

**LECTURERS' PEDAGOGICAL PRACTICES ON STUDENT TEACHERS WITH
VISUAL IMPAIREMENT IN PHYSICAL EDUCATION AND SPORTS CLASSROOMS
AT A SELECTED COLLEGE OF EDUCATION IN CENTRAL PROVINCE.**

BY

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**A Dissertation submitted to the University of Zambia in Partial Fulfilment of
The Requirement for the Degree of Masters of Physical Education and Sport**

THE UNIVERSITY OF ZAMBIA

LUSAKA

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AUTHOR’S DECLARATION

I, Kalaba Dorothy, do hereby solemnly declare that this dissertation entitled, “Lecturers pedagogical practices on student teachers with visual impairment in Physical Education and Sports classrooms at a selected college of education in Central province,” represents my own work, except where otherwise acknowledged, and that it has never been previously submitted for a degree at the University of Zambia or any other university.

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APPROVAL

This dissertation of Kalaba Dorothy is hereby approved as fulfilling the requirements for the award of the degree of Master of Education in Physical Education and Sports by the University of Zambia.

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DEDICATION

This dissertation is dedicated to my parents Mr Kalaba Francis and Mrs Mary, M. Kalaba for their tireless effort and support in ensuring that I become who I am today. I also dedicate this work to my lovely sons, Daniel, Stanley, Mapalo and lastly, Kaela Mwenya Elijah who endured my absence for some time during my studies. I love you very much.

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Finally, my sincere appreciation may not end without the mention of the college of education where data was collected for this study. I really appreciate their acceptance and willingness to participate in providing data for this study, without them this study would not have been done.

All the support received from the mentioned and unmentioned individuals, coupled with my own efforts, made possible the completion of this work.

ABSTRACT

The study explored lecturers' pedagogical practices on student teachers with visual impairment (VI) in Physical Education and Sports (PES) classrooms at a selected college of Education in Central Province. The objectives were; to establish pedagogical practices employed by PES lecturers on student teachers with VI in PES theory and practical lessons, to explore how pedagogical practices employed by PES lecturers benefit student teachers with VI, to examine the applicability of teaching resources PES lecturers used on student teachers with VI and lastly, to establish challenges PES lecturers faced in PES classrooms which include student teachers with VI. A qualitative Case study design was employed in this study. Purposive sampling, which was homogeneous by type was used. Samples involved four (4) PES lecturers and two (2) student teachers with VI. Data collection used in-depth interviews and a total of eight (8) lesson observations in both theory and practical lessons. Data were analysed thematically. Pedagogical practices revealed from findings included questions and answers, lecture method, demonstration, group work and individualized learning. For student teachers with VI to benefit in PES lessons, findings revealed that PES lecturers modify activities, call names of student teachers with VI, avoid some tasks and touch student teachers will VI during lesson presentation. Even though the above were mentioned, not all the practices were used with inclusion of student teachers with VI. Additionally, PES lecturers did not use any teaching resource specifically made for student teachers with VI during lesson presentation because such were lacking at the college. Instead, an ordinary ball was used which did not help in having students with VI getting involved in the lesson.

Among other challenges PES lecturers faced were lack of knowledge and skill to handle student teachers with VI PES lessons and lack of teaching resources specifically for student teachers with VI.

The study concludes that despite mentioning pedagogical practices, they were not rightly used by lecturers in PES theory and practical lessons to fully involve student teachers with VI. It recommends the college to improve pedagogies for inclusive education of student teachers with VI among PES lecturers who in turn train teachers to teach effectively in schools.

Key words: Student teachers with visual impairment, Physical Education and Sports, pedagogical practices, College of Education

ACRONYMS AND ABBREVIATIONS

CDC:	Curriculum Development Centre
CPD:	Continuing Professional Development
EFA:	Education for All
IDEA	Individuals with Disabilities Education Act
IEP:	Individualized Education Plan
MACE:	Mansa College of Education
MOGE:	Ministry of General Education
MYSCD:	Ministry of Youth Sports and Child Development
PE:	Physical Education
PES:	Physical Education and Sports
SEN:	Special education needs
TPP:	Teacher preparation programs
UDHR:	Universal Declaration of Human Rights.
UNCRC:	United Nations Convention on the Rights of the Child
UNESCO:	United Nations Educational Scientific a Cultural Organization.
UNGA:	United Nation General Assembly
VI:	Visual impairment

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CHAPTER ONE: INTRODUCTION.

1.0 Overview

This chapter mainly looked at the background to the study, problem statement, and purpose of the study, research objectives, research questions and significance of the study. It further discussed limitations, scope of the study, theoretical framework, as well as conceptual framework. The chapter ended with a summary.

1.1 Background to the Study

Physical Education and Sports (PES) is a subject among others which is found in the Zambian school curriculum and it has undergone a lot of changes from pre-historic Zambia through colonial to post-colonial era (MoGE & MYCD, 2017). This subject originates from the combination of two terms: 'Physical Education' and 'Sport and that is how it is taught in schools and Colleges of Education. It is worthwhile clarifying the use of the terms in this review. The term Physical Education refers to that area of the school curriculum whose concern is developing students' physical competence and confidence and the ability to use these in a wide range of activities (Bailey, 2006). Sport refers to a range of activities, social relationships, processes and presumed psychological, sociological and physical outcomes. Further, the international agencies like the United Nations Educational, Scientific and Cultural Organization (UNESCO) uses inclusive term 'Physical Education and Sport' to refer to those structured, supervised physical activities that occur at school during the school day (Bailey, 2005).

However, PES is a subject which is taught theoretically and practically (MoGE & MYCD, 2017). This subject is taught in Colleges of Education because it offers a regulated opportunity for trainee teachers after acquiring knowledge and skills to introduce physical activities and the lifestyle skills and knowledge in a structured way to all children within a safe and supportive environment. This in turn may bring about children's development in five domains namely: physical, lifestyle, affective, social and cognitive (Bailey, 2006). Additionally, involvement in PES is important because finding from research shows that those who participate while in school are more likely to be involved in sports after graduation (Ponchillia, Strause, & Ponchillia, 2002).

In pre-historic Zambia, Physical Education (PE) as it was called by then, was mainly in the form of physical activities of daily life where people lived in clans making movements from one place

to another while involving themselves in activities which included among them hunting, erecting shelters, swimming, fishing as well as gathering fruits (Snelson,1974). Zambia, formally called Northern Rhodesia, received formal education from missionaries before the coming of colonialism (Mangan,1987) and this involved physical activities done through apprenticeship skills, like crafts and agriculture, blacksmithing as well as carpentry (Snelson,1974).

Colonial era brought in colonial form of education which was embraced by the whites in their own schools and included PE activities with games and sports copied from Europe (Zimbabwe Open University 2000). Further, the post-colonial government in Zambia implemented a number of education reforms and among them was the Education Act of 1966 whose aim was changing the colonial education system making it meet the needs of independent Zambians. The reforms of the early 1970s enhanced reintroduction of PE in primary schools as well as in Colleges of Education and syllabi for both were there at the time in all schools (Mwanakatwe, 2013).The government through the 1977 Educational Reforms emphasised much on the teaching of PE as a subject but it was still scarce because it was not examinable at both levels, lacked understanding among teachers and administrators on its importance and also lacked teaching and learning materials in schools which was as a result of Zambian decline in economy because of the fall of copper prices on international market between the 1980s and 1990s. Emphasis shifted to extra-curricular sports activities which were offered as a form of physical fitness. PE was by then strongly complemented by physical and recreational activities offered in community welfare centres of the urban areas, mostly the major mining towns on the Copperbelt because of many facilities that were found there. Other academic subjects were stressed rather than practical ones. PE was later reintroduced by the Ministry of Education (MOE) after realising that this subject contributes to the holistic development of a child. The National Policy on Education, Educating Our Future of 1996, which followed Focus on Learning of 1992, is the current policy being implemented where PE in Zambian schools falls, whose interpretations in details are in the Zambia Education Curriculum Framework of 2013 (Hikabwa, 2016). PE among other subjects has experienced major changes from being a non-examinable curriculum subject to an examinable one from primary to secondary school levels. Additionally, it was during this same period that this subject began to be called PES. This subject is compulsory at primary school level while at secondary level it is optional, Ministry of General Education, & Ministry of Youth, Sport and Child Development, (MOGE & MYSCD, 2017).

After independence, emphasis by the Zambian government was put on the provision of quality PES for all students and it recognized the need for inclusion of learners with disabilities in the education system, Curriculum Development Centre (CDC, 2013). Representatives from diverse key national PES stakeholders formed a Technical Working Group (TWG) and had a review process of the existing PES situation in which gaps were identified through PES grass root stakeholders' consultations. Among other issues that were identified as gaps was the inclusion of students with Special Education Needs (SEN) in PES teaching in Zambian schools and the aim was to come up with recommendations to help in improving quality teaching of the subject (MOGE & MOYSCD, 2017). Students with SEN are categorized and one of these categories is the student with visual impairment (VI) (CDC, 2013). The Visual impairment can be defined legally and educationally. Educationally, the definition of visual impairment as this study adopts takes into consideration the degree of a person in the use of visual ability. This shows that there are students who have low vision and those who are blind. A student who is said to have some vision is that one with low vision and therefore, can have the ability to read enlarged prints while an educationally blind student has very limited vision such that his/ her reading and writing relies on the use of Braille system or the use of audio tapes (Mastropieri & Scruggs, 2010).

The policy encourages teacher and teacher educators to be equipped with skills and knowledge for them to screen, identify and assess learners' impairments. Learning institutions as well as teachers are also encouraged to adopt the curriculum making it relevant to learners with disabilities. Emphasis is also put on all teacher training institutions to include in their institution's programmes involving SEN so that students are equipped with knowledge, skills as well as values for them to teach learners with SEN. Even though all these assertions are there, government schools in particular have paid little attention to people with disabilities. Generally, PES environment is not conducive for students with disability (MOGE & MYSCD, 2017). Additionally, research has shown that educators perceive children with visual impairments to be one of the most difficult populations to include in general PE (Caroy, 2012 and MOGE & MYSCD, 2017), and this makes us question pedagogical practices PES lecturers use in regular classrooms in a college of education. In this study, pedagogical practices are teaching to multiple learning styles which include methods, approaches and strategies or styles of instructions.

Therefore, specifically, the type of visual impairment this study considered was that of students with VI. This study specifically explored lecturers' pedagogical practices on student teachers with

VI in PES classrooms at a selected College of Education in Central Province. Generally, the giving of instruction of students with and without disabilities in the same classes, including PE classes is what is termed as inclusion (Haegele & Sutherland, 2015). This study conceptualized the inclusion as the process that brings student teachers with VI to learn together with those without or with other disabilities.

The government recognised the role PES plays towards physical development of young Zambians including student teachers with VI. PES contributes to health, moral, intellectual, and well-balanced development of human beings. Additionally, through PES young people are introduced to physical literacy, which later promotes sports recreation, competitive sports and other physically active lifestyles which in adulthood can reduce the risk of non-communicable diseases (MOGE & MOYSCD, 2017). However, student teachers with VI in an inclusive class need to enjoy the good intentions of Education for All (EFA) which has been a strategy for United Nations Educational Scientific and Cultural Organization (UNESCO) in ensuring that equal and quality education to all children is provided regardless of their cultural background, socio-economic, ethnicity, or disability condition. If inclusive education is properly provided and implemented, it might be a good way of achieving EFA (Eklinth & Van den Brule-Balescut, 2006; Peters, 2003). Inclusive education also brings about quality education which is effective in improving learning of all students (Hayes & Bulat, 2017).

Further, students with VI tend to be less physically active than their sighted peers (Haegele & Porretta, 2015). Among identified barriers that restrict physical activity participation include; lack of opportunity within and outside of school, parents' fear of injury and lack of trained physical educators (Perkins, Columna, Lieberman, & Bailey, 2013). Low physical activity participation may lead to students with VI developing health related issues. However, Pan, Frey, Bar-Or, and Longmuir (2005), recommends a physical education class as best environment for students with disabilities to learn about and participate in physical activity. Inclusive PE classes for students with disabilities have gained attention in recent years because learning is taking place in that environment. (Haegele & Sutherland, 2015; Lieberman & Houston-Wilson, 2009). Because of this arrangement, scholars and researchers interested in PE for those with visual impairments have focused on developing strategies for inclusive education settings (Lieberman, Ponchillia, & Ponchillia, 2013). As indicated by the Individuals with Disabilities Education Act (IDEA), one

educational area, PE, is mandatory for all students in schools including those with VI receiving federal funds.

Under IDEA, PE is defined as a means through which students' physical and motor fitness, fundamental motor skills and patterns; skills in aquatics, dance, individual and group games, as well as in sports are developed (IDEA, 2004). PE programs as specified by IDEA must be designed for the purpose of helping students improve their movement skills and fitness needed to maintain a physically active and healthy lifestyle. Although researchers have implemented physical activity programs at schools for students with VI little is known about current physical education practices in learning institutions from a research perspective (Cervantes & Porretta, 2013). Through PE, students with VI learn about and participate in physical activity.

1.2 Statement of the Problem

All students in all learning institutions beginning from primary schools to higher learning institutions need to have equal opportunities to education (CDC, 2013). The curriculum for Colleges of Education for students doing primary teacher education in Zambia requires that all students take teaching courses which include among others, Expressive Arts, in which PES as a subject is integrated (CDC, 2013). PES has given priority to participation for all in physical activities including students with VI in inclusive classrooms (MYSCD, 2017). Because of this situation, the government opened the Zambia Institute of Special Education (ZAMISE) to equip educators with knowledge and skills to handle students with disabilities. Even though that learning institution was put in place, PE teachers face problems in the teaching of visually impaired students due to lack of specific information regarding how such students learn (MoGE & MOYSCD, 2017). In connection with the same, researchers have implemented physical activity programs at schools for students with visual impairment but little is known about current PE lecturers' pedagogical practices from a research perspective (Cervantes & Porretta, 2013). Conroy (2012), in his research adds that PE educators did not know how to implement strategies which may assist them meet the PE standards for all students, including those with VI. If little is known from research perspective about the current PE pedagogical practices which may assist in meeting PES standards for students including those with VI in learning institutions, it makes us question how such students learn effectively in PES classrooms.

1.3 Purpose of the Study.

The study explored PES Lecturers' pedagogical practices on student teachers with VI in PES classrooms at a selected College of Education in Central province.

1.4 Main Objective.

The study explored PES Lecturers' pedagogical practices on student teachers with VI in PES classrooms at a selected College of Education in Central Province.

1.4.1 Specific Research Objectives

The study was guided by the following objectives:

1. To establish pedagogical practices employed by PES Lecturers on student teachers with VI in theory and practical lessons at a College of Education.
2. To explore how pedagogical practices employed by PES Lecturers benefit student teachers with VI in a PES classroom at a College of Education.
3. To examine the appropriateness of the teaching resources used by PES Lecturers on student teachers with VI in a PES classroom at a College of Education.
4. To establish challenges faced by PES Lecturers when teaching student teachers with VI in a classroom at a college of Education.

1.5. Specific Research Questions.

In order to meet the purpose of this study the following research questions helped to guide the study.

1. What pedagogical practices do PES Lecturers employ when teaching student teachers with VI in an inclusive PES classroom at a College of Education?
2. How do PES Lecturers ensure that pedagogical practices they employ in an inclusive PES class benefit student teacher with VI at a College of Education?
3. How appropriate are the teaching resources used by PES Lecturers when teaching student teachers with VI in an inclusive classroom at a college of education?
4. What challenges do PES Lecturers face in the teaching of student teachers with VI in a PES inclusive classroom at a College of Education?

1.6. Significance of the Study

The study findings and recommendations may help the College of Education to improve pedagogies for inclusive education of student teachers with VI among PES lecturers, who will in turn train teachers to teach effectively in schools. The study would also contribute to existing literature and serve as a reference for other researchers in relation to lecturers' pedagogical practices on student teachers with VI in PES classroom. It was also hoped that the study would contribute to the strategies and tools which PES lecturers can use to handle student teachers with VI in inclusive PES lessons. Furthermore, the results of the study might be of significance to the saving lecturers in the sense that it would provide strategies and recommendations on how to prepare and cope with inclusive teaching. Finally, physical education and sports researchers may use the findings of this study as a starting point for further research on PES lecturers' pedagogical practices in PES lesson presentations.

1.7. Limitations of the Study.

The study was changed to another College of Education in another province because the proposed college had one of the target groups, the student teacher with VI, gone out of the college for school experience. This made it impossible for the researcher to continue with that proposed college. Additionally, this was a qualitative study with a limited sample of only male PES lecturers on the part of gender. During the study the targeted college had no female lecturers who were offering PES neither was there any female student teacher with VI. The study therefore, was carried out on only male PES lecturers and male student teachers with VI. Hence, interviews and observations were gender biased which just represented males only and the findings are difficult to generalize to all lecturers. It is the hope of the researcher that these findings will be a step toward improving PES lecturers' pedagogical practices on student teachers with VI in regular classrooms.

1.8 Delimitations

This study was conducted only at one college of Education because that's where the student teachers with VI were found. The rest of the colleges had such kind of student gone, spreading across the country for school experience in different districts of their choices.

1.9. Scope of the Study.

This study was conducted in one of the Colleges of Education in Zambia. The participants were PES lecturers and student teachers with VI. The study was on PES lecturers' pedagogical practices

on student teachers with VI in PES classroom at a selected College of Education in Central province.

1.10. Theoretical Framework.

This study is grounded on the theory of inclusive pedagogy by Pantic and Florian. It centres on the premise that all students regardless of any disability need to learn together in learning institutions. Worldwide, there is an agreement by societies on the inclusion of students with disabilities in regular schools (Ballard, 2012). This entails that attention is shifted from only those individuals with additional needs to the learning of all students in the regular classroom in a particular community, meaning that all students have learning opportunities that enable them adequately participate in an inclusive classroom life. In higher learning institutions equal opportunity to education is encouraged to all individuals including those who are **with** VI in a PE class. Unfortunately, the problem lies in the implementation of inclusion of students with VI in PE to meet those assessed needs of the students (Baraka, 2013). Through proper use of pedagogy, proper materials, training (Aki, Turan., & Kyalon, 2007) and through provision of adaptable curriculum relevant to their disability (CDC, 2013), there can be proper implementation of inclusion of students with VI in PES classrooms.

