 Doi: 10. 5923/j.edu 20140403.02. *Journal of Education and Practice* ISSN 2222- 1735 (paper) ISSN 2222-288X (online) Vol. 3, No. 3 2012.

Kasonde-Ngandu, S. (2013). **Writing a Research Proposal in Educational Research**, Lusaka: UNZA Press.

Ministry of Education (1992). **Focus on Learning**. Lusaka: Government Printers.

Katherine, B. Leslie – Ann, F, Betty, M.S, Anne, W.R, and Christopher, F. (2011). **Physical Education Resources, Class Management, and Student Physical Activity Levels: A Structure-process-outcome Approach to Evaluating Physical Education Effectiveness**. PMC.

Kennedy, M. (2003a). **Comfort Zone**. American School and University, 75(8), 20-25.

Kennedy, M. (2003b). **History in the Making**. American School and University, 75(10),

Kennedy, M. (2003c). **Paying for Protection**. American School and University, 76(2),

Kennedy, M. (2003d). **Picking the Right Pieces**. American School and University, 75(9),

Kennedy, M. (2003e). **Staying Vigilant**. American School and University, 76(1), 8-10.

Keolahragaan 9 (1), 26- 34 Doi [https:// Doi org/ 10.21831/jk. V9i1-32490](https://doi.org/10.21831/jk.V9i1-32490) *Journal Keolahragaan* 9 (1), 2021-27.

Kerr, J. (2003). **Civil Engineers Issue Infrastructure Alert: Say Roads, Bridges and Schools in bad Shape**. *Houston Chronicle*, p. A6.

Killeen, J., Evans, G., and Danko, S. (2003). **The Role of Permanent Student Artwork in Students' Sense of Ownership in an Elementary School**. Environment and Behavior. *U.S. Department of Education (.gov)* University of Queensland.

Kirui Kipng' Etich J.E. et al.: Assessment of Essentials Physical Education Equipment and Facilities in Teacher Training College in Kenya (2014). Kenyatta University.

Kirui, K., E.J and Osman, A..., (2012). **Use of Clinical Supervision Cycle in the Assessment of Teacher Trainees' in Physical Education in Kenya: A Study of Teacher Colleges in Rift Valley zone**. Vol. 3 No .9.

Kirui, K. E. J and Too, K. J. (2012). **Teaching of Physical Education Course as a Fundamental Right of Students in Primary Schools in Kenya: A Study of Bomet District**. Vol. No. 8.

Kombo, D. and Tromp, D (2006). **Proposal and Thesis Writing: An Introduction**. Nairobi: Paulines Publications Africa.

Klavina, A. (2008). **Using Peer-Mediated Instructions for Students with Severe and Multiple Disabilities in Inclusive Physical Education**. *European Journal*.

Kvale, S., and Brinkmann, S. (2015). Interviews: Learning the Craft of Qualitative Research Interviewing (2<sup>nd</sup>ed.). Los Angeles, Calif: Sage.

Lockesh, K, (1984). **Mythologies of Educational Research**. New Delhi: Vikas Publishing House.

Locke, L. (1992). **Changing Primary School Physical Education**. *Quest-Illinois-National Association for Physical Education in Higher Education*.

Lubysheva, L. (2002). **Technology Aimed at Implementation of Innovative Projects with the view of Improving Physical Education Systems at the Regional Level**. *Physical Training: Upbringing, Education, Training*, 3, 2-6.

Lungu, D. and Mkandawire, S.B. (2022). The Contribution of the Physical Environment to the Teaching and Learning of Literacy in Selected Primary Schools of Lusaka District of Zambia. *Zambia Journal of Education*, 7 (1), 47-67.

Lusaka: Marvel Publishers. , H.K. (2018). **Qualitative Research Methodology in Social Sciences and Related Subjects**. *Journal of Economic Development, Environment and People*, 7(1), 23-48.

Ma, X., and MacMillan, R. B. (1999). **Influences of Workplace Conditions on Teachers' Job Satisfaction**. *Journal of Educational Research*, 93(1), 39-47.

Maiden, J., and Foreman, B. (1998). **Cost, Design and Climate: Building a Learning Environment**. *School Business Affairs*, 64(1), 40-44.

MacKendrick, M. (1996). **Active Living + Quality Daily Physical Education the Perfect Solution**. The Canadian Association for Health, Physical Education, *Recreation and Dance Journal*.

Marshall, J., and Hardman, K. (2000). **The State and Status of Physical Education in Schools in International Context**. *European Physical Education Review*.

Paicibi, N.A. (2003) **Pertinent Issues in Employees Management**. Kampala: M.P.K. Graphics (U) Ltd.