Inclusive pedagogy centres on what has to be taught and how it has to be taught instead of who is to learn. While certain instructions which support the learning of students with VI need to be incorporated, there is need to use pedagogical practices which are appropriate (Pantic & Florian, 2015). This theory rejects the deterministic belief about ability being fixed, instead it brings out the idea that ability can be improved by the mentor (Pantic & Florian, 2015). Teaching and learning, progressing and achieving needs of student with VI depend on what such students can do instead of what they cannot. However, difficulties in learning are seen as a professional challenge instead of deficit in students. Additionally, using a variety of grouping strategies may support learning of all students rather than depending on ability grouping which may separate the able from less able as well as utilizing formative assessment to support learning (Pantic & Florian, 2015).

Therefore, the particular principles this theory tries to promote centres on what has to be taught and how it has to be taught instead of who needs to learn (Pantic & Florian, 2015). Due to this, the study focused on lecturers' pedagogical practices on student teachers with VI in PES classrooms

at a selected College of Education. The Zambian education system encourages all students to learn in the same classroom regardless of any disability (MOGE & MOYSCD, 2017). Therefore, this prompted the researcher to carry out the study on pedagogical practices employed by PES lecturers on student teachers with VI in PES classroom at a selected College of Education.

The theory, inclusive pedagogy, was in line with the current study because it helped in understanding and establishing the pedagogical practices to use on student teachers with VI in inclusive classrooms. This therefore, has created a need for physical educators to learn and use pedagogies that support the learning of students with VI as they include them in PE classes (Morley, Bailey, Tan, & Cooke, 2010). In addition, recent studies record teacher's change of attitudes and their willingness to include students, but need guidance in the use of instructional strategies for them to support students with VI in the general PES class (Morley et al., 2010). If proper pedagogical practices are employed, student teachers with VI may actively be involved and may participate in both PES theory and practical lesson. The theory, inclusive pedagogy, helped in understanding and establishing the right pedagogical practices to use on student teachers with VI in inclusive PES classrooms at a selected college of education

1.11 Summary

The chapter gave out information on the background of the study, statement of the problem, research objectives, research questions, significance of the study, theoretical frameworks as well as operational definition of terms. The following chapter discussed the review of related literature that provided gaps and gave a background to the study.

1.12. OPERATIONAL DEFINITIONS

- College of Education:** an institution for training teachers.
- Inclusion:** the state or a process in education which addresses and responds positively to the variety that exists among students through altering and changing the education system to accommodate all students regardless of their different types of conditions. This study will only centre on the inclusion of student teachers with blindness.
- Pedagogical practices:** these are teaching to multiple learning styles which include

methods, strategies and / or styles of instructions.

Physical Education and Sports: this is a subject in the school curriculum under which physical activities performed in school are structured and supervised physical activities that occur at school during the school day

Students: learners found in higher institutions of learning e.g., Colleges

Student teachers with blindness: students who do not see anything and are training to be Teachers and their writing and reading depend on the use of Braille.

Visually impaired students: students with difficulties in seeing and whose ability in reading and writing is dependent on the use of Braille.

CHAPTER TWO: LITERATURE REVIEW

2.0 Overview

This chapter discusses different literature related to the title, “Lecturers’ pedagogical practices on student teachers with VI in PES classrooms at a selected College of Education in Central Province. It reviews a number of studies undertaken by different scholars which are related to the mentioned topic. These include: World perspective on inclusion, international policies on inclusion, Zambian perspective on inclusion, pedagogical practices, adaptive teaching methods for the VI students which include: the use of tactile materials, encouraging collaborative learning; the use of audio, optical and non-optical devices, extra time allowance, sound projection and calling students names, the use of questions and answers as well as adapting written texts. The curriculum, community support, training and resources, learning environment as well as orientation and mobility skills are other items included under literature. However, research findings and conclusions made by scholars are also brought out.

2.1. World Perspective on Inclusion

Worldwide, there is an agreement by societies on the inclusion of children with disabilities in regular schools (Ballard, 2012). Inclusion is highly supported globally by Salamanca statement and Framework for Action on Special Education Needs, United Nations Educational Scientific and Cultural Organization, (NESCO, 2010). Children with disabilities are educated in regular schools globally following the agreement to the civil rights movement which is expressed in international human rights instruments (Pantic & Florian, 2015). Knowledge has also evolved in education concerning teaching PES to learners with disabilities and has been advocated for worldwide. Inclusion as perceived worldwide is a continuous process of changing regular schools as well as school systems with a view to supporting all the children, including those with a wide range of unique needs, to realize their social, academic and career potential (Lidor & Hutzler, 2019). This involves removing barriers in the following: teaching, learning, curriculum, assessment, communication, environment, as well as socialization at all levels (Chireshe, 2013). Inclusive PES as a subject area generally prioritizes participation for all in physical activities (MOGE & MYSCD, 2017).

2.2. International Policies on Inclusion

The Universal Declaration of Human Rights (UDHR) of 1948 is the first policy centred on inclusive education and was adopted by United Nation General Assembly. It agrees to respect differences in human beings knowing that individuals are different from one another and also to use the difference to provide services to cater for needs of everyone without discrimination (UNESCO, 1996). The United Nations Convention on the Rights of the Child of 1989 is another policy whose advocacy is on the right of all children to get educated without any kind of segregation or mistreatment. Mention is on the right of children with disabilities to be educated just like their fellow children without disabilities (MOEVT, 2009). Another policy is the Jomtien World Declaration on Education for All of 1990 which took place in Thailand. Among the six goals set under this declaration is one which is more related to this study and this is the access and provision of education to all marginalized groups including children with disabilities (Eklindh & Van den Brule-Balescut, 2006)

The Standard Rules on the Equalization of Opportunities for Persons with Disability of 1993 is another policy. It has one of the rules in its policy which advocates for all countries to provide equal access to primary, secondary as well as tertiary education for children with disabilities in integrated settings (Possi, 1996). Furthermore, among the remaining policies is the Salamanca Statement of 1994 which is a remarkable and fundamental document that has a firm standpoint on inclusive education. Its aim is to eliminate discrimination, create welcoming communities, and build an inclusive society as well as reaching education for all (Eklindh & Van den Brule-Balescut, 2006).

The United Kingdom (UK) has a number of recent policies on the national curriculum SEN and disabilities as well as generic principles of educational practice (Department for Education and Skills, 2001) which have emphasized the need to include pupils with SEN in the context of a mainstream school environment. The UK government has also committed itself to developing an inclusive education system through adopting Salamanca statement whose proposal is the enrolment of all children in regular school by all governments wherever possible (Bailey, 2015). Policy guidelines for Inclusion in education that UNESCO (2009), has at a minimum include recognition of inclusive education as a right, and Provision of materials for students with disabilities.

Despite all these policies, Grol (2000) claims that, effective policies and legislations to support implementation, control and monitoring of inclusive education are lacking. This seems true considering the fact that, there are no official documents specifically prepared to guide the education provision for people with disabilities, especially in inclusive settings. All the guidelines for provision of education are based on the policies and documents for general education (Karakoski & Strom, 2005). Even for the few learners who are included in general classes; their educational needs are not met because many schools do not have supportive environments for their learning (MOEVT, 2009).

2.3 Zambian Perspective on Inclusion

The Zambian government from the time it gained its independence in October, 1964, has generally acknowledged the need to include pupils with disabilities in the education system (MOE & MYSCD, 1917). Among other things that were considered in the promotion of the teaching of students with disabilities was the opening of the Zambia Institute of special education (ZAMISE), by then called the Lusaka College for teachers of the handicapped in 1971. Emphasize was placed on equipping teachers and teacher educators with knowledge and skills for them to identify, assess and screen learner's impairments. Learning institutions together with their teachers are also encouraged to adapt the curriculum making it relevant to the needs of learners with disabilities. As indicated by the policy framework, those learners with severe disabilities who do not seem to benefit from an inclusive curriculum need to be provided with an alternative curriculum that fits their needs and abilities. Furthermore, such learners alternatively need to be sent to special schools where their needs can be met. Additionally, teacher training institutions are advised to include special education in their programs so that teachers are prepared with values, skills and knowledge in order for them to teach and support learners with SEN. Despite all the above outlined arrangements, very little attention has been given to students with disabilities which include among others students with VI, especially in government schools (MOE & MYSCD, 2017).

2.4. Pedagogical Practices

With inclusion policy, Lidoh & Hutzler (2019), carried out research on how they were to address the inclusion challenge that involved altering one existing teacher preparation program (TPP) in PE. That was with the purpose of allowing students with VI to study together with other students

who were enrolled with them in the same program of continuing professional development within schools. As PE subject demands, students with VI were required to have both theory and actively participate in a variety of skill-oriented physical activity classes. Lecturers' and instructors' pedagogical concerns related to students with VI were discussed in the meetings. Students with VI like others were required in their school TPP, to teach instructional units during the second and third years. However, lecturers came out openly that they were not sure of how to help students with VI to benefit most from their practical work in the schools. Another concern was limited experiences of training opportunities in both initial teacher training (ITT) and in-Service training (INSET). ITT programs provided in school were perceived as being inadequate and theoretical in nature while INSET program was seen to be irrelevant to a PE specific context (Bailey, 2015).

Further, instead of putting 'others' at the centre, inclusion embraces diversity, pays attention to individual uniqueness of 'others', values differences and the focus of interest is on children's strengths rather than their deficits (Forlin & Sin, 2010; Groundwater-Smith, Ewing, Le, & Corn (2011); Kim & Rouse (2011). Improved pedagogical practices teachers use for inclusion in PE is important as they bring about social justice issues that enhance improved learning for all children (Kershner, 2009; Majoko, 2017). Implication in handling students with disabilities can manifest in the PE teachers' support given to these children to access and develop physical capital, a cultural capital, and resources related to regular physical activity, health and bodies (Combs, Elliot, & Whipple, 2010). Inclusive practices in PE that avoid discrimination embrace and respect diversity, promote input and children's participation stand for an important move towards social justice (Simpson & Mandich, 2012). Practices on the other side that show forms of exclusion violate the idea of equality of opportunity (Majoko, 2016). The complexity of pedagogy involves interaction of teachers, children, curriculum content, and knowledge that is created (Tinning, 2010). If effective pedagogical practices are to be realized, importance should be attached to teacher- child relationships and the relationships between children (Lysaker & Furuness, 2011). Additionally, they consider how teachers foster relationships and how they teach specific curriculum content as well as the kind of learning of children as important factors.

When adjustments are made in the TPPs for the VI students and those with other disabilities, consideration should be given to two main pedagogical challenges namely actions to be taken to prepare lecturers to work with these students and the actions which need to be taken with other

students who are required as part of a learning group comprising students with disabilities (Lidor & Hutzler, 2019)

Walker (2014), in United Kingdom in his research on methods PE teachers use to include pupils with special educational needs and their perceptions of their inclusion, with regard to conducting open physical activities, indicated that even though both participants showed an understanding of some inclusive practices, the participants were unaware of the applicable frameworks and recognized a lack of training in this field as a limiting factor. Ammah & Hodge (2005), identifies literature and suggests it to be a common reason for teachers' difficulties in facilitating inclusive PE. Literature that deals with adaptations in general physical education (GPE) classes to accommodate pupils with SEN was lacking. However, training could possibly show a further research area on common practices, their effectiveness and how to implement them in PE lessons, which could possibly help PE teachers in their adaptation of their lesson.

European agency for special needs and inclusive education (2015), perceives teacher education for inclusion as a hot topic which brings out various reports, projects and discussions. However, very little has been documented on inclusion of teachers with disability within TPPs and in particular in PE TPPs. Teachers attitudes towards inclusion are very significant to pedagogical practices for guaranteeing the inclusion of the learners that are visually impaired in an inclusive PES classroom (Callcott, 2012).

Muzata, et al (2019), at the University of Zambia carried out a study with a view to establishing the perceptions of students with VI towards their inclusion in the Faculty of Education. Their findings revealed that generally students with VI were satisfied with their inclusion in the Faculty of Education. Most participants reported that there was no discrimination from fellow students during academic discourse. However, they acknowledged that there were challenges resulting from lecturers' lack of skills in their consideration of their learning needs in inclusive classroom. Additionally, findings showed that academically, student teachers with VI felt more included even though they felt isolated in out of class activities which was seen by some as a form of discrimination. Recommendations from the study indicated the need for the Faculty of Education to train all lecturers of content and methodology courses in inclusive methodologies and design activities that encourage interactive learning beyond the classroom in order to promote inclusion of students with VI.

Furthermore, a study conducted in Tanzania showed that there was a big difference in the number of students with VI in primary schools and those in secondary schools. It indicated that few students advance to secondary from primary schools and that posed a question as to why the situation stood like that. The first secretary of embassy of Finland in Tanzania, Satusantala, during participatory workshop on education, gender and inclusion, came out clearly that many challenges in the education sector detach students with special needs from the school system (ICC, 2008). The most prominent reason given for the elimination from education system of the students with VI was the inclusive methods used to teach them which did not help them learn better. Hence, that led to poor performance of students with VI in their final exams leading them into expulsion from education system (Ballard, 2012).

2.5. Adaptive Teaching Methods for Students with Visual Impairments.

Learning takes place as a result of teaching. An effective teaching involves complex interaction between the teacher and students (Webster & Roe, 1998). There is therefore, need for a paradigm shift from non-participatory, a traditional teaching, to that which involves considering different needs of students. Inclusive classroom teaching is not as easy as a normal class because it is more individualized and has more diversity among students (Peters, 2003).

In addition, the degree of visual abilities differs among students and this causes differences in learning needs and strategies among students (Salisbury, 2008). Therefore, students with VI require unique ways to address their academic problems. This implies that in order to have effective teaching, teachers need to predetermine teaching approaches and this can be possible through understanding this desire (Salisbury, 2008). In order to help build a picture of the world, students with VI need to be helped by their teacher through the use of sensory stimulations, which are: smells, sounds, shapes, and textures (Webster & Roe, 1998). As shown by research, the best and quality teachers include students with a variety of learning needs (Mastropieri & Scruggs, 2010). Inclusive education puts emphasize on adaptive teaching and this entails that a quality teacher should consider these adaptations to facilitate student learning. Even though modifications and adaptations of teaching and learning environment are emphasized, at certain times adaptation cannot even be necessary. This means that other practices as well as teaching strategies used on sighted students can also be made use of on students with VI (Spungin, 2002).

Below are various methods used by teachers when teaching students with VI in an inclusive classroom. Some of these methods work better with students with VI when adapted while others are used the way they are without being modified.

2.5.1 The use of Tactile Materials

Absence of visual ability in students with VI causes deficit in conceptual experiences and understanding. Hence, there is need to adapt teaching materials to enable such students learn like other members of the class can do. This may involve the use of tactile materials which may include tactile boards in an event that a student teacher needs to learn on a new sport to show that person the boundaries, positions, to teach terminology and to describe the strategy and purpose of the game (Bailey, 2006). The use of concrete experiences could be the best way to teach these students. (Pauline, 2008). Additionally, tactile diagrams should be exposed to these children and let them explore them for they are very important in understanding difficult images and concepts which cannot be explained and described in words. These are used in situations where shapes and patterns are required to understand the concept when there is absence of real objects as these help in teaching (Salisbury, 2008). Tactile diagrams or images are drawn using special mats and stylus on Braille papers so that images are easily felt (UNESCO, 2001).

2.5.2 Encouraging Collaborative Learning.

Students differ in learning capabilities and those with low ability can learn from their fellow capable peers. In order to promote academic achievement, there is need to improve social interaction among students as well as to have positive attitude towards the subject. There is therefore, need among students of different learning capabilities and learning needs, to have cooperative learning (Mastropieri & Scruggs, 2010). This cooperative group learning involves students working together in small groups where they help each other to carry out different tasks. This strategy is good for teaching the students with VI, (~~already written in full on the second page of background~~) especially with the used of mixed ability groups (Mitchell, 2008). Students with VI in their small groups paired with their fellow sighted students are helped to organize their works, repeat teacher's instructions and find correct pages (UNESCO, 2001).

2.5.3. The Use of Audio, Optical and Non-Optical Devices

Students with visual impairments highly depend on verbal information for their learning and this implies that audio devices need to be incorporated to facilitate teaching process. These include

items like audio cassettes and compact discs. Audio format however, cannot explain lesson contents with diagrams and table (Salisbury, 2008). Moreover, a lesson can be tape recorded and given to students with VI for later playback at their convenient time (UNESCO, 2001). If for instance a videotape has to be shown, the video concept needs to be explained to such students by specialized teacher's or class mates for easier understanding of visual concepts in it before the class watches it. In the case of a film with sub titles, a classmate or teacher can read aloud to the class to help those students with VI (Spungin, 2002).

Optical and non-optical devices are used by students with VI to improve their vision and increase their functionality by using other senses. Optical devices to mention among others eye glasses, utilize lenses for the purpose of increasing residual vision of a person and medical specialists normally are the ones that prescribe them while non-optical devices are not prescribed (Spungin, 2002). Examples of non-optical devices include: Braille and brail writer, prints, book stand, tape recorders, calculators, recorded and talking, books to mention but a few (Simon et al., 2010). The teacher's role is therefore, to ensure that students with VI utilize these visual devices as well as assistive technologies to help with vision (Spungin, 2002).

2.5.4. Extra Time Allowance

The students with VI finish writing their work at a slow pace because of the nature of impairment (Mastropieri & Scruggs, 2010). In order for them to be helped, extra time allowance needs to be given to enable them process visual information so that their *assignment* is completely written (Salisbury, 2008). The degree of impairment determines the pace at which the student with VI writes. For instance, students with low vision consume a longer period of time to read a text as compared to those with a normal vision. This is the same with reading as well as writing in Braille, and getting information from tactile sources. Students with blindness take a lot of time just as they take when integrating heard information. It is generally accepted for low vision students to make an addition of half of the time while twice as much to students with blindness (Spungin, 2002). This requirement is highly recognized in external examinations and the students with VI are given an allowance of up to 100% additional time (Salisbury, 2008).

2.5.5. Sound Projection and Calling Students' Names.

The voice of the teacher is one of the main sources of information for learning relied on by students with VI. Teachers are therefore, obliged to do some or all of the following; firstly, to have a

pleasant voice which produces relaxed tone and pitch. Secondly, having a voice which is interesting to listen to by taking into consideration speed of talking, volume as well as pitch (Best, 1992). Thirdly, avoiding vague statements like phrases which indicate “over here” or “this and that” for they cannot help VI students to understand what a teacher is talking about (Mastropieri & Scruggs, 2010). Fourthly, reading the notes aloud during teaching while writing them on the board or making presentation on the projector (Spungin, 2002). Fifthly, calling first the name of the student the teacher wants to advise for students to know specifically whom the teacher is talking to. This makes students with VI feel important and being part and parcel of the class that they are effectively included in the lesson (Mastropieri & Scruggs, 2010; Salisbury, 2008). The use of the name makes students with VI to understand who is talking (UNESCO, 2001). Finally, the language used in class for content delivery is a major hindrance for engagement level and academic achievement of especially students with VI and some other students (Grace & Gravestock, 2009). The best teacher uses simple presentation as well as communication, and also makes follow up on individual student’s tasks to ensure that the lesson is understood (Westwood, 1995).

2.5.6. Using Questions and Answers

Giving instructions and receiving responses from students with VI orally can also be a good alternative. Oral answers given out by students with VI should be written down by their teacher. Additionally, answers students give can be recorded using a tape recorder. However, through this way, and for possible correction purposes, it is not possible for a student to review the answers he or she has given. Therefore, teachers and their students need to be consulted before the test is taken for a better way of making assessments on students with VI (Spungin, 2002).

2.5.7. Adapting Written Texts

If students with VI are to be helped, teaching materials need to be adapted. With printed text, adapting them could be increasing the font size, increasing contrast, adding colour, bolding the text, and adjusting spaces between characters. These adaptations however, can depend on the extent of the severity of visual defects and the needs of the student concerned (Mastropieri & Scruggs, 2010). Therefore, before the lesson, there is need to consult a specialist teacher on preparation of materials as different students use different materials depending on the degree of their visual impairment.

2.6 The Curriculum

Following the 1996 National Education policy, educating our future, the Zambia curriculum implementation Framework, was developed through consultative and participatory process to give further guidance on the preferred type of education required by the nation. Learning institutions are informed to provide appropriate resources for quality learning to learners with SEN (CDC, 2013). Learners with disabilities need to have adapted curriculum and adapted technology relevant to their disability. However, CDC (2013), continues to indicate that it is striving for inclusive education provision. Inclusion with regard to PE involves changing the curriculum and providing appropriate support that ensures that opportunity to succeed is given to every child. Thus, justice, inclusion and equity are revealed in the interplay of curriculum and pedagogical practices (Ballard, 2012).

From a practical point of view in order to come up with effective inclusion, the existing programs need to undergo various modifications and adjustment. The Integration Law indicates that a special committee for inclusion needs to be put in place in each academic institution. This needs to be done mainly for two reasons that is, to profile the students' special needs and to give assistance to faculty members working at the institution so that they come up with the required modifications in the program, which should centre on the profiles of the students with disabilities (Lidor & Hutzler, 2019). Additionally, the policy recommends different pedagogical methods to meet different needs of learners especially those with special needs because implementation is poor and it requires effective monitoring as well as quality assurance tools.

2.7. Community Support.

Habulezi & Phasha (2012), discuss the nature of learning support provided to students with VI in Botswana. Qualitative research method which was used included classroom session observations and individual interviews with students with VI. Although the school was inclusive, students with VI spent afternoon study sessions separately from their non-disabled counterparts for them to receive additional support not available in regular class. Peers dictated notes for them and teachers helped them during evening and weekends. However, there was shortage of assistive devices like the white canes among others which was due to the government long procedure of procuring things for school. Communities were reported to over protect the totally blind learners thereby hindering practicing of skills learnt at school. Braille queries were handled by specialized teachers who

invigilated exams for students with VI. Bailey (2015), indicates that support from trained staff was more difficult in the context of PE than in any other subject areas because of safety concerns the subject is associated with especially in lessons which include students with VI. Moreover, even where support was rendered, that was observed to be inadequate.

2.8. Training and Resources.

Teachers are the most ever powerful resource present in all educational systems, and their importance of continuous building of their knowledge and skills need much emphasize. In situations where trainings exist, the curriculum often does not include training that is in line with the nature of disabilities and approaches that involve working with students who have disabilities. This results in a severe shortage of teachers as well as teacher assistants who may effectively be capable to support individual needs of students with disabilities (WHO, 2011). Failure to build those skills and ensure teachers positive attitudes towards disability makes it difficult to achieve true inclusive education.

Even though the government opened the Zambia Institute of Special Education (ZAMISE) to equip students with knowledge and skills to handle students with disabilities, there is still a challenge in terms of teaching PES as a subject in most of the colleges. Even if educators demonstrate good intentions, these educators more especially teachers fear to handle those students because they are not fully trained to meet the demands in an inclusive classroom. Teachers who teach PE in their classes which include students with VI are said to be more vulnerable to safety and control (MOE & MYSCD, 2017)). Lancaster & Bain (2007), add that because of the variety and specified different disabilities of students, a lot of teachers feel inadequately trained and not competent enough to meet the demands of inclusive education.

In higher learning institutions equal opportunity to education is encouraged to all individuals including those with disabilities in a PE class. Researcher have however, shown that proper implementation of inclusion of students in a PE classroom and balance are possible for students with VI, through proper use of pedagogy, proper materials, training (Aki, Turan., & Kyalon, 2007) as well as through provision of adaptable curriculum relevant to their disability (CDC, 2013). Unfortunately, the problem lies in the implementation of inclusion of VI students in PE to meet those assessed needs of the students (Baraka, 2013). PE teachers face problems in the teaching of VI students due to lack of specific information regarding how such students learn and how they

can effectively include them. Selecting pedagogies and materials to use in PES classes is of great help for the teaching and learning of the students in a PES inclusive classroom (Conroy, 2012). The increased inclusive implementation in education requires lecturers to make changes in their programs to enable them have their students be prepared to educate diverse learners. With regard to the above, if students with disabilities are to study in TPPs, this simply means that there is need for TPPs to be modified according to the type of disabilities of learners' present (Kim, 2011).

Further, Haegele and Lieberman (2016), explored the experiences of PE teachers at school for students with VI in the United States. Findings that came out from the research confirm assumptions about the population of students attending such schools, and other areas that emerged include strengths and concerns regarding PE practices. It was indicated that there was an increase in the number of students who attended such schools especially those with VI who were more than those with multiple disabilities. Results from this study support that none of their students had any other disability apart from those with VI. In addition, teachers reported teaching students with a mix of different disabilities in addition to those with VI. However, best practice suggestions for teaching PE at schools for students with VI needed to be taken into consideration in order to meet needs of that diverse population. Further, the study brought out strengths which included among others provision of PE in schools, hiring of certified PE teachers and utilizing curricula that was tied to their state and national standards as well as offering a variety of after-school sports. Apart from strengths, a number of concerns were raised which were, the need for additional training for the teachers related to children who had VI. Additionally, there were very few assessments in the field of PE and in particular for students with VI. Therefore, results from this study provide insight into future research needs and that is, the need for future training of PE educators who handle such unique individuals educated at schools for students with VI (Haegele & Lieberman, 2016)

Furthermore, a qualitative study conducted by Conroy (2012), explored the experiences of physical education teachers in supporting the curricular needs of students with VI in general PE classes. This study had twenty-five PE teachers who participated in individual interviews. Three main themes emerged from interview data which included successes, challenges, and needs. Findings suggest that inclusion of students with VI was a positive experience for such students and their peers. PE teachers often stated that having students in the general PE class encouraged peer interaction and development of social skills and other skills of the Expanded Core Curriculum

(ECC). Successful teaching strategies included use of verbal descriptions and physical guidance. Parent participation and support was extremely helpful. PE teachers also reported challenges working with students with VI. These included planning and structuring the class to include the student with VI, as an active participant, a limited number of strategies to draw upon for direct teaching, effective use of peers and paraprofessionals as supports, and consultation with other educational team members including the teacher of students with VI. Needs were similar to challenges but more specifically focused on training. Teachers repeated that they needed training in planning and differentiating the curriculum for students with VI in PE as well as training about how students with VI learn. They did not know how to implement strategies which may assist them meet the PE standards for all students, including those with VI. Finally, teachers needed strategies for managing peer mentors and paraprofessionals, and for working with parents (Conroy, 2012).

2.9. Learning Environment

Generally, there is need to adapt teaching and learning environment if successful inclusive education has to be achieved. The learning of the students with VI is automatically interrupted in environments which are not supportive to them (Johnsen, 2001). Research shows that among some of the factors that lead to ineffective learning of the students with VI are inflexible curriculum and inappropriate assessment procedures. There should be that difference between inclusive learning environment and an ordinary learning environment, because students of different abilities and learning needs are found in an inclusive classroom (MOGE & MYSCD, 2017). If there is to be quality learning of students with VI, certain features and conditions have to be adhered to and among those are: special services from specialized teachers, teaching and learning resources, assistive devices such as assistive canes and not forgetting the use of flexible teaching methods (Conroy, 2012). However, an inclusive learning environment should allow and support the potential learning of all students, regardless of whatever learning differences and diversities these students might have in the class (Baraka, 2013). Therefore, advice is given to all educational stakeholders including teachers to restructure the education system together with its practices, to enable these students learn better in inclusive settings (Block, 2007).

2.10 Orientation and Mobility skills

Learning institutions for students with VI provide well-rounded educational programs with services specifically designed for individuals with VI and these include; orientation and mobility. Curricula typical in PE inclusive schools is also provided. PES is visual and it requires good orientation and mobility skills for a trainee. With adequate orientation skills and mobility, the student with VI can perform many living skills independently which may include among others walking to classrooms alone, using the toilet and avoiding falling which are crucial to their self-esteem and sense of independence (Conroy, 2012). These skills help students return home without assistance and that reduces the psychological burden on teachers. What makes life for the student with VI easier and more fulfilling is gaining experience and knowledge, adapting to new social situations, expanding their living space, receiving encouragement from teachers and improving relations with classmates. Proposed models are many and these are there to direct general movement. There is therefore, need to encourage the use of vigorous physical exercise in the improvement of physical skills, fitness and behaviour of such students.

In addition, physical activities enable students with VI to have confidence to move through space without instructions. Additionally, motor skills needed for daily living and mobility are developed. However, a number of points need much attention for example, building gradually the intensity of the exercise, employing various reinforcing events in order to increase the persons' motivation to exercise and also allowing the person to choose between various exercises options as that may help assess the persons' opinion about the exercise. Further, engagement of a student with VI in outdoor sports requires the participation of family or friends to ensure safety. In addition, the ability to walk purposefully, safely and confidently is extremely important, but there comes a challenge on the part of a student with VI when encountering an unfamiliar environment (Conroy, 2012). Therefore, student teachers with VI need support in such unfamiliar environment.

Conroy (2012), carried out research on supporting students with VI in PE and attention was on needs of Physical Educators. This study tested 16 students with VI for weight, age, height and BMI, and the basic data were measured using pre-and post-tests. Thirty-three-foot unassisted walking test was used to determine the ability of participants to orient themselves as well as acting on that orientation. What came out after ten weeks of blind baseball training was that the experimental group improved significantly in their success rate in hitting a baseball. The paired

sample t-test showed that the experimental group made obvious progress in directional detection of mobility in four test items, achieving a statistically significant improvement. However, the control group showed little significant progress without training, and did not even reach a statistically significant level. This study therefore, confirmed that blind baseball training for the visually impaired conducted for ten weeks showed significant improvement in orientation and mobility.

Further, research reveals that youth who are visually impaired can benefit from physical activity in the same way like their sighted peers (Adelson & Fraiberg, 1976; Shephard, Ward, & Lee, 1987; Winnick & Short, 1985). These benefits increase skills needed for independence and improve overall quality of life (Lieberman, 2011). This entails that student with VI should be given opportunities to participate in physical activities similar to other students, including those without disabilities. Additionally, some students may benefit from the adapted PE class while others may participate in a regular PE class using modifications (National Association for Adapted Physical Education Services, 2010). This therefore, has created a need for physical educators to learn and use strategies that support the learning of movement concepts of students with VI as they include them in PE classes (Morley, Bailey, Tan, & Cooke, 2010). In additionally, recent studies record teachers' change of attitudes and their willingness to include students, but need guidance in the use of instructional strategies for them to support students with VI in the general PES class (Morley et al., 2010). Lieberman, Houston-Wilson, & Kozub (2002) in their research add that barriers to including students with VI in the PE class included among others, lack of training of the physical educator, and lack of appropriate planning.

2.11 Summary

This chapter discussed different literature related to the title, "Lecturers' pedagogical practices on student teachers with VI in PES classrooms at a selected College of Education in Central Province. It reviewed a number of studies undertaken by different scholars which were related to the mentioned topic. Literature brought out concerns which were focussed more on PES educators who reported that they had challenges working with students with VI which included planning and structuring the class to include the student with VI. Limited number of strategies for direct teaching was also pronounced. Other concerns were: limited experiences of training opportunities in both ITT and continuing professional development within schools where the ITT provided in school

was generally viewed as inadequate as well as being theoretical in nature. Studies recorded teachers' change of attitudes and their willingness to include students, but needed guidance in the use of instructional strategies for them to support students with VI in the general PES class. Literature shows that PES educators did not know how to implement strategies which may assist them meet the PE standards for all students including those with VI. The researcher was motivated to conduct research considering what literatures shows that PES educators did not know how to implement strategies which may assist them meet the PE standards for all students including those with VI in PES theory and practical lessons. Hence, the researcher sought to explore lecturers' pedagogical practices on student teachers with VI in PES classroom at a selected College of Education in Central province. That needed to be done because improved pedagogical practices by PES lecturers on student teachers with VI brings about improved learning of such students in PES inclusive classrooms.

CHAPTER THREE: METHODOLOGY

3.0 Overview

This chapter discussed the research methodology that was used in this study. The study adopted the qualitative approach whose description is given. It further describes case study design. Other aspects described in this chapter include: study area or site, study population, study sample, sampling techniques and data collection methods, data analysis and trustworthiness, voluntarism, anonymity and confidentiality. The chapter first describes qualitative approach as indicated below.

3.1. Qualitative approach

The study employed a qualitative approach to explore lecturers' pedagogical practices on student teachers with VI in PES classrooms at a selected College of Education in Central province. This approach collects information from participants in order to understand the phenomenon under study from perspective of those involved in the research (Ary, Jacob and Sorensen, 2010). Qualitative approach suits very well with this study, because it gave a detailed account of PES lecturers' own perspective of their pedagogical practices on student teachers with VI in PES classrooms. Additionally, the researcher chose this approach because of its nature in providing data from respondents in the natural setting (Gall, Gall & Borg, 2007). Natural setting in the current study involved interviewing PES lecturers on pedagogical practices used on student teachers with VI and making lesson observations on the same in both theory and practical PES lessons. Qualitative research shows this characteristic of providing detailed information from participants involved in research. A design that was used was case study and it is discussed below.

3.2 Case Study Design

The purpose of this study was to explore lecturers' pedagogical practices on student teachers with VI in PES classrooms at a college of education. In order to maintain the required detailed information, a case study design was used. A case study inquires about a phenomenon that is taking place within a specific context. That made it a suitable approach for a researcher's description and explanation of a phenomenon (Miles & Huberman, 1994). There are different types of case-study

which are based on the number of cases and among those is the study of a single distinctive set of people such as a small group (Selvam, 2017). In that case, a distinctive set of PES lecturers were studied following their pedagogical practices in PES classrooms which had student teachers with VI. The specific context under which the phenomenon took place was under lesson presentations made during theory and practical PES lessons. Interview were also conducted where consideration was on PES lecturers' pedagogical practices. In practical lessons, student teachers with VI were involved in performing netball skills, overhead and chest pass in a game situation.

This study employed an embedded case study design. In education, an embedded case study is a type of qualitative research that explores a complex phenomenon within a specific context such as a classroom, a school, or a program. It involves selecting one or more subunits of analysis within the main case, such as students, teachers, or activities, and examining how they interact and influence the overall outcomes. Additionally, aspects that require separate attention are explored. (Yin, 2003). It was appropriate to call this study an embedded case study because attention was only on pedagogical practices employed on student teachers with VI in an inclusive class. A selection of only PES lecturers from the college population was made to explore their pedagogical practices on student teachers with VI. Students with VI were selected from an inclusive class where the researcher explored pedagogical practices specifically employed on them. Four PES lectures at different times were involved in teaching student teachers with VI in PES classroom in order to provide information under the same phenomenon of study of which each PES lecturer stood as an independent unit of analysis. This therefore, made this research to qualify for an embedded case study. The study took place in Central province as discussed in the following part.

3.3. Study Area or Site:

The research site was at a college of Education in the Central part of Zambia. The college is one of the ten (10) Colleges of Education in Zambia. The reason for the researcher's selection of the mentioned research site was the presence at the college of PES lecturers as well as student teachers with VI who were purposively picked as the study centred on them. Additionally, that college was the only one at that time which had an intake of student teachers with VI as other Colleges of Education had them gone on school experience.

3.4. Study Population

Population is the total aggregation of elements where the sample can be drawn from, (Selvam, 2017). The population for this study consisted of all lecturers and all student teachers at a College of Education. It was from that study population where the study sample was gotten as shown in what follows.

3.5. Study Sample

A sample is, “a portion of the population,” (Kasonde, 2013: 36). Patton (2002), argues that selection of sample size depends on the resources and time available for collection of data in a particular research study. In order to achieve that intention and compromise with time, four PES lecturers were selected. The classrooms where observations were conducted were those which had student teachers with VI. The reason why four PES lecturers were selected was that those were the only ones who offered PES in classrooms which had student teachers with VI. However, this was a qualitative study, which intended to gather detailed information on lecturers’ pedagogical practices on student teachers with VI in PES classrooms at a College of Education.

3.6. Sampling Techniques

Sampling techniques involve a research plan that shows how cases are to be drawn from the population for the study (Kasonde, 2013). It shows the process on how the researcher brings participants for the study. The technique that was used was purposive sampling, a non-probability procedure, where the researcher selects participants basing on the knowledge they have under the study (Selvam, 2017). Homogeneous purposive sampling was used. With this kind of sampling the researcher picks up a small sample with similar characteristics in order to describing some particular subgroup (Kombo & Tromp, 2013). Therefore, the researcher was helped to pick on lecturers who offer PES as well as student teachers with VI who took part in this study. In order to come up with information from groups which were sampled, the researcher used data collection instruments as described in the following paragraph.