Management of PES Facilities in Nigerian Schools (2018): **Issues and Challenges**. H. ALI and S. B, Gwangwazo Article Al- Hikmah *Journal of Education*, Vol. 5 No. 2.

Maxwell, A.J. (2005). **Qualitative Research: An Interactive Approach**. London: Thousand Oaks: Sage.

Ministry of Education (MOE). (1996). **Educating Our Future**. Lusaka: Ministry of Education.

Ministry of Education (2000). **Curriculum Framework**. Lusaka: Curriculum Development Centre.

Ministry of Education (2007). **Physical Activity for Healthy, Confident Kids: Guidelines for Sustainable Physical Activity in School Communities**. Wellington: Learn Media.

Mkandawire, S.B. (2019). Selected Common Methods and Tools for Data Collection in Research. In, M.K. Banja (Ed). Selected Readings in Education Volume 2. pp 143-153.

Morgan, P., Bourke, S., and Thompson, K. (2001). **The Influence of Personal School Physical Education Experiences on Non-Specialist Teachers' Attitudes**. Paper presented at the Australian Association for Research in Education, Fremantle.

Morgan, P.J, and Bourke, S.F., (2005). **An Investigation of Pre-service and Primary School Teachers Perceptive of PE Teaching Confidence and Teacher Education**. *CHAPER Health Lifestyle Journal*.

Morgan, P.J. and 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 Exercises and Sport*.

Misharov, N. (1993). **Organisational-Pedagogical Conditions of Improving Physical Fitness of Students– Participants of the Programme "Presidential Contests"**: PhD Thesis in Pedagogic. Chelyabinsk, p. 210.

Mutiti, M. (2011). **Factors contributing to the poor status of physical education**. Selected schools of Chongwe District.

Mziray, S. and Kitta, S. (1996). **The Role and Current Position of Physical Education in Primary Education in Tanzania**. *Paper of Education and Development*.

Lubans D, Morgan, PJ, and Tudor-Locke, C. A. **systematic review of studies using pedometers to promote physical activity among youth**. *Preventive Medicine*. 2009.

Nikolarazi, M., Kumar, P., Favazza, P., Sideridis, G., Koulousiou, D. and Riall, A. (2005). **A cross-cultural examination of typically developing children's attitudes toward individuals with special needs**. *International Journal of Disability, Development and Education*.

Petrie C., Jones, A., and McKim, T. (2007). **The effects of curricula and assessment on Pedagogical approaches and on educational outcomes**. Wellington: Ministry of Education.

Published as: Braun, V. and Clarke, V. (2012). **Thematic Analysis**. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, and K. J. Sher (Eds), *APA handbook of research methods in psychology, vol. 2: Research designs: Quantitative, qualitative, neuropsychological, and biological*(pp.57-71). Washington, DC: American Psychological Association.

Richard, S. (2010). **The impact of physical education and sport on education Outcomes: a review of literature**. *Institute of Youth Sport School of Sport, Exercise and Health Sciences Loughborough University*.

RoutledgeCapel, S. (2010). **Moving beyond physical education subject knowledge to develop knowledgeable teachers of the subject**. *Curriculum Journal*.

- Romanovich, B. and Svetovets, V. (2006). **Sport-oriented physical education in the October school**. Moscow: Publishing House of the ANO SRC "Theory and Practice of Physical Culture and Sport.
- Salov, V. (2001). **Theoretical and methodological foundations of student healthy lifestyle of students through physical training** (Doctoral dissertation, Doctor of Education). St. Petersburg.
- Schunk, D.H., 2012. **Learning Theories: An Educational Perspective. Sixth Edition**, Boston; Pearson.
- Sherrill, C. (2004). **Adapted Physical Activity, Recreation and Sport: Cross disciplinary and Lifespan (6th Ed.)**. McGraw - Hill, Companies, Inc. USA.
- Shimishi, G. (2015) **The Role of Physical Education in Promoting Learners Academic Performance: Kombaniya Primary School of Mansa District Province, Zambia**.
- Siedentop, D. (1992). **Sport education: A retrospective**. *Journal of Teaching in Physical Education*.
- Sparkes, A., Templin, T, and Schempp, P. (1990). **The problematic nature of a career in a marginal subject: Some implications for teacher education programs**. *Journal of Education for Teaching*.
- Stuart, C., and Thurlow, D. (2000). **Making it their own: Pre-service teachers' experiences, beliefs, and classroom practices**, *Journal of Teacher Education*.
- Timperley, H., Wilson, A., Barrar, H., and Fung, I. (2007). **Teacher professional learning and development: Best evidence synthesis iteration**. Retrieved from: <http://www.educationcounts.govt.nz/publications/series/2515/15341>.
- Tinning, R. (1987). **Improving teaching in physical education**. Melbourne: Deakin University.
- Trudeau, F. and et al. (2010). **Daily primary school physical education: effects on physical activity during adult life**. *Med SciSportExerc*.
- Sibeso, J. (2019). **Challenges physical education teachers face in the implementation of inclusive learning**. University of Zambia: Lusaka.
- Simon, K. (2011). **Assumptions Limitations and Delimitations: Dissertation and Scholarly research**. Recipes for success. Seattle, WA, Dissertation success, LLC. [www.dissertationrecipes.com](http://www.dissertationrecipes.com)