3.7. Instruments used for Data Collection.

The instruments which were used for data collection were in-depth interview guides and observation checklists. These instruments were used because of the two methods which were employed during data collection which were in-depth interviews and qualitative observation. That was attributed to what is indicated by Johnson & Christensen (2012), that researchers using case

study encourage the use of more than one method of data collection. This study employed case study. Observation was done in both theory and practical PES lessons in classrooms which had student teachers with VI. The detailed description below shows instruments the researcher used and it starts with in-depth interview guides.

3.7.1. In-Depth Interview guides.

Detailed information was collected from PES lecturers on their pedagogical practices on student teachers with VI in PES classrooms through the use of in-depth interview guide. The researcher interviewed four PES lecturers. The questions in the interview guide were developed from the four specific research objectives presented in chapter one which PES lecturers answered. Appendix two shows an interview guide for PES lectures with a total of nine research questions generated from the four research objectives where each objective produced at list two questions. Data was collected through direct interaction between a researcher and participants and oral questions were used by the interviewer to gain responses from participants as encouraged by Gall, Gall & Borg (2007). Probing questions were asked to allow participants to speak out their beliefs, opinions, attitudes, feelings, insights, and experiences about a phenomenon under investigation. Ambiguous statement, follow up answers and immediate concerns were easily clarified. This was possible because participants were available.

Furthermore, the researcher interviewed two student teachers with VI. Those students were interviewed to ascertain what was said by PES lecturers. This brought the number of participants to six. Student teachers with VI answered a total number of eight research questions formulated from four research objectives where each research objective produced two research questions as indicated in appendix five in an interview guide. Concerns that were addressed in appendix five were: lecturers' pedagogical practices on student teachers with VI in PES classrooms, pedagogical practices employed by PES lecturers to benefit student teachers with VI in their classrooms, resources used that supported learning of such students and challenges they encountered in PES classrooms. Another instrument that was used was qualitative observation checklist as indicated below.

3.7.2. Observation checklist.

The researcher used observation checklist as another instrument to gather data from participants. An observation checklist provides information about actual behaviour and helps to put it into

context, making it be understood better (Kasonde, 2013). The researcher therefore, had items she was looking for listed on the observation checklist as appendix three and four show respectively in theory and practical lesson observations while focussing her attention on PES lectures' pedagogical practices. The researcher in this study was a non-participant observer who was simply observing happenings in the research field without herself actively participating. All the four PES lecturers were observed once in a theory lesson and also once in a practical lesson with each session lasting for about 50 to 60 minutes. Observation in theory lesson was done in the classroom while practical lessons were conducted at the sports grounds. Data was recorded mostly in note form and with permission from participants, a video was recorded with the help of a digital camera. The researcher recorded behaviours immediately after occurring to avoid distortion of information as indicated by Gay, Mills & Airasian (2009) that notes should be taken during observation to prevent information being distorted or forgotten which could be a result of recording data after observation sessions.

3. 8 Data Analysis

To obtain much meaning from raw data which was collected, data analysis was done. Bell (2005), indicates that raw data collected straight from the field in its original form, does not give much meaning. Hence, there was need to analyse it because that was the only way to describe and interpret it for the purpose of obtaining the meaning and pattern from it. Going by what Miles and Huberman (1994), point out, in qualitative studies, data analysis starts immediately after the first data collection process in order to find out if any necessary information is missing. It is in the same vein that the researcher began analysing data the very time it was collected. That helped the researcher in ensuring that data which was collected served an intended purpose of obtaining information that mirror the research questions, as well as developing a deeper understanding of the phenomenon which was studied. Interim data analysis was unavoidable after every interview as it helped in checking if any necessary information was missing for the study.

Raw data was then transcribed after the whole process of data collection was over. Transcription involves the process of changing observational notes, interview notes as well as audio recording into texts (Johnson & Christensen, 2012). What followed transcription was thematic analysis which was used to organise the transcribed data. The process of data analysis involved identifying, analysing and reporting occurrence of themes from data collected from the field and that involved

some basic steps (Braun & Clarke, 2006). The researcher used research questions to present interview and observation responses from each participant. Some direct quotations were also used to report information which was collected. What the researcher did was in line with what Cohen, Manion & Morrison (2007) support that the importance of reporting direct statement from research participants is shown in the maintenance of the flavour of its original data.

3.9. Ethical Issues

Ethics are concerned with ensuring that the well-being and the interests of research participants are not harmed as a result of research being done (Lankshear & Knobel, 2004). The research was governed by the research code of ethics of the University of Zambia ethical committee in maintaining the following research ethical issues,

3.9.1. Voluntarism

Consent forms from ethics committee of The University of Zambia were filled in to seek permission. The forms contained important information about this particular research, as well as the importance in their participation in the study. Permission from the relevant authorities; that was the Provincial Education Office (PEO), the Principal, PES lecturers and student teachers with VI in the province was sought. As a university student, a research clearance from the University of Zambia was also sought. That helped in obtaining permission from the province and the district officers to go to a specific College of Education where data was collected. Creswell (2009), and Kombo & Tromp (2006), advise that participants must be informed in advance about data collection from them. Thus, participants were made aware of data collection from them through the use of consent letters. The researcher's aim was to seek respondent's consent, ensure voluntary participation and provision of information, while giving them free room to withdraw from the research participation at their convenient time as that is what Creswell (2009), Kombo & Tromp (2006), encourage.

3.9. 2. Anonymity and confidentiality

In this entire study, the name of the province, college as well as the participants are kept anonymous as insisted on by Creswell (2009) and Kombo & Tromp (2006) that anonymity and confidentiality in research study need to be observed. The study shows the names of participants, PES lecturers and student teachers with VI, presented by pseudonyms. Respondents requested for the use of pseudonym on them so that they are not known by the general public. Conroy (2012)

encourages the use of a pseudonym if preferred by the interviewees. In this case PES lecturers and students were presented using letters. Lecturers were named as LP A, LP B, LP C and LP D while student teachers with VI were presented as SP A and SP B. Data collected from respondents was kept confidential.

3.9.3. Trustworthiness

Trustworthiness refers to the researcher not misrepresenting views of participants. Creswell (2009) points out that trustworthiness is demonstrated when participants recognize the report findings as their own experiences. To show that, the researcher employed the following measures: one on one interviews were recorded and lesson observations were also video recorded with participants' permission. Transcriptions of each individual interview were made for referral adequacy. The researcher went back to some of the participants to ascertain whether the transcribed data was a trustful version of their experiences.

3.10. Summary

The case study approach under qualitative methods employed in this study helped to collect data in various settings. The qualitative procedure, data collection and analysis were used to constitute the methodology of this study. Different research tools were used to supplement one another. All these methodological procedures were aimed at providing qualitative data to the research objectives of this study in order to fulfil the primary aim, Lecturers pedagogical practices on student teachers with VI in PES classrooms at a College of Education. The next chapter presents the research findings.

CHAPTER FOUR: PRESENTATION OF FINDINGS.

4.0 Overview

In this chapter, findings of the study are presented. The purpose of the study was to explore lectures' pedagogical practices on student teachers with VI in PES classrooms at a selected College of Education in Central province. The information gathered was used to address the following research concerns: pedagogical practices PES lecturers employed on student teachers with VI in PES theory and practical classrooms, pedagogical practices used to benefit student teachers with VI in PES classrooms, applicability of resources used on student teachers with VI and challenges faced by PES lecturers in such classrooms. To address the concerns, the data was collected through in-depth interviews and lesson observations in both theory and practical lessons where student teachers with VI together with others who were sighted were involved. The data from interviews and lesson observations provided several themes, but what was taken care of was that which related to and answered the research questions of the study

4.1. Pedagogical Practices Employed by PES Lecturers on Student Teachers with VI in PES Classroom

Research question one sought to explore pedagogical practices employed by PES lecturers on student teachers with VI in PES classrooms. This research question was very important for this study because it helped in establishing how PES lecturers handled student teachers with VI in both theory and practical PES lessons. In order to answer the question, the researcher got information from PES lecturers who were key to answering the research question. Student teachers with VI were also asked to describe pedagogical practices PES lecturers used on them in PES classrooms. PES lecturers were asked to establish pedagogical practices employed on student teachers with VI in theory lessons, importance of mentioned pedagogical practices to student teachers with VI, preferred pedagogical practices in PES practical lessons and importance of such mentioned pedagogical practices to student teachers with VI. The study observed two major themes which were derived from the interviews and lesson observations, that is: pedagogical practices used in theory lessons and those used in practical lessons as shown below.

4.1.1 Pedagogical Practices Used in PES Theory Lessons.

Lecturers who offered PES were asked to describe pedagogical practices used on student teachers with VI in PES theory lessons. From the data collected, two sub-themes emerged, namely: asking

questions and allowing students to answer as well as lecturing. All of the participants claimed that asking questions and allowing students to answer as well as lecturing were practices used in theory lessons.

4.1.1.1. Asking Questions and Allowing Students to Answer.

Findings from interviews revealed that pedagogical practices used by PES lecturers on student teachers in PES theory lessons included asking students questions and allowing them to answer as well as lecturing as indicated by LP B that,

Mostly in PES theory lessons I do not run away from the use of question-and-answer method. With this method, I ask my students questions and in return I expect them to give me answers. Thereafter, I make clarifications on the answers they give from oral questions. The student teachers with VI are able to listen and answer the questions with minimal problems (LP B, Male, 17.03.2020).

LP D elaborated further that:

I pose a question to the student teacher with VI and ensure that he answers it so that he is part of the class (LP D, Male, 17.03.2020).

Reasons PES lecturers gave for the use of question and answer to student teachers with VI in PES classrooms included making such students actively participate in class as narrated below:

using question and answer helps to make student teachers with VI and other students in a class be active during lessons and it is simple to use (LP C, Male, 17. 03.2020).

Another lecturer added that:

Through this method it is easy to observe activeness of student teachers with VI in the lesson (LP A, Male, 17.03.2020)

Student teachers with VI in an interview agreed that PES lecturers use questions and answers when teaching them during theory lessons. In support of the same, SP B in his statement said:

Mostly the lecturer asks questions as he presents lessons to us. He poses questions and sometimes demands an answer from me (SP B, Man, 18.03.2020).

What was observed during theory lesson presentations was that LP A, LP B and LP C used question and answer method and switched on to lecture method in the later stages of the teaching process.

LP D started and continued teaching, using lecture method throughout the lesson and also demonstrated the skill, kangaroo walk, with the help of a student who held the lecturer around his waist while the lecturer folded his legs around the student and touching both hands on the ground. They both started moving at the same time and the lecturer continuously moved his hands at the same time up and down. The performance was done without making any explanation to the student teacher with VI. However, the involvement of a student teacher with VI was highly considered by LP A, LP B and LP C although LP B at certain times did not make a student teacher with VI realise that he was the one he was talking to but other students around him did so. LP D rarely considered involvement of a student teacher with VI while he was lecturing.

In summary, what was pronounced from interview as a suitable pedagogical practice for students with VI was asking questions and requesting for answers. However, it was observed that LP A, LP B and LP C used the same method while LP D never used it. For those that used this method only LP A and LP C actively involved student teachers with VI while LP B treated that student like one who could clearly see and just pointed at him to give a response to the question asked without him knowing that he was the one pointed at. The student next to him made him become aware through touching him and that enabled him say something. LP D never used this method. Findings from interviews revealed another pedagogical practice as explained below:

4.1.1.2 Lecturing

All PES lecturers revealed from interviews that their teaching involves lecturing in classrooms which included student teachers with VI. The reason they gave for using these practices is that time is not worsted but it is saved especially in larger classes. Talking on saving time as the reason for using this practice, LP D said:

Sometimes I use lecture method in class as one of the methodologies in a theory lesson. Using this practice, I, as a lecturer usually give most of the information to all the students in class while all the students mainly remain passive in the process of learning. This method has many advantages in that it helps me to cover a lot of work within a short period of time. (LP D, Male, 17.03.2020).

A student teacher with VI also highlighted during interviews that;

Our PES lecturer normally lectures in PES theory lessons. In fact, we sit in the same room together with those student teachers you are sighted when he is delivering content to us (SP B, Man, 18.03.2020).

Lecturers who offered PES pointed out that lecturing was not a suitable pedagogical practice on student teachers with VI because at certain times concentration is just on lecturing without even knowing if all the students are concentrating in the lesson. They further said that some students do not take down notes while others do as the verbatim show below.

At times it becomes very difficult during lecturing to spare some time on student teachers with VI and in most cases I do not even know if my presentation is followed or not because mostly, they do not even take down notes. They write at a very slow pace and if time is not enough, I do not even ask them questions to allow them participate in lessons (LP A, Male, 17.03.2020).

LPD added that;

At least it makes me point at students with VI for them to respond through the use of questions and allowing them to answer it (LP D, Male, 17.03.2020).

Classroom observation confirmed the use of the practice, lecturing, by all PES lecturers during theory lesson presentations while adding other methods like question and answer by LP A, LP B and LP C. However, all the students were listening as their lecturer was presenting the work but student teachers with blindness were not taking down points or notes during the lecture in all classes while the rest of the members were writing. Most of the teaching by all PES lecturers was dominated by lecturing even though other methods were added. LP D also used demonstration in addition to lecturing. He demonstrated some skills as he was presenting a theory lesson but none of the students was asked to repeat his action.

In summary, findings from interviews confirmed what was observed during lesson presentations. PES lecturers lectured in PES theory lesson presentation and added other practices. However, student teachers with VI were not actively involved in lessons. They were not even taking down notes or points when lecturing was going on while students who were sighted were busy doing so.

4.1.2. Pedagogical Practices Used in PES Practical Lessons.

Lecturers who offered PES were asked to describe pedagogical practices used on student teachers with VI in PES practical lessons. From the data collected, five sub-themes emerged, namely: demonstrations of activities, giving students work to do in groups and/ or in pairs, attending to individual student teachers with VI, performing activities in parts, and performing activities as a whole then in parts and finally as a whole.

4.1.2.1 Demonstrating activities.

All PES lecturers narrated during interviews that they demonstrated physical activities to the class before involving everyone in the performance and in certain circumstances request was made on fellow students to do that to their friends. In verbatim, LP D said,

Under this pedagogical practice I, as a lecturer may demonstrate in class how a particular activity can be performed or may ask one of the students to demonstrate to his or her friends (LP D, Male, 17.03.2020).

PES lecturers had the following to say that concerned practical lesson presentation,

during practical work I mostly use demonstrations and activities are performed together with student teachers with VI and I give guidance. I do demonstrations and certain times I assign a fellow student in instances where I may not know how to demonstrate (LP B, Male, 17.03.2020).

Another lecturer made a comment that he demonstrates activities in practical PES lesson but those activities he feels student teachers with blindness cannot manage to perform are modified as explained in the following verbatim:

Practical lessons are demonstrated by me as a PES lecturer with modifications for students with VI in a PES classroom. For example, if I am teaching headstand, I can give these students maybe to do chicken walk, following specific instructions. These activities performed by student teachers with VI are slightly different in situations I feel that they cannot manage to perform them (LP A, Male, 17.03.2020).

Another lecturer made a comment that:

I demonstrate activities in classroom to teach student teachers with VI. Whilst student teachers with VI are with those that are sighted in their groups, I get the ball and use it to do demonstrations. For example, I can call one of the students with VI to demonstrate a skill thereafter, all the students can now perform that skill together or I can demonstrate it myself as their lecturer. That is how they learn the skills. (LP D, Male, 17.03.2020).

Student teachers with VI in a one-on-one interview were in the same line with what was mentioned by PES lecturers about making demonstrations in practical lessons and they said:

The lecturer demonstrates activities of a particular day to the class. Thereafter, he requests student teachers with sight to demonstrate to us, as their partners who are student teachers with VI and show us how the lecturer has just demonstrated. At times the lecturer himself does the demonstration specifically to us and thereafter we do what he shows us (SP B, Man, 18.03.2020).

Lecturers mostly in practical work come to us, the students with VI, touch us and show us what our friends with sight are doing since we cannot see what they are doing. (SP A, Man, 18.03.2020)

Classroom observation showed all PES lecturers demonstrating activities in practical PES lesson presentations. In classes for LP A and LP C demonstrations were done by all PES lecturers. LP A demonstrated netball skills; overhead pass, chest pass and pivoting while LP C performed gymnastic activities; forward roll, back ward roll. In the class for LP B activities were at times demonstrated by the student teacher with VI and at other times the lecturer himself did it. In the class for LP D, the lecturer and students who were sighted demonstrated activities. Involvement of student teachers with VI in classes for LP A, LP C and LP D was the effort of student teachers who were sighted, no effort of the lecturer was observed.

In summary, PES lecturers revealed from interviews that demonstration of physical activities was done in PES practical lessons and that was confirmed during lesson presentations where all PES lecturers demonstrated activities. LP A and LP C demonstrated all the activities in their classes

while LP B allowed the student teacher with VI to demonstrate and at other times, he did that. LP D demonstrated activities in his class and other times he allowed student teachers with sight to do that. However, Involvement of student teachers with VI in classes for LP A, LP C and LP D was the effort of student teachers who were sighted and no effort of the lecturer was observed. Other pedagogical practices revealed in practical PES lessons were:

4.1.2.2 Giving students work to do in groups and/ or in pairs.

All PES lecturers during interview revealed that student teachers with VI were paired or grouped with student teachers with sight in the performance of activities. This implies that mixed grouping was utilized. These same methods were said to be the best for teaching student teachers with VI in PES practical lessons which included such students. The reason they gave for such kind of grouping was that segregation was minimized and cooperation was encouraged. In supporting mixed grouping, LP B said:

In a practical PES lesson student teacher with VI are integrated in pair work or group work with those students who are sighted. What I have just seen is that it's just not good for someone maybe to put them alone without being mixed with the sighted ones that's why I mix them with students who are able to see. I do that to avoid that feeling in them of being segregated. This method is very helpful in that the students feel part of the learning process where they engage themselves in performing activities. (LP B, Male, 17.03.2020).

Further, LP C highlighted on the importance of mixed grouping in practical PES lessons in his statement that:

Usually, you find that student teachers who are sighted assist their friends who have no sight and they work very close to each other especially during practical lessons because the friends that are sighted give instructions to the student who is not sighted unless this person does not know that's when I, as a lecturer come in and give clues on how those movements are supposed to be done in that particular practical activity. I do not give very much strenuous activities to student teachers with VI. (LP C, Male, 17.03.2020)

Student teachers with VI during interviews also had this to say on PES lecturers regarding the use of group work and/or pair work;

A PES lecturer uses pair work as he teaches us in practical work and this method is normally between a student teacher with VI like me and anyone who has sight so that we are helped on what to do to avoid us being behind (SP B, Man, 18.03.2020).

When the lecturer is presenting a practical lesson to us in an inclusive PES classroom, he uses group work. With group work, us as student teachers with VI are helped where we are behind by our friends and by so doing, we get encouraged (SP A, Man, 18.03.2020)

During lesson observation students were put in groups and/or in pairs in all classrooms by PES lecturers in practical lesson presentations. However, the involvement of a student teacher with VI was very much emphasized in the class for LP A but students in that class did not take up that initiative. The remaining lecturers did not take an active role of emphasizing participation of student teachers with VI in their classes. Effort for that was seen by their fellow students who were sighted.

In summary, all PES lecturers revealed during interviews that their preferred pedagogical practice in PES practical lesson was the use of mixed grouping where student teachers with VI were helped by their fellow students who were sighted. Classroom observations matched very much with what was said in an interview. All PES lecturer used pair work and/or group work in practical lesson presentations. However, LP B, LP C and LP D did not take an active role of emphasizing participation of student teachers with VI in their pairs or groups but fellow students who were sighted made that effort. LP A emphasized very much on involvement of a student teacher with VI in performing activities but students in that class did not take that initiative.

Individualised learning was another practice mentioned by PES lecturers as indicated below:

4.1.2.3. Attending to individual student teachers with VI.

LP C, LP B and LP D pointed out that individualized learning helps them give special instructions to student teachers with VI as explained in the following verbatim:

Since student teachers with VI do not see actions, I use individualized learning on them during practical PES lessons. Even if they are in a group, I give them special instructions.

I also prepare instructional materials or instructional equipment which I use to get them involved in practical lessons. Instructions they receive are based on how movements in a particular activity are done (LP C, Male, 17.03.2020).

I come in contact with a student teacher with VI as I explain to him how to perform the activities of the day (LP B, Male, 17.03.2020).

Student teachers with VI reviewed during interviews that they received special attention from PES lecturers through individualized learning as the following verbatim show;

A lecturer comes to me and holds me in an attempt to show me how a particular activity is performed before or after demonstrating an activity to students who are sighted. (SP A, Male, 17.03.2020).

Sometimes the lecturer comes in and gives me instructions on how to perform activities while many times I make use of my friends for instructions on how to perform activities. (SP B, Male, 17.03.2020).

During PES practical lesson observations LP C did not concentrate much in giving special instructions to a student teacher with VI. This meant that individual attention on such a student was not there. His Concentration was on activities performed by student teachers who were sighted. LP B at first also ignored and never told the student teacher with VI to do anything while the rest of the class were busy performing floor agility activities. LP B attended to such a student when another lecturer who was passing by shouted at such a student calling him by name and said, “...akupangako naiwe,” meaning, “you should also do what others are doing.” That was when effort was then observed in that lecturer after being reminded. LP D and LP A showed very little concern in giving special instructions and mainly sighted students gave the said students individual attention after receiving instructions from the lecturer.

In summary, even though PES lecturers mentioned during interviews that individualised learning was used in practical lessons on student teachers with VI, lesson observations showed little in giving such students special instructions. LP C showed little effort in giving special instructions to the said student. LP B changed his approach and began considering the presence of the student teacher with VI when he was reminded indirectly by another lecturer who shouted and called that student by name telling him to do what others were doing. LP D and LP A showed very little concern in giving special instructions but fellow students helped in doing that.

4.1.2.4. Performing an activity in parts.

PES lecturers revealed through interviews that they had physical activities performed in parts to make the learning of students with VI easy as narrated below.

Pedagogical practices I employ in inclusive PES class are mostly more of part method. An activity under this method is performed in parts or segments. I feel this method is good because the student teacher with VI manages to perform an activity step by step and I like using this method because it is a well-known fact that those students are slow in doing things because of their nature. A lot of verbal explanations are done because those students have a challenge with sight and where possible touching them really helps in order to guide them where to place the hands because they cannot see (LP A, Male, 17.03.2020).

LP C also elaborated that:

Part method helps me to teach difficult parts of the activities thereafter I put the parts together by performing the whole activity at once and that's what I do to my student teachers with VI (LP C, Male, 17.03.2020).

Lesson observation in a PES practical lesson showed LPA and LPC demonstrating activities in parts to a student teacher with VI. For example, the student teacher with VI was told by LP A to stand in a certain way, then to put the ball above his head and to throw it from behind his head. Those several activities were done in parts repeatedly and later the whole activity was performed at once by the lecturer who further instructed the student to do the same. Even though the student teacher with VI managed to perform an activity as guided by LP A, such a student was ignored by his teammates. They never bothered to involve him in the game. In other ways, they avoided throwing the ball to him and that made him complaint saying, 'bola ine ii teti inteye,' translated in English as 'I cannot manage playing this kind of a game.' LPC never gave clear instruction to a student teacher with VI when he wanted him to perform warm up actiitie. In his instruction, he said, 'do like this.' but the student teacher was visually impaired who could not see. LP B and LP D just made a mention of that method but never used it during their practical lesson presentation. In summary, LP A, LP C and LP D revealed from interviews that part method was used in practical lessons. LP A narrated that using part method helped student teachers with VI perform an activity regardless of how difficult it may be with minimal challenges because an activity is segmented in

the way it is performed. LP C pointed out that he was helped with the use of the method when teaching difficult parts of an activity. However, lesson observations revealed LP A and LP C demonstrating activities in parts and that was mainly done on student teachers with VI thereby involving them in the lesson while LP B and LP D did not use this method. Finally, pedagogical practice PES lecturers brought out for practical PES lessons is indicated below.

4.1.2.5. Performing an activity as a whole, then in parts and finally, as a whole.

LP A, LP B and LP D in an interview mentioned whole part whole method as a pedagogical practice used in a PES practical lesson and LP B narrated that:

With this method the whole activity is performed first while identifying difficult parts of an activity which are then performed in parts repeatedly. If the difficult parts are well performed the whole activity is again performed. (LP B, Male, 17.03.2020)

Student teachers with VI in an interview did not mention the lecturers' use of this method in lesson presentation. However, lesson observations showed that LP A and LP B used whole part whole method. For example, LP B told SPA to perform an activity called hand belly support after explaining to him how the activity is done but that student failed to perform because he was not holding the partner well around her trunk. After making such corrections and perfecting the part where the problem was noticed, the student was made to perform the whole activity which he performed with minimal problems. SP B in the class for LP A failed to perform an activity because instructions involved vague statements like, "do like this," but that student could not see.

In summary, LP A, LP B and LP D in an interview mentioned that they use whole-part-whole method in a PES practical lesson. However, lesson observations during practical lessons confirmed what lecturers pointed out during interviews. After demonstrating the whole activity, a difficult part was identified and performed in parts and LP D managed to help a student teacher perform an activity while LP B used instructions which were not clear, for example, 'do like this' and therefore, made that student fail to perform as expected.

4.2 How PES Lecturers Ensured That Pedagogical Practices They Employed Benefit

Student Teachers with VI in PES classrooms.

Research question two sought to explore how PES lecturers ensured that pedagogical practices they employed in PES lessons benefit student teachers with VI. This question was framed on the

premise that pedagogical practices lecturers employ in PES lessons can either benefit student teachers with VI or not. Therefore, research question two helped to determine the effectiveness of pedagogical practices used on student teachers with VI for them to benefit in their lessons. In order to answer this question, PES lecturers were asked to explain how they ensured that student teachers with VI benefit from pedagogical practices they employed in a PES lesson at that College of Education. Student teachers with VI were also asked to explain how PES lecturers ensured that they benefit in PES lessons. In order to address the concerns, data was collected through in-depth interviews and lesson observations in both theory and practical lessons and what was taken care of was that which answered the research question. Therefore, the study observed two major themes which were derived from the interviews with PES lecturers and student teachers with VI and also from lesson observations. The two major themes included how pedagogical practices employed in theory lessons benefited student teachers with VI and the same question was raised to find out how such students benefited in practical lessons as shown below.

4.2.1 How PES Lecturers Ensured That Pedagogical Practices They Employed Benefit

Student Teachers with VI in PES theory lessons.

Lecturers who offered PES were asked to explain how they ensured that pedagogical practices they employed benefit student teachers with VI in PES theory lessons. From the data collected, three sub-themes emerged, namely: calling names of students, avoidance of some tasks to student teachers with VI and transcribing notes into Braille,

4.2.1.1 Calling students' names.

All PES lecturers mentioned that if student teachers with VI were to benefit from PES theory lessons, calling out their names during the process of teaching was very important. The calling of names of student teachers with VI was a clear indication of them knowing that they were the ones being talked to as explained in the following statements:

I shout out calling the student teacher with VI by name in order to capture his attention, Thereafter, I tell him what I want to say and that makes him get involved in the lesson
(LP D, Male, 17.03.2020)

LP C also added that:

Calling their names helps to keep them awake and through that they concentrate and contribute in the learning process (LP C, Male, 17.03.2020).

Student teachers with VI in an interview also agreed that if they are called by name, they are helped to be attentive during theory PES lessons as narrated by SP B that,

My PES lecturer calls me by my name every time we have a lecture and that helps me to pay particular attention (SP B, Male, 18.03.2020).

The other student also said:

I do participate in PES lessons because every time we have a lecture, my lecturer calls my name at least two to three times for me to contribute and sometimes I just talk even if I am not very sure of the right answer to give him (SP A, Male, 17.03.2020).

Class observations showed that all PES lecturers remembered to call student teachers with VI at least once or twice during PES theory lessons. For example, SP A and SP B were called by their names by LP A and LP B respectively during presentation when they had their hands up in an attempt to respond to the questions asked. However, students were able to know when the lecturer wanted them to contribute through the use of the names. The same happened when lecturers wanted to have their attention or request them to perform an activity. By so doing, both students contributed in the learning process where they were able to.

In summary, PES lecturers said student teachers with VI were called by their names in order to capture their attention and make them benefit in PES classrooms. Calling students' names also made them know that they were the ones being talked to, keep them aware and contribute in the learning process. However, lesson observation showed that all PES lecturers called student teachers with VI by their names in theory lessons when they wanted to capture their attention.

4.2.1.2 Avoidance of some tasks to student teachers with VI.

PES lecturers narrated that they avoided giving student teachers with VI certain tasks whenever they felt that such could not be done by them. Among other things they said they avoided was giving mathematical concepts as explained by LP A and LP D in the following statements,

I avoid giving mathematical concepts to student teachers with VI because they do not do mathematics and what I do is to give them an alternative work related to the topic (LP A, Male, 17.03.2020).

Students with VI do not learn mathematics in secondary schools and this makes it difficult for them to learn this subject at tertiary level and that is the reason why mathematical concepts are avoided when teaching them (LP D, Male, 17.03.2020). .

Probing further on the learning of mathematics by student teachers with VI, SP A said,

Learning mathematics is very difficult for me as one who is visually impaired because even at secondary school at times teachers were giving us an option either to leave the classroom or not during maths period, indicating that we cannot solve mathematics. I am yet to see what happens here at college because I am a first-year student and nothing mathematical related has being tackled so far (SP A, Male, 18.03.2020).

However, during lesson observations no lecturer presented any lesson which had any mathematical concept in it where the researcher needed to find out how PES lecturers handled such students in such matters.

In summary, LP A and LP D made it clear that they never gave mathematical concepts to student teachers with VI because according to them such students never learnt mathematics at secondary level. Instead, alternative work which helped them get involved in lessons was said to be given. Further, lesson observations during all PES lecturers' presentations did not show aspects of mathematical concepts coming out as topics were not centred on that.

4.2.1.3. Transcribing notes into Braille

PES lecturers said student teachers with VI had their notes for study transcribed before or after the lesson as narrated by LP D that,

When preparing lecture notes I ensure that I have some transcribed into Braille by the officer who is responsible and then I give those Braille materials to those who are not sighted before or after theory lessons (LP D, Male, 17.03.2020).

LP B added that:

Notes in ink are taken to transcribers so that student teachers with VI can have access to them and make use of them for studying even though it takes some time for them to be ready (LP B, Male, and 17.03.2020).

SP B during an interview also came out clearly that,

... the transcriber takes too long to transcribe our notes and we do not know the right time of receiving such notes because we do not have notes for all the lectures already attended.

(SP B, Male, 17.03.2020).

Even though it was mentioned during interviews that student teachers with VI were provided with Braille notes, classroom observation showed that such student teachers were not supported in their learning as far as accessing appropriate notes was concerned. They had very few notes transcribed for studying and were still waiting for some more. They were not sure of the right time they were going to receive them.

In summary, PES lecturers said they had notes for student teachers with VI transcribed before or after the lesson but narrated that transcription took too long. However, lesson observations showed student teachers with VI having very few transcribed notes. Student teachers with VI further mentioned that they were waiting for some more transcribed note whose time of receiving was not known.

4.2.2. How PES Lecturers Ensured That Pedagogical Practices They Employed Benefit

Student Teachers with VI in PES practical lessons.

The following were mentioned by PES lecturers as pedagogical practices they employ for student teachers with VI to benefit in PES practical lessons.

4.2.2.1 Touching student teachers with VI.

All PES lecturers pointed out that touching student teachers with VI makes them become aware of what happens in practical work and that makes them get involved in the lesson as explained by LP A in the following statement:

The activities I feel student teachers with VI can manage to perform are done together with the rest of the students who are sighted. But I spare time for demonstrations of activities prepared only for student teachers who have difficulties with their sight. However, I highly give instructions under practices where student teachers with VI are told to do this and that. Where there is need, such students are touched on the parts of their body as I try to make them perform and enjoy the activities. Through that they benefit in the lesson because they also get involved (LP A, Male, 17.03.2020).

The aspect of being touched by PES lecturers was also mentioned by student teachers with VI during an interview as indicated by SP A in the statement below.

The lecturer calls me and gets hold of the hand and starts showing me activities of the day practically. He shows me how to go about with the performance of activities and controlling mistakes where they are noticed (SP A, Man, 18.03.2020)

Lesson observation showed that all PES lecturers touched student teachers with VI on their body part when showing them how to perform activities. For example, LP A touched SP B on his hand, neck and head while LP C touched the said student on the arms and legs as he gave guidance to them.

In summary, what PES lecturers said during interviews correlated very well with what was observed in PES practical lessons. Student teachers with VI were touched by LP A and LP B during performance of activities.

4.2.2.2 Giving modified activities.

PES lecturers mentioned that they modify activities for student teachers with VI if they feel the work prepared for the class cannot be performed by those without sight as indicated in verbatim by LP B that,

I give student teachers with VI modified activities in practical work because it is not all activities, they are capable of performing. For activities they can manage to perform, I request them to do that while guiding them and giving them additional instructions (LP B, Male, 17.03.2020).

Modification of activities was also mentioned by student teachers with VI during an interview that PES lecturers modify their activities as indicated below.

In situations where the lecturer feels that activities prepared for the class cannot be performed by me, as one who is visually impaired, he ends up giving me additional instructions and alternative activities which he feels I can manage to perform. (SP B, Man, 18.03.2020)

Another student teacher with VI said:

At times I am separated from the rest of the class and I am given simple activities to perform because it is not all the activities I can manage to perform. (SP A, Man, 18.03.2020)

Observation in PES practical lesson presentation showed that activities which were performed by student teachers with sight were the same activities which were performed by student teachers with VI in classes handled by LP B, LP C and LP D. However, a bit of modification was made in a class for LP A where he told students with sight to simply run and give the ball, an ordinary football, to a student teacher with VI for him to throw to his teammates. Even though that student was given the ball, it was difficult for him to pass it on to his teammates. The ball was thrown without considering where it was landing and not knowing who could receive it. He did not even know points to move to. That challenge made him make a comment that, “kupelafye uulipo, uuli mupepi,” translated in English as, “I can just throw the ball to anyone who is nearer.” The same challenge of knowing who to throw the ball to and the few times he had access to the ball made that student to attempt moving out of the ground, laughing whilst saying, “bola ine iyi teti inteye”

translated in English as “*I cannot manage to play this kind of a game*” LP A also made a comment as he called the student teacher with VI by name saying, “... *didn't have enough game play,*” because his friends never considered passing the ball to him.

In summary, PES lecturers narrated that they had difficult activities modified for student teachers with VI to perform but lesson observation revealed that only LP D did a bit of modification. Even though that was done, it was still difficult for the student teacher with VI to fully get involved in the netball game because his team mates rarely gave him the ball to throw to them.

Apart from modifying activities, another practice mentioned is indicated below.

4.2.2.3. Guided learning

Even though PES lecturers said they never had formal training which can enable them handle student teachers with VI, guided learning was mentioned by LP B, LP C and LP D as a pedagogical practice used in ensuring that such student teachers benefit in PES practical lessons. LP C elaborated that,

I do give guided lessons for friendly activities, showing them how to put hands to allow them perform activities. Students do it willingly. I didn't have much of special education learnt during training. No formal training was there but my teaching is through experience (LP C, Male, 17.03.2020).

LP D added that:

Student teachers with VI cannot do anything in practical lessons without guidance. I guide them on how the activities of a particular day are supposed to be performed (LP D, Male, 17.03.2020).

Student teachers with VI also brought out the issue of being guided by lecturers where PES practical lessons were concerned. They mentioned that at times lecturers touch them at an appropriate part of the body to guide them on what needs to be done as indicated by SP B that,

I remember the lecturer touching on my knees when he wanted me to bend whilst standing as he was showing me how I can perform the skill, digging, in volleyball (SP B, Man, 18.03.2020).

With the issue of giving guidance, lesson observations showed that PES lecturers used words which were not clear or helpful to student teachers with VI. LP B in a practical lesson used the words, “do like this” while rotating the waist and wanted the student teacher with VI to perform

that same activity. However, it was impossible for that student to see what the lecturer was doing and imitate him. As a result, the student just stood still without doing anything.