Ulstad, S. O. (2016). **Motivation, Learning Strategies, and Performance in Physical Education at Primary School.** *Advances in Physical Education*, 6, 27-34

Wadsworth, B.J. (2004). Piaget's theory of cognitive and affective development: Foundations of constructivism. New York: Longman.

US Department of Health and Human Services. 2008 **Physical Activity Guidelines for Americans.** Washington, DC: US Dept of Health and Human Services; 2008.

2. Budde H, Voelcker-Rehage C, Pietrasyk-Kendziorra S, Ribeiro P, Tidow G. Acute coordinative exercise improves attentional performance in adolescents. *Neurosci*

Xiang, P, Lowy, S and Mc Bride, R. (2002). **The impact of a field based elementary Physical education methods course on pre- serves classroom teachers` beliefs.** *Journal of Teaching Physical Education*, 21 (2), 145- 161.

## APPENDICES

### APPENDIX A: INFORMED CONSENT FORM

#### CONSENT FORM

If you sign this form, it means that the information sheet has been read and explained to you orally, or you have read the aims of this study and you have been given the chance to ask any questions now or at a later time. If you voluntarily agree to participate, confirm this below. By signing below, I agree to take part in the study. Print name of participant:

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Signature/Thumbprint of participant Date

Or legally Authorised representative or guardian for underage

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Signature of person obtaining consent Date

---

Signature of Witness to Consent Process Date

(Must not be a member of study team).

**APPENDIX B Interview Guide (ESOGI)**

1. What facilities have you made available to the Primary Schools for Teaching of Physical Education and Sport?

.....  
...

2. Why do you provide inadequate PES facilities and Equipment to Primary schools for teaching of Physical Education and Sport?

.....  
.....

3. Why has the obligation for maintenance of Physical Education and Sport facilities been left to Primary Schools that do not have the financial capacity to undertake this task?

.....  
.....

4. What interventions are considering making the available Physical Education and Sport facilities and Equipment enhance the teaching of Physical Education Sport in Primary Schools?

.....  
.....  
.....  
.....

**Thank you for participating in this study**

### APPENDIX C Interview Guide (Teacher)

1. What do you do to ensure that the available PES facilities and equipment benefit all the learners in your classes?  
.....
2. What should be done to improve the delivery of PES lesson amidst the inadequate PES facilities and equipment?  
.....
3. How does the inadequate PES facilities influence your teaching of PES at your school?  
.....
4. What teaching strategies do employ to ensure that PES is optimally taught despite the inadequacy of the available facilities and equipment?  
.....
5. What sort of support do you receive from the school administration in the process of teaching PES amidst the current state of the PES facilities and equipment?  
.....
6. How do you intend to motivate the pupils that seemingly are demotivated and uninterested in PES lessons due to non-availability of certain PES facilities and Equipment?  
.....

*Thank you for participating in this study*

#### APPENDIX D: WORK PLAN

DAY	ACTIVITY
1	●Distributing. Teachers, and pupils at primary schools A, B, C, D and E in Serenje district.
2	●Distributing questionnaires and interviewing some pupils and teachers at Schools A and B.
3	●Interviewing pupils, and teachers at school C.
4	●Interviewing pupils and teachers of schools D and E.
5	Interviewing Education Standard Officer General Inspector (ESOGI) and Head Teachers of schools A, B, C, D and E.
6	●Coding the data

### APPENDIX E: BUDGET

<b>Description</b>	<b>Quantity</b>	<b>Unit cost</b>	<b>Subtotal</b>
Questionnaires(printing)	80	K3.00	K240.00
Interview guide (printing)	6	K2.50	K15.00
Transport costs	1		K1500
Food	1	K50.00	K500
Accommodation	1	K250	K1000
Miscellaneous			K500
	<b>Totals</b>		<b>K3,755.00</b>