In summary, PES lecturers mentioned that they never had a formal training where they were supposed to learn how to handle student teachers with VI but they mentioned guided learning as a means through which such students were to be actively involved in PES practical lessons. During lesson observation, lecturers used vague statements in an attempt to give guidance to students. For example, LP B in his statement said, “do like this” as he attempted to make the student with VI perform an activity but that was impossible for him to visualize and perform the activity.

4.3.0 Resources PES Lecturers Used on Student Teachers with VI in PES Classrooms.

Research question three sought to describe the types of teaching resources used on student teachers with VI in both theory and practical PES lesson presentation. This question was framed on the premise that the type of resources used can either facilitate teaching of student teachers with VI or not. Therefore, research question three helped to determine the effectiveness of teaching resources used on student teachers with VI for them to benefit in their lessons. In order to answer this question, PES lecturers were asked to identify teaching resources they use on student teachers with VI in PES theory and practical lesson. They were also asked to explain how they ensured that such students benefit from mentioned resources. General picture of the finding showed that the college never had resources specifically for use on student teachers with VI and suggestions of the resources that could be used were made as indicated below.

4.3.1. Un available resources for student teachers with VI.

Research findings reviewed that the college did not provide PES lecturers with teaching resources they needed to use specifically on student teachers with VI in PES lesson as the following verbatim shows.

We appreciate the importance of teaching resources for teaching and learning of student teachers with VI but the college does not have such things us, as PES lecturers can use specifically on such students to facilitate their learning in their lessons (LP B, Man, 17.03.2020).

Another PES lecturer echoed to say,

We do not have special materials provided by the college for use specifically on student teachers with VI and this becomes a little bit difficult for me to teach because teaching resources simplify work (LP C, Male, 17.03.2020).

Student teachers with VI had the same point as that of PES lecturers concerning the colleges' lack of teaching resources in PES lessons as the following verbatim shows,

I am not provided with any special teaching or learning resources in either theory or practical lessons by PES lecturers that can facilitate my participation in PES lessons and I have never learnt PE before to know what needs to be used. When we are in class, I just follow what my friends are doing.... Since I am the first-year student, I have never seen anything from the time I came that's why I cannot describe resources I should use here at college (SP A, Man, 18.03.2020).

Another student teacher with VI added that;

No special teaching and learning resources are provided by the PES lecturer in this college to help me acquire knowledge and skills for me to be helped to understand concepts in PES theory and practical lessons (SP B, Man, 18.03.2020)

Student teachers with VI did not describe any teaching resource used by PES lecturers to facilitate their learning in PES theory and practical lessons saying that they did not notice lecturers using any resource in their teaching process as the following verbatim shows:

Describing resources provided for me, as a student with VI, at this college is very difficult because nothing is provided for me to use (LP B, Man, 18.03.2020).

In summary, PES lecturers mentioned that the college lacked teaching resources for students with VI. The same was mentioned by student teachers with VI that nothing was used by PES lecturers in either theory or practical lessons to facilitate their learning.

Even though teaching resources for student teachers with VI were lacking at that College of Education, PES lecturers came up with suggestions of what could be used to facilitate teaching of such students as indicated below.

4.3.1.1 Suggested resources

The resources PES lecturers suggested for use on student teachers with VI in PES classrooms included:

4.3.1.1.1 Human guides

PES lectures indicated that student teachers with sight could be helpful to student teachers with VI in running situations as the following verbatim shows:

If it means running, we usually give them a guide.....and that guide could be a partner who is sighted and can run along with this person who has no sight and they would run like that. (LP B, Male, 17.03. 2020).

An orientation and mobility instructor can also be used as a guide as narrated below,

There is also physical guidance where the student teacher with VI is moved around the court or field of play by an orientation and mobility instructor. The Physical Education lecturer who knows the content to present to students works hand in hand with an orientation and mobility instructor before the actual lesson presentation is done. This is called pre-teaching where information such students need to know before the lesson is reinforced (LP A, Male, 17.03. 2020).

In summary, PES lecturers narrated that a fellow student, who is sighted, can be used as a guide to a student teacher with VI. Another guide mentioned was an orientation and mobility instructor during pre- teaching.

4.3.1.1.2. Concrete materials

They further indicated that student teachers with VI lack access to concrete materials. LP B made it clear that the college lacked balls with rings inside which student teachers with VI can use in ball games as explained below:

Resources for student teachers with VI in PES practical lessons are also lacking in the college. For example, in the game of netball, student teachers with VI are supposed to use a special ball with a bell inside, to help them play but the college does not have (LP B, Male, 17.03.2020).

. LP C further added that:

In both theory and practical PES lessons, mostly I use concrete materials which student teachers with VI feel because with them, the sense of feeling is very much used. So, ordinary football balls, netball balls as well as basketball balls are utilized (LP C, Male, 17.03.2020).

PES lecturers wished resources could be provided that could help create a sound source at the location of a target as that may enable student teachers with VI to orient themselves and successfully participate in physical activities and sports. Their narration was that such students could be told if the sound is before, after or embedded into the target. Sampling sound sources appropriate for use on student teachers with VI, LP C said,

Appropriate resources which could best be used by students with VI include adaptable balls, wireless doorbells and other portable sound sources. For students who are completely blind, specially made balls with bells or sound are more appropriate (LP C, Man, 17.03.2020).

In summary PES lecturer mentioned that special balls with a bell inside which student teachers with VI could use in games were unavailable at the college and some opted to use ordinary balls.

4.3.1.1.3 Improvised materials.

PES lecturers further indicated that in order to teach student teachers with VI effectively and meet their needs, they improvised teaching materials as narrated by LP C that,

We even have a lot of chess mats which are quite different from those bought for the so-called normal students. They are a bit rough on some parts while other parts are smooth. Those are the ones I use for teaching student teachers with VI. Actually, I just improvised those chess mats and that was done by giving students an assignment. Student teachers with VI easily feel such resources with their own hands. I did that because those bought from the shops are mainly for the sighted (LP C, Male, 17.03.2020).

In summary, PES lecturers showed their commitment in coming up with teaching resources for students with VI by improvising chess mats.

4.3.1.1.4 Models

PES lecturers narrated that when teaching student teachers with VI, models are used and those are touched and felt by such students. An example cited was a model of the skeletal system as explained below,

Even though the college does not provide us with resources specifically for use on student teachers with VI in inclusive PES classroom, I make use of the resources used on the so-called normal students. For example, I use the model of the skeletal system when I am teaching on the body system which I make them touch and feel (LP A, Man, 17.03.2020).

They further indicated that they needed large tactile models as such were recommended for dynamic movements as explained below.

In PES practical lessons, we need tactile models which are appropriate for demonstrating an activity and allowing the student to feel what the lecturer is doing. This allows the student to feel the form of movement that a lecturer is describing verbally (LP A, Male, 17.03. 2020).

Additionally, PES lecturers went on to suggest that tactile boards or tactile maps if available help in location places of play as indicated below.

Tactile models like boards and maps provide the physical layout of the playing area using raised lines and figures. With these the students can explore the boards and navigate through the actual court with us as lecturers to gain an understanding of the playing area. Unfortunately, we do not have such things and such, are difficult to make (LP A, Male, 17.03. 2020).

Findings from theory lesson observations confirmed what came out from interviews that resources for student teachers with VI were not available and were not used by PES lecturer. Such students were not even encouraged to use special learning resource to help them understand the concepts. In addition, PES lecturers did not even check if student teachers with VI were writing or taking down notes or points as they presented lessons. Those students in all the classes were just listening throughout the lesson. Similarly, in practical lessons what was observed were just ordinary netball

ball used by LP A to demonstrate skills in a netball game. LP C used mats to demonstrated floor agility activities. The other remaining participants, LP B and LP D performed activities without the use of any teaching or learning resource. Hence, that brought about failure to describe teaching and learning materials PES lecturers used to facilitate teaching of student teachers with VI.

In summary, research findings reviewed that the college did not provide PES lecturers with resources to use on student teachers with VI in both theory and practical PES lesson presentations. What was used in practical lessons were just ordinary balls used by students with sight. However, suggestions of suitable resources to use on such students were made which included human guides, concrete materials, improvisation and coming up with models even though that was mentioned to be difficult to make.

4.4.0 Challenges Faced by PES Lecturers in Classrooms with Student Teachers with VI.

Research question four sought to identify challenges faced by PES lecturers in PES theory and practical classrooms inclusive of student teachers with VI. After identifying such challenges, they were then asked to explain how those challenges could be resolved. The responses obtained from the participants helped the researcher to understand the challenges faced by PES lecturers with their pedagogical practices employed in classrooms which include student teachers with VI. The following were the challenges revealed.

4.4. 1 Lack of knowledge / Professional Preparation.

PES lecturers during interviews pointed out that they did not have much knowledge and skill to handle student teachers with VI because they never had special training as the following statements show by LP B and LP D respectively:

I have never been trained to teach the VI students. I have just acquired the knowledge and skill of teaching the VI students through experience. At times I do forget that my class consists of student teachers with VI and teach as if everyone in class has sight thereby, ending up offending such students...we need what we may call as professional development study lessons where to know how to teach these students because they learn in a certain way (LP B, Male, 17.03.2020).

I have never undergone any training where I could have been trained to handle or teach student teachers with VI. But the truth of the matter is that I am compelled to

handle them no matter what, that is the problem. I know quite well that I am trained personnel in PES but I am not a special person to handle student teachers with VI found nowadays in inclusive PES classrooms. I have never been to any special school which deals with special education and how to handle them in sports, that's the challenge on my part (LP D, Male, 17.03.2020)

They further said that during pre-service training, they never received any information about physical activity of students with VI which centers around orientation and mobility, transition, and recreational activities as indicated by LP A that,

...even when I was trained as a pre-service teacher, I received very little, if any information on orientation and mobility of students with VI. The amount of information on physical activity given to pre-service teachers about visually impaired students which usually centers around orientation and mobility, transition, and recreational activities is simply not enough (LP A, Male, 17.03.2020).

The student teacher with VI in an interview questioned the level of special education of the PES lecturer in his statement that,

The lecturer provides me with notes written in ink just like he does with student teachers with sight which I cannot manage to read. This indicates to me that the lecturer might have very little or no knowledge on transcription because he quiet alright knows that I cannot read notes written in ink (SP A, Man, 18.03.2020)

In order to solve the challenge of lack of professional preparation, PES lecturers said,

Professional preparation for practicing lecturers can be improved by providing information about pedagogical practices for including students with VI into the main content of the curriculum. Information needed include ways to modify physical and fitness activities, instructional strategies, and sports and recreational activity resources (SP C, Man, 18.03.2020).

In summary, PES lecturers said they did not have much knowledge and skills to handle student teachers with VI because their training had little to do with orientation and mobility of students with VI. Further, the student teacher with VI questioned the level of special education received by the PES lecturer who provided him with notes written in ink which he could not manage to read.

4.4.2 Lack of teaching resources.

All PES lecturers mentioned that teaching resources specifically for use on student teachers with VI in both theory and practical lessons were not provided by the college as elaborated below:

The college does not have teaching resources that PES lecturers can use to teach student teachers with VI in both theory and practical lessons. The only things the college buys are Braille papers and those things student teachers use for writing on the Braille papers, stylus (LP B, Male, 17.03.2020).

LP C added that,

We don't have an embosser. If an embosser is available, student teachers with blindness can just be given notes on soft copy which can then be put on lab computer. This equipment directly transcribes notes into Braille and we can have readily available notes in Braille because the embosser is a machine which transcribes computer commanded notes into Braille. (LP C, Male, 17.03.2020)

LP D, LP C, LPA and LP B emphasized that the college lacks resources for PES practical lessons as indicated below.

A major challenge comes in when presenting a practical lesson because the materials to use especially for student teachers who are not sighted are not there. (LP D, Male, 17.03.2020).

LP A added that:

I have seen that even parents are not helping me because we just depend on the learning materials which are bought for those students who have sight. (LPA Male, 17.03.2020)

Student teachers with VI had the same point as that of the lecturers about the college's lack of resources for them as explained below.

In other schools which have the VI students, they do provide balls which have rings inside which this college does not provide. Challenges we encounter include not having teaching and learning materials to use which we can touch and feel like we do in Art and design where tactile materials are provided as model which can be felt and identified as well as being heard. (SPB, Man, 18.03.2020).

In summary, all PES lecturers mentioned that the college did not provide them with teaching resources to use specifically on student teachers with VI in either theory or practical lessons. However, PES lecturers seemed to have an idea of the resources they could use which included an embosser which transcribes computer commanded notes into Braille.

4.4.3. Teaching new concepts not learnt at secondary level

Lecturers mentioned that they find difficulties in teaching student teachers with VI certain topics which they never learnt in some grades before entering into a college as narrated in the following statement:

Physical Education is a science which may involve the use of numbers. For example, the topic biomechanics, deals with concepts where numbers are involved in calculating distance, time and speed. These are mathematical related and it gives me a very big challenge when I am dealing with students with VI because according to what they say mathematics is the subject they do not learn from grade ten to grade twelve and it becomes a very big problem for them to learn it here at college (LP A, Male, 17.03.2020).

LP B added that:

Teaching of certain topics to student teachers with VI is not an easy thing. For example, the topics which involve calculations of the leagues and calculating the number of times to be played in a knockout are not easily learnt by students who are said not to have learnt mathematics in grade ten to twelve like the students with VI (LP B, Male, 17.03.2020).

In summary, PES lecturers mentioned that they had difficulties teaching student teachers with VI certain topics they never learnt at secondary school like the topic, biomechanics, which involve mathematical concepts not learnt at secondary.

4.4.4 Lecturing pace

LP B and LP C mentioned lecturing pace as another challenge as indicated in the following

Verbatim,

I find it challenging at times to slow down for the student teacher with VI in an inclusive PES class. But this needs to be done because it helps to accommodate those students for them to understand and catch up with others (LP B, Male, 17.03.2020).

LP C further said:

Student teachers with VI do not move at the same pace with those who have good sight because those lack the ability to see and they move at a very slow pace. I can also say that time is not adequate and the taking down of notes is done much with the help of friends (LP C, Male, 17.03.2020).

In supporting the point that time for the students with VI is inadequate, SP B said,

At times the lecturer doesn't wait for me to finish perfecting an activity when my fellow students are guiding me. He rushes and introduces another activity to the class (SP B, Male, 18.03.2020).

Lesson observation confirmed what was said by SP B that the lecturer at times never spared time for that student even though his commitment in involving him in the lesson was noticed.

In summary, PES lecturers mentioned that they find it challenging at times to slow down for the student teacher with VI during lesson presentation in an inclusive PES class. The same was said by student teachers with VI. Lesson observation confirmed what was mentioned. However, slowing down for the student teacher with VI was said to be important and needed to be done because those students by nature are slow and do not move at the same pace with their friends who are sighted.

4.4.5. Number of transcribers in the college

LP B, SP B and SP A identified transcribing notes into Braille as a challenge at that college and in verbatim LP B said:

The college does not have many transcribers to transcribe work for student teachers with VI in good time and yet those students write in Braille. I find work of that kind to be very difficult to ready because I am a lecturer who does not have any knowledge about it (LP B, Male, 17.03.2020).

Student teachers with VI also pointed out that they were provided with notes written in ink which they could not read as SP B narrated:

The PES lecturer provides me with notes but the notes he brings me ma handouts written in ink which is impossible for me to read unless work is written in Braille. Lecturers need to provide us with notes on a flash in soft copy which may be transcribed for me to read when I am studying (SP B, Man, 18.03.2020).

Apart from being provided with hand-outs written in ink, student teachers with VI also highlighted that they lacked materials to study as well as having their results missing as the following statement explains,

I lack materials to use in learning.... Sometimes my results, as the only VI student in this class, are lost and I do not know at which point they get lost because just after writing all what I do is to take my work for transcribing. Sometimes all what I just see is a small paper with results written on after taking my work for transcribing (SP A, Man, 18.03.2020).

In summary, the college did not have many transcribers who could transcribe work for student teachers with VI and lecturers found work written in Braille very difficult to ready because of lack of knowledge about it.

4.4.6. Modifying activities

LP A and LP B found challenges in modifying activities and in the following statement, LPA said,

I find it difficult to modify the activity and make it different from what I have planned (LP A, Male, 17.03.2020)

In summary, PES lectures found challenges in modifying activities, making them different from what was planned.

4.4.7 Attitude of student teachers with VI.

It was narrated by LP D that:

At times there are students with VI who have good temper and you can relate with them very well but there are also others who feel that they are isolated while in fact they are not. Looking at that, it depends very much on the attitude of that particular person. At times some of them would not want to be treated in a special way. But if you take that same approach to that other person, may be that other person may feel offended because he or she would want to be treated in a special way (LP D, Male, 17.03.2020)

SP A added that:

Practical lessons are a challenge in the sense that each and every time I need students who are sighted as allowed by my lecturer to be by my side to show me how to perform a particular activity. Because of how different people are, I may not receive instructions the way I am expecting them to be due to lack of patience in the student giving guidance and also lack of experience in handling student teachers with VI like myself, thinking that the way they can know it can be known or taken in the same way by me (SP A, Man, 18.03.2020)

SP B further said:

I isolate myself from my friends, the sighted students, despite the lecturer encouraging me to feel free to participate in the activities which I find myself not capable of performing as I am not able to see. I feel like I am disturbing my friends (SP B, Man, 18.03.2020)

In summary, findings from interviews revealed that lecturers had a challenge with the attitude of some student teachers with VI towards themselves. Some of them never wanted to be treated in

the special way thinking that if that happens it could mean they are being isolated. Others were mentioned to isolate themselves from friends because of the thought that they waste their friends' time as they try to help them.

4.4.8. Lack of a special unit and inadequate specialized staff.

All PES lecturers highlighted the point that the college did not have adequate specialized staff and a special unit of the required standard of student teachers with VI as narrated by LP A that,

The college does not have adequate specialized staff and a room specifically for student teachers with VI as a special unit of a required standard and this also is a problem (LP A, Male, 17.03.2020).

In summary, all PES lecturers highlighted the point that the college lacked specialized staff and a special unit of the required standard for student teachers with VI.

4.4.9. Curriculum and Activities

With regard to the curriculum and physical activities, PES lecturers had this to say,

Activities like netball, football, volleyball and other ball games are contained in the curriculum for general PES course but these are not conducive to independent participation by students who are visually impaired. However, there is no harm with such activities being performed by such students. These activities require visual-motor coordination. This means that there is need for tracking the ball and the opponent if they are to be played successfully (LP C, Male, 17.03.2020).

In summary, PES lecturers had the challenge with the curriculum and activities provided in general PES classes which were mentioned not to be conducive for independent participation by students with VI.

4.4.10 Summary

Basing on the four research questions that this chapter has presented, the findings that were arrived at strongly revealed two major categories of pedagogical practices used by PES lecturers, that is those used in theory lessons and those used in practical lessons. Those used in theory lessons included asking questions and allowing students to answer as well as lecturing. Demonstrating

activities, giving students work to do in groups and/or in pair, attending to individual students with VI, performing an activity in parts and performing an activity as a whole, then in parts and finally as a whole, were practices PES lecturers brought out under PES practical lessons. Even though such practices were mentioned, less involvement of student teachers with VI by lecturers in both theory and practical PES lessons was observed.

Further, findings reviewed how PES lecturers ensured that pedagogical practices they employed benefit student teachers with VI in PES theory and practical lessons. PES lecturers narrated that during theory lessons they called students by name, avoided giving student teachers with VI some tasks and transcribed their notes into Braille. For practical lessons, they mentioned of touching student teachers with VI, giving them modified activities, performing individualized learning and guiding them during their learning. Even though that was said, lesson observation showed less to that. For example, physical activities were not well modified by lecturers, no extra time and vague statements were given in an attempt to give such students guided learning.

Furthermore, description of teaching resources used on student teachers with VI during theory and practical lesson presentation was not done by PES lecturers because the college did not have any teaching resource for such students. That was even confirmed through lesson observations where no lecturer used any resource specifically meant for such students. Even though that was the case, PES lecturers seemed to have an idea of the right resources to use on the mentioned students.

Lastly, PES lecturers had challenges in handling student teachers with VI during lessons which included: lack of knowledge and/ or professional preparation, lack of resources, lecturing pace, and difficulties in modifying activities, inadequate time, inadequate specialized staff as well as the curriculum and activities. Solution to such challenges were highlighted. The chapter that follows is a discussion of the findings that have been presented in this chapter.

CHAPTER FIVE: DISCUSSIONS OF THE FINDINGS.

5.0 Overview.

This chapter discusses the findings of the study and their implications on lecturers' pedagogical practices on student teachers with VI in PES classrooms. The purpose of the study was to explore PES lecturers' pedagogical practices on student teachers with VI in PES classrooms at a selected college of Education in Central province. The findings are discussed in relation to the research objectives and the existing knowledge of lecturers on their pedagogical practices on the mentioned students. In this chapter, effort has been made to reflect, confirm and extend current knowledge and thinking in lecturers' pedagogical practices. This has helped to interpret and outline what the findings meant to the current study.

5.1 Pedagogical Practices Employed by PES Lecturers on Student Teachers with VI in PES Classrooms.

Pedagogical practices used on student teachers with VI were categorised into two namely, those used in theory lessons and those used in practical lessons. Asking questions and allowing students to answer as well as lecturing were pedagogical practices mentioned under theory lessons while demonstrating activities, giving students work to do in groups and/ or in pairs, attending to individual student teachers with VI, performing an activity in parts, performing an activity as a whole, then in parts and finally, as a whole, fell under practical lessons.

5.1.1. Pedagogical Practices Used by PES Lecturers on Student Teachers with VI In Theory Lessons

Findings from interviews revealed that student teachers were asked questions and they were expected to give a response to that. Asking questions in classes which include student teachers with VI can be a good pedagogical practice because students with VI are able to hear and can actively participate in the lesson. The kind of teaching where there is interaction between the lecturer and students is appreciated as this makes it possible for students to bring out their views concerning what they know. What was revealed by PES lecturers was in line with what Conroy (2012), encourages that there is need for a paradigm shift from the traditional teaching approaches to modern ones where there is interaction between a teacher and a student. This approach is useful in uncovering learning deficits in conceptual experiences and understanding in student teachers with VI because they lack vision. With this approach, PES lecturers can know, take measures and ensure that student teachers with VI understand concepts.

While lecturers' effort in asking questions and allowing students to respond was noticed, lesson observation showed some challenges in involvement of student teachers with VI in lessons. For example, LP B did not make it known to the student teacher with VI that he was the one he wanted to respond to the question he asked. He just pointed at him and began waiting for an answer but it took some time for that particular student to respond to the question because in the first place he was not aware of what he was expected to do. Not until his fellow student with sight made him aware and touch him, telling him to respond, did he manage to do that because such a student could not see that he was the one the lecturer pointed at. This may suggest that lecturers lacked some knowledge and skills on how to handle student teachers with VI in an inclusive classroom. In practical lessons, PES lecturers' concentration was on demonstrations of physical activities and allowing students to practice. They never bothered to ask student teachers with VI difficulties they encountered during the performance of activities as that could help to reveal successes or challenges faced as they perform activities. Inclusive pedagogy encourages embracing every student in class either it be those with sight or those without (Pantic & Florian, 2015, and Majoko, 2017).

Lecturing was another pedagogical practice revealed from findings. During interviews, PES lecturers revealed that lecturing is employed in theory PES classrooms and lesson observation confirmed the use of this practice by PES lecturers. Lecturing cannot be a good pedagogical practice. Where lecturing is used throughout the lesson, student participation is not there. As indicated by Conroy (2012), lecturing is a non-participatory method of teaching in developing countries. This also includes Zambia. This pressure from a rigid curriculum of wanting to finish the syllabus at every end of the year makes lecturers use lecture method, which is discouraged and said to be inappropriate in inclusive teaching, especially for student teachers with VI (Muzata, et al, 2019).

Additionally, while student teachers with sight were busy taking down points during lecturing, student teachers with VI were doing nothing. This indicated that such students were not fully involved in the lesson. This could be that the pace at which lecturing was done did not accommodate such students. Muzata, et al (2019), advises that while lecturers need sensitization of being at pace when teaching, students also need sensitization on the use of recorders and computers to take notes. A participatory approach is therefore, appreciated where students with VI can interact with the lecturer together with other students who are sighted.

5.1.2. Pedagogical Practices Used by PES Lecturers on Student Teachers with VI in PES Practical Lessons.

It was revealed from interviews that PES lecturers demonstrated physical activities during practical lessons before allowing all the students to perform. What was revealed through interviews was even observed during lesson presentation although not properly done. LP A, LP C and LP D made little effort in including students with VI in lessons. They never took kin interest in guiding students with VI on performance of activities. However, little effort in guidance was seen from students with sight who at times mislead such students like the case was with LP B. The failure of that lecturer to give proper guidance on how such a student could throw the ball led to failure of that same student to get involved in the game. That strategy is good although it was wrongly used. Lecturers needed to demonstrate the skills to all the students and more time was supposed to be spent on making demonstrations to students with VI. Giving guidance to such students during demonstrations is encouraged (Conroy, 2012) and student involvement in the lesson is observed if there is directive teaching. Doing that prevents forgetting the skills and concepts learnt and also prevents being misled by other students. Educators are encouraged to be patient with themselves and students with VI because such students need more time.

Furthermore, it seems a student teacher with VI lacked self-confidence by giving a response of laughing and saying that he could not manage performing an activity every time he was told to do that. In such a case, a PES lecturer needed to console and encourage such a student to participate in the lesson for him to build self- confidence. Counselling and encouragements create an enabling environment which greatly enhance a learner's confidence and enjoyment in the learning situation (Conroy, 2012). It could therefore be said that, difficulties in learning of students with VI is attributed to a professional challenge instead of deficit in children as indicated in Inclusive pedagogy (Pantic & Florian, 2015).

Another pedagogical practice revealed was giving students work to do in either groups or in pairs. Even though this practice was mentioned, PES lecturers did not use it in theory lessons. This could have been a good strategy especially if mixed grouping is used because segregation is avoided and cooperation is promoted. Cooperative groups in inclusive classrooms have been proven and found good in bringing about social interaction, academic achievement and positive attitude towards the subject. Additionally, tasks or assignments should be discussed in cooperative groups (Conroy, 2012).

Finding from PES practical lesson observations showed the use of mixed grouping as there was no option about it because each class had only one student teacher with VI. Using mixed grouping strategy supports learning of all children rather than depending on ability grouping which separate able from less able (Pantic, 2015). Even though that was the case, lecturers had little or no time to look at performance of student teachers with VI. Much time was supposed to be spend on correcting such students' actions instead of leaving that task to fellow students with sight who did not give clear instructions because they were also required to perform activities. It may be suggestive that orientations be done on how best PES lecturers can handle students with VI and how peers can come in to help.

Individual learning was another pedagogical practice revealed from interviews. It was evident from practical lesson observation that PES lecturers never rendered individualised learning to student teachers with VI even though that was mentioned. Lecturers were supposed to give special instructions to student teachers with VI which could have signified individual learning. The issue of Individualized Education Plan (IEP) for each student with VI was supposed to be brought in where such students needed to learn what others were learning in inclusive classrooms but in a unique manner. Lecturers were right to have all students perform the same activities even though students with VI generally failed to perform according to expectations like others. Students with VI typically need some modifications for them to be successful in the performance of physical activities (Sherrill, 1998). IEP need to include goals and objectives related specifically to physical education. This therefore, does not mean that an adapted designation on the IEP involves a student with VI receiving separate physical education. Adapted physical education is a service, not a placement (Lieberman, 1996). All students learn, progress and achieve their needs if the teaching focuses on what they can do and not what they cannot (Floriah & Linklater, 2010)

Additionally, PES lecturers reported during interviews that physical activities are supposed to be performed in parts in practical lessons. Contrary to what was reported, observation in a PES practical lesson showed less to the practice mentioned. Most of the activities were performed wholly. This implies that activities were not performed in parts. This strategy could be usefulness in helping student teachers with VI in the performance of an activity at every stage and is helpful in teaching difficult parts of activities. Sichela (2018), sees need to demonstrate skills in parts and step by step knowing that there are students who are slow. Students with VI spend more time in many of the activities they do in the class, as compared to other students without VI.

Further, performing an activity as a whole, then in parts, and finally, as a whole, was mentioned as another pedagogical practice employed in PES practical lesson. Even though that practice was mentioned, what was observed during lesson presentation was that instructions received by student teachers with VI were not very clear and did not support learning like the case was with LP B, where that student failed to perform as expected. The lecturer held his waist and rotated it clockwise saying to the student with VI, “do like this,” but that student could not do what was asked because he was not able to see. This strategy was wrongly used because instructions a student teacher with VI received were not clear. This could be a very good practice if clear instructions are given to student teachers with VI before performance of an activity. Sichela (2018), encourages performing difficult physical activities using whole-part-whole method while Conroy (2012), advises that there is need to incorporate certain instructions which support the learning of those children with learning challenges. This study complements other researches, demonstrating that physical education educators are willing to include and directly teach students with VI, but do not always know how (Conroy, 2012). This therefore, is a clear indication that in-service training needs to be undertaken by PES lecturers for them to learn appropriate pedagogical practices to use on student teachers with VI.

5.2 How PES Lecturers ensured that Pedagogical Practices Employed in PES classrooms Benefit Student Teachers with VI.

Findings from interviews brought out two categories of Pedagogical practices employed by PES lecturers for student teachers with VI to benefit in PES lessons. The two categories were from PES theory and practical lessons. From theory lessons, pedagogical practices mentioned were; calling students’ names, avoiding the giving of some tasks to student teachers with VI, and transcribing notes into Braille. Those that emanate from practical lessons included, touching student teachers with VI, giving modified activities, individualized learning and guided learning.

5.2.1. How Student Teachers with VI Benefit in PES Theory Lesson

During interviews, findings revealed that PES lecturers call students with VI by their names to capture their attention for them to benefit in the lesson. What lecturers said correlate with what Mastropieri & Scruggs (2010), and Salisbury (2008), advise that calling students with VI directly by their names draws their attention towards the lesson. What was said was observed during lesson

presentation where such students were called by their names at least once during the lesson. Such an action happened when students with VI had their hand up and wanted to contribute. Calling of names really help students with VI to be attentive and be ready to perform an activity in the case of a practical lesson. It was good that lecturers maintained that requirement in inclusive classes for the benefit of student teachers with VI. By so doing, student teachers contributed in the learning process where they were able to.

While calling of names of students with VI was appreciated, it could be said that that strategy was wrongly used because there was biasness in the calling of names of students in an inclusive classroom. It was necessary to call every name of a student who was holding the floor during lesson presentation including students who were sighted. That could be done for easy identification of who was holding the floor. UNESCO (2001), advises that it is important to use students' names during class discussions so that students are identified. It may be suggestive that PES lecturers lacked that knowledge on the use of all the names during their lesson presentation. The one-time observation was enough to prove the motives all lecturers had.

PES lecturers also narrated that they avoided giving student teachers with VI certain tasks which they felt could not be done by them. Such tasks included anything to do with mathematical concepts where calculations were involved. Avoiding the giving of certain task to such students could be much better if such could not be done by the said students because learning focuses on what students can do instead of what they cannot (Pantic and Florian, 2015). In addition, learning could be difficult since students themselves said that they never learnt anything involving mathematical concepts at secondary school, indicating that they were given alternative work. Further, lesson observations during all PES lecturers' presentations did not show aspects of mathematical concepts coming out as topics were not centred on that.

Research findings also revealed that PES lecturers had the notes for student teachers with VI transcribed before or after the lesson for students with VI to benefit in the lesson but further narrated that transcription took too long. The idea of transcribing notes into braille is highly appreciated and it might be a good strategy because that is the best way such students could access notes which could be read and make them benefit from what is learnt. But student teachers with VI further narrated that the taking long of the transcription of their note into Braille at times resulted in them not benefiting in the lesson. This was even observed during lesson presentation

where such students were not supported in their learning in terms of accessing of the notes. They had very few notes transcribed for studying. What could be of help is to teach students to write their own notes in Braille during lecturing in order to avoid such challenges. This needs to be the task of the lecturer who needs to mentor his/her students to write notes even though students reported that they find difficulties in doing that because of the pace at which lecturing is done. Inclusive pedagogy encourages that ability can be improved by the mentor (Pantic & Florian, 2015).

5.2.2. How Student Teachers with VI Benefit in PES Practical Lessons.

Findings from interviews reviewed that PES lecturers touch student teachers with VI to get them involved in practical lessons. This can be the right strategy to use because such students lack sight and when the lecturer touches them, they may feel being recognised. What lecturers said matched with what was observed during practical lesson presentation. Student teachers were touched by PES lecturers as they showed them how to perform physical activities. Touching students enhances their concentration and involvement in the lesson. With that practice, the presence of such students was felt and they actively involved themselves in the lesson.

Findings from interviews also revealed that student teachers with VI were given modified activities by PES lecturers in practical lessons if activities prepared for the whole class could not be performed by such students. The idea PES lecturers had was in line with what Lidor & Hutzler (2019) support that from a practical point of view, the existing programs should undergo various modifications and adjustment for students with VI. Contrary to what was said, almost all the lecturers had all the students performing the same activities without modifications regardless of the disability. This meant that activities performed by the students with sight were the same activities performed by student teachers with VI in classes for LP B, LP C and LP D. Even though that was the case, students with VI had difficulties in getting involved and actively participating in physical activities with students who were sighted. Since the class had students with VI, physical activities were supposed to be adapted to meet the unique needs of the students in a Physical Education class. Such modified activities could have been addressed in the student's IEP with specific goals and objectives for those activities written on the IEP as advised by Houston-Wilson & Lieberman, (1999).

Further modification was made in a class for LP A but that was wrongly done. The modification made by the PES lecturer involved a student teacher with sight to simply run and give an ordinary

netball ball to a student teacher with VI for him to throw to his team mate. However, an ordinary ball was not a right resource to use by students with VI as it could not bring out any effect on such students. How difficult it was for a student teacher with VI to know his team mates to throw the ball to, was even observed. But such a game should not be avoided to students with VI. Therefore, modifications could have included the use of auditory balls and goals, slower moving balls, and when necessary, changing-the rules of the game to accomplish the similar or same goals.

Apart from making such modifications, students with sight were supposed to be mentored well for them to help their friends with VI. Vygotsky (1978), and Wade (2000), advise that assistance from other students may help students who are academically lagging behind to accomplish activities, and achieve higher performances which on their own cannot be achieved. Through peer assistance, that gap of knowledge becomes filled. Therefore, lesson observation showed the lecturer encouraging students to help a student teacher with VI but that was not easily done. It could be true that the activities were not well modified by the lecturers leading to less involvement of student teachers with VI in physical activities.

Findings from interviews also revealed that student teachers with VI receive guided learning in practical lessons when performing physical activities as a means of making them benefit in physical activities. If students' learning is guided, it means specific instructions given to them need to be followed. PES lecturers' idea of guided learning is in line with what Conroy (2012), emphasize that apart from just using teaching and learning strategies that are appropriate for most students with additional and non-additional needs, certain instructions also need to be incorporated to support the learning of students with learning challenges. Even though PES lecturers brought out the issue of guiding students in their learning, what was observed during lesson presentation was that lecturers used words which were not helpful to student teachers with VI and such words included "here" "there," or "over here" or "this and that" when performing activities. PES lecturers needed to use the exact words they wanted such students to act on instead of saying, do like this, because such students could not see the actions being performed. For example, they could have told such students to hold the waist, to bend, to be in crouch position and to do other things. Such words used by lecturers were ambiguous and not helpful to students with VI. Mastropieri & Scruggs (2010) discourage the use of ambiguous language and phrases like "over here", "this and that" indicating that such words need to be avoided when teaching as they do not help students with VI understand what the teaching is referring to. If teaching is to be effective, there is need to

use proper language which students can clearly understand. Language should be seen as an important tool to use to transfer information between an educator and a student in the learning and thinking process of the student.

5.3: Description of Resources Used on Student Teachers with VI in PES Classrooms.

Another concern was on the description of teaching resourced used by PES lecturers on student teachers with VI in PES classrooms. It was impossible for PES lecturers to describe resources they used to facilitate the teaching of students with VI because the college was mentioned not to provide such resources as discussed below.

5.3.1.Un Available Resources for Student Teachers with VI.

Research finding reviewed that the college did not provide PES lecturers with resources to use in PES classrooms where student teachers with VI were included. This finding agrees with the opinion that relevant teaching materials for students with VI are not readily available due to lack of enough funds (Mboya *et al*, 2008). This trend has been in existence in Zambia and as indicated, current researches on inclusive education in Zambia have continued showing same challenges of lack of resources for students with disabilities (CSO & Ministry of Community Development and Social Services, MOCDESS, 2018). Effective teaching involves the use of appropriate resources as these simplify teaching and facilitate learning. Students with VI find it difficult to learn and acquire knowledge and skills if appropriate teaching and learning resources are not used. This was the same observation made during lesson presentation because student teachers with VI were made to learn skills in a limited way without the use of resources and yet they lack the ability to see. PES lecturers needed to acquaint those students with the visual environment. This implies that PES lecturers were supposed to be provided with appropriate teaching resources which could have facilitated their proper use of pedagogical practices for students with VI to learn effectively. However, lack of teaching resources by the college did not mean that PES lecturers did not have any idea of the resources which were supposed to be used by students with VI. Suggested resources were brought out as indicated below.

5.3.1.1 Suggested Resources for Use on Student Teachers With VI.

PES lecturers made suggestions of what they needed to use for student teachers with VI to benefit in PES lessons. What they suggested were human guides, concrete materials, improvised materials and models.

Human guide was suggested as a necessary resource to use on student teachers with VI in PES lessons. PES lecturers indicated that a student teacher with sight could be used as a guide to a student teacher with VI in running situations where they could run along together. An orientation and mobility instructor could also be used as a guide to help in ensuring that students with VI are actively included in PES lessons. One of the strategies which was suggested for use was pre-teaching, which was defined as teaching elements of the next lesson, activity or skill prior to the student participating in a lesson. The PES lecturer and the orientation and mobility instructor could assist with pre-teaching by reinforcing the information the student needs to know before the class. Key elements for students with VI to learn before the next lesson include the physical layout of a playing area, the equipment used in the game, terminology related to a game or sport, the scoring system used, the player positions involved in the sport, game strategies, and any other background information related to the activity. This kind of teaching may include, orientation and mobility practice, tactile maps and actual instructions involved. As indicated by Lieberman & Houston-Wilson (2018), the physical educator can consult with the student's orientation and mobility instructor who can assist with this strategy to incorporate tactile mapping and court or field orientation into their lessons

In summary, PES lecturers narrated that a fellow student, who is sighted, could be used as a guide during the lesson to facilitate involvement of students with VI in PES lessons. However, another guide could be an orientation and mobility instructor who during pre-teaching, together with the physical educator can reinforce the information the student needs to know before the class. These guides may promote a quicker understanding of and response to the desired task and better skill performance in practical lessons.

Other suggested resources were concrete materials like balls with rings inside, which could help student teachers with VI to get involved in games which use a ball, in practical lessons. This suggestion was brought in after noticing difficulties encountered by such students when using an inappropriate ball which could not be located where it was. The findings of this study therefore, propose what ICC (2008), and Mboya et al (2008), advise that inclusive education for students with VI becomes successfully implemented if appropriate teaching resources are available.

Improvised materials were also other teaching resources which were mentioned to facilitate involvement of student teachers with VI. Chess mats were among items to improvise but PES

lecturers made it clear that they did not know how to adapt teaching resources to suit the needs of such students. If PES lecturers are well oriented in their meetings, improvising materials for use on students with VI can be a very simple task. The response PES lecturers gave of not knowing how to adapt teaching resources to meet the needs of students with VI was the same concern raised by Conroy (2012), who acknowledges that teachers lack the knowledge and skills of adapting teaching materials to become relevant to the needs of students with VI. There is therefore, need to emphasize on orientations and in-service courses where teacher educators can be imparted with knowledge and skills that can enable them improvise materials which can help in the use of the right pedagogical practice.

Finally, other resources suggested for use in PES classrooms were models. A model of the skeletal system was cited as example which could help to teach on the body system. Although such a resource could be touched and felt by students with VI, PES lecturers made it clear how difficult it was for such to be made. From a practical point of view, effective use of pedagogical practices needs the existing programs to undergo various modifications and adjustment (Lidor & Hutzler, 2019). This therefore, calls for PES lecturers' orientations within the college on how models can be made and if possible, just buying models specifically for students with VI because such students lack sight and feeling objects could be one way of enhancing their involvement and participation in lessons.

5.4. Challenges Faced by PES Lecturers in Classrooms Which Had Students with VI.

Pedagogical practices employed by PES lecturers had some challenges with having student teachers with VI get involved in PES lessons. One of the challenges was lack of enough knowledge and skills by PES lecturers to handle student teachers with VI because they never had special training associated with such students. The finding of this current study was similar to the findings of the study conducted by Central Statistical Office, CSO, & MoCDSS (2018), that current researches show the same challenges in the education of learners with VI. CSO & MoCDSS (2018), point out that most PES educators in schools are generalists and they may need knowledge and skills to actively involve students with VI in their teaching. That was the same situation reported by PES lecturers as indicated by LP A that, "I have not been trained in special education to handle student teachers with VI in PES classroom." In other words, it can be said that there was lack of professional preparation on the part of PES lecturers. The student teachers with VI

attributed their receiving of notes written in ink to little knowledge PES lecturers had on special education. There is therefore, need to have in-service trainings and orientation programmes where PES lecturers may be trained and sensitized on how to handle students with VI.

Another challenge revealed was lack of teaching resources. Findings revealed from interviews indicated that the college never provided PES lecturers with teaching resources to use specifically on student teachers with VI in both theory and practical lessons. This was even evidenced from lesson observations made in both theory and practical PES lessons where no resources for students with VI were made available. It could therefore, be said that student teachers with VI were neglected while concentration was on students who were sighted because resources which were available were just for the later students. However, education is the right of every individual in the society regardless of any disability. The abilities of the visually impaired can be improved through education, but to achieve this goal, the government must seek the advice of experts to develop teaching aids for the VI to enable participation in school activities, team sports and other activities (Chao-Chien, 2012) Additionally, post-secondary institutions like colleges and universities are required by federal law to maintain technology centres where students with disabilities may acquire the necessary equipment and materials as advised by Myers and Bastian (2010).

The finding of the current study was similar to the study conducted by Muzata, etal (2019), who reports that implementation of inclusive education was characterized with difficulties of accessing teaching and learning materials for the visually impaired, among others. Further advice given is to use assistive technology which requires specialized software, devices and other forms of technology which facilitate learning of student teachers with VI. Additionally, lecturers need to be innovative and creative in their teaching as that can bring about teaching resources which can facilitate learning of such students. Inclusive pedagogy demands teachers to develop innovative ways that enable them work with other stakeholders in order to come up with rich learning communities (Majoko, 2016).

The teaching of new concepts not learnt at secondary level was another challenge PES lecturers faced as they handled student teachers with VI in PES classrooms. PES lecturers made it clear that they had difficulties teaching student teachers with VI certain topics, for example, biomechanics, which they never learnt at secondary school. Such topics were said to involve mathematical concepts not learnt at secondary school. Finding of the current study correlated very well with

what was found by Muzata, et al (2019), in their study on perceptions of students with VI towards their inclusion in the faculty of education at the University of Zambia: A phenomenological study. The study revealed that students had challenges that related to a rigid curriculum that lecturers were unable to adapt to meet their learning needs. Among the challenges students reported to have faced included the nature of content taught such as statistics or mathematics related content. Learning such content could be a disadvantage on the part of students with VI if they never had such a back ground as narrated by LP B that, “I was exempted from taking mathematics at secondary level.” There must be continuity in learning of concepts, building on from known to what is unknown. From the above, it can be perceived that student teachers with VI cannot be fully involved in the lessons because they can have difficulties learning some content in which they never have any back ground. This is against the advice given by Floriah & Linklater (2010), who affirm that all children learn, progress and achieve their needs if the teaching and learning focuses on what children can do and not what they cannot.

The curriculum therefore, should not be rigid, it must be adjusted to meet the needs of every individual. This implies that the learning of student teachers with VI depend on what they can do instead of what they cannot. Differentiating the curriculum as well as instruction for students in the PES class could be essential. For students with VI, this could mean incorporating instruction in the skills of the ECC into lessons and learning units. This support strategy requires the lecture to be master of content knowledge in the subject and to know the needs of each student in the class well. Differentiated instruction allows PES lecturers to support student learning through the design of the lessons and activities and through effective instruction.

Another challenge that PES lecturers face in general Physical Education relates to the pace of lecturing. PES lecturers unknowingly may move along at a pace that is conducive to learning for sighted students but not for students with VI. As indicated by Lieberman & Cowart (1996), student teachers with VI need specific explanation, demonstration, physical guidance, and feedback regarding skill or activity performance. It simply means that time must be spared for their attention. Otherwise, by the time they understand and elicit the desired movement, the class may have already moved on to another activity as indicated by SP A (2020) that, “the lecturer does not wait for me to be shown how best I can perform an activity. He just moves on to another activity without paying particular attention to how I am performing.” This act shows some sort of segregation by

PES lecturers. This finding was similar to the findings conducted by Muzata, et al (2019), on perceptions of students with VI towards their inclusion in the faculty of education at the University of Zambia where students had difficulties coping up with the speed of lecturing and taking down notes. Inclusive pedagogy, as a theory, rejects the deterministic belief about ability being fixed, instead it brings out the idea that ability can be improved by the mentor (Pantic & Florian, 2015). This implies that in theory lessons, such students need to use computers and JAWs software for them to read and write quickly as the use of Braille to take notes slows them down, making them fail to catch up with the speed of lecturing. PES lecturers therefore, need sensitization on how best they may be at pace during their teaching while students need sensitization on how to use recorders and computers in taking notes

Further, what could be ideal to removing this barrier would be to change lecturing styles from a more lecturer-directed, that is command style, to a more student-centered teaching style, for example, taking on problem solving, cooperative learning, and guided discovery. The use of trained peer tutors or guides may promote a quicker understanding of and response to the desired task and better skill performance in practical lessons.

The other challenge mentioned was transcription of notes into braille. The finding that PES lecturers had a challenge in having notes transcribed into Braille for student teachers with VI was attributed to lack of knowledge PES lecturers said they had. They could not even read assignments and tests written in Braille. The college was mentioned to have few transcribers who could not manage doing the work in the quickest possible time. Since PES lecturers had no knowledge about transcription of assignments and tests for students with VI, such tasks were done by transcribers although they took too long to do that work. However, student teachers with VI complained of receiving feedback late and yet feedback is cardinal in learning. Muzata, et al (2019), points out that having the knowledge of results is supposed to be timely in order to inform learning and that motivates students to even work on their weaknesses based on the same within that same time. What is therefore, shown is unfairness on the part of student teachers with VI receiving feedback long after their peers have received it on the same task given at the same time. This does not reflect well in the classroom where the lecturer would want students with VI to fully get involved in the lesson. Such students may feel segregated, discriminated or ignored.

Modifying activities for student teachers with VI was another challenge faced by PES lecturers. With regard to this theme, it seems PES lecturers understood that student teachers with VI require adaptive and modified activities if they are to achieve their educational needs. As indicated by Lidor & Hutzler (2019), effective involvement of students with VI requires the existing programs to undergo various modifications and adjustment. Even though that understanding was there, PES lecturers had difficulties in modifying activities for student teachers with VI in PES classrooms and that did not help such students to fully get involved in lessons. From a practical point of view, during lesson observation, a student in a class for LP A did not manage to fully get involved in the performance of netball game and ended up complaining that he could not manage performing that activity. Therefore, activity modification which was required by LP A, for example, was to make changes to the equipment, which in that case was an ordinally ball which needed to be a ball with a bell in side. Other things that needed modification included the space or surface, the environment, distance to targets, or even the rules or speed of the game which in that case was netball. It is however, important to note that these modifications need to be offered to the entire class so that the student with the VI does not stand out or feel marginalized. The above finding was similar to the finding in the study conducted by Barack (2013), on teaching students with VI in inclusive classrooms. It was found that teachers struggle to modify their teaching to suit needs of students with VI and added that it might be one of the reasons why they even resort to teaching students mostly using common strategies which do not help students with VI.

Attitude of student teachers with VI towards themselves was mentioned as another challenge. PES lecturers' finding that some student teachers with VI have a negative attitude towards themselves feeling that they are isolated while in fact they are not, may not force them to try their best to involve such students in PES classrooms. Student teachers with VI need to be treated in a special way and there is no need to feel offended about it. They also need to be helped by their friends and this may not make them feel as if they are just disturbing them. Special attention is therefore, required to sensitize PES lecturers who in turn may sensitize student teachers with VI to accept the support provided to them as deserving students with special education needs from their colleagues who have sight. If inclusion has to be real, there is need for extra support that brings about student participation in learning. Continued sensitization against negative attitudes is also required. Conroy (2012), advocates for a provision of sensitive transition in higher learning institutions for students with disabilities which include among others, student teachers with VI,

during their first year of attendance. This needs to be done to prevent early leaving while promoting academic success. In order to do that, orientations, tutorials and counselling are involved. This entails that, PES lecturers need skills if they are to teach such students in PES classrooms. It is therefore, important to have staff development in teacher preparation in colleges of education and universities in Zambia where among other issues, inclusive education can be learnt if there is to be effective involvement of students with VI in the education system.

Lack of a special unit and inadequate specialized staff were also other challenges mentioned. PES lecturers finding that the college had no special unit of a required standard for student teachers with VI and inadequate specialized staff to transcribe notes cannot promote involvement in learning of such students. A special unit has got appropriate resources meant for use by such students. The advice given by CDC (2013) may be taken that learning institutions need to provide appropriate resources for quality learning to students with SEN. Further, there was delayed feedback or having results for students with VI missing because of very few personnel to transcribe the notes for such student teachers. The higher learning institutions therefore, may need to have a disability unit and adequate specialized staff to take care of the needs of students with disabilities and avoid losing Braille papers.

Finally, curriculum and physical activities provided in general physical education classes were seen as other challenges faced by PES lecturers. Activities like netball, volleyball, football, and other ball games were mentioned not to be conducive to independent participation by students who are visually impaired. Such activities require visual-motor coordination. Students with visual impairments need orientation and mobility training or physical therapy but the lecturer might not have an idea on how to go about it if such a training was not undertaken before. However, these activities cannot be avoided to students with VI because they can be modified in order to meet the needs of such students (Lieberman & Cowart, 1996). That is the reason why auditory balls and goals, slower moving balls and where necessary, changing the rules of the game, to accomplish the similar or same goals, can be used as ways of making modifications. This means that there is need for tracking the ball and the opponent if they are to be successfully performed. Such choices therefore, may help students who are visually impaired to successfully participate in physical activities.

5.5 Summary

This chapter presented findings of the study which were discussed in the light of reviewed literature and research objectives set out in the first chapter. The discussions were done using sub-themes arising from the presentation of the findings of this study. The study was on lecturers' pedagogical practices on student teachers with VI in PES classroom at a College of Education. Even though such pedagogical practices were revealed, observations showed that almost all the practices were used without proper involvement of student teachers with VI in both theory and practical PES lessons. Additionally, less was done to pedagogical practices mentioned. The use of teaching resources that facilitate involvement of student teachers with VI was not there. Even the resource, an ordinally ball, which was used during the lesson, did not support involvement of a student teacher with VI. Further, PES lecturers encountered so many challenges with pedagogical practices they used to have student teachers with VI get involved in PES classrooms and among others they lacked special training to handle such student. It could therefore, be said that even though PES lecturers seemed to have some knowledge on pedagogical practices to use on student teachers with VI in PES classrooms, such practices were not effectively used for such students to actively get involved in PES lessons.

CHAPTER SIX: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.0 Introduction

This chapter summarizes findings of the study and makes conclusions basing on the findings and further provides recommendations to resolve the problem. The chapter starts by presenting the summary which is followed by conclusions. It then makes, recommendations for the present study and finally, makes suggestions for future research basing on the findings of the study.

6.1 Summary

In pre-historic Zambia, Physical Education existed in form of physical activities of daily life and included among others activities such as hunting and swimming (Snelson, 1974). Colonial era brought in PE activities with games and sports copied from Europe (Zimbabwe Open University 2000). The post-colonial government with the education reforms of 1977 emphasized on the teaching of PE which in today's curriculum is a combined subject called PE and Sports. The national PES stakeholders reviewed the existing PES situation in which the gap, Inclusion of students with Special Education Needs (SEN) in PES teaching in Zambian schools was identified (MOGE & MOYSCD, 2017). Even though the policy encourages training institutions to include programmes involving SEN, research shows that educators perceive students with VI to be one of the most difficult populations to include in general PE (MOGE & MYSCD, 2017). This study explored lecturers' pedagogical practices on student teachers with VI in PES classroom at a selected College of Education in Central Province. In order to carry out the study, a qualitative research method was employed to gather data relatively from a small population sample of PES lecturers and student teachers with VI. Instrument used were interview guides and qualitative observation checklists. This was done to explore lecturers' pedagogical practices on student teachers with VI in PES classrooms.

Depending on the findings of the analysis, the following major findings were obtained. PES lecturers came up with two categories of pedagogical practices which they said were made use of when teaching student teachers with VI in PES classrooms. The first category emerged from theory lessons and included question and answer as well as lecture method. The second category emanated from PES practical lessons and included demonstrating activities, giving students work to do in groups and/or in pair, attending to individual students with VI, performing an activity in

parts and performing an activity as a whole, then in parts and finally as a whole. Although the above pedagogical practices were mentioned, observations showed that almost all of them were used without proper involvement of student teachers with VI in both theory and practical PES lessons.

PES lecturers also mentioned that in order to include student teachers with VI in PES lessons, activities are modified, students' names are called out, they are touched, guided, given individualised learning, some tasks are not given to them and notes are transcribed into Braille. Opposing this claim, lesson observations showed less to pedagogical practices mentioned. For example, with the issue of modifying activities, only one lecturer did that for a student teacher with VI in his class. Even though that was done, there was failure to fully involve that student in netball by his teammates and that might have been attributed to the lecturers' lack of knowledge on how the game was to be modified. From a practical point of view, effective inclusion needs the existing programs to undergo various modifications and adjustment.

Furthermore, PES lecturers never used teaching resources meant specifically for student teachers with VI and made it clear that the college never bought any of the teaching resource for use in either theory or practical lessons. One PES lecturer who used an ordinary netball ball to teach skills in netball game had difficulties having the student teacher with VI getting included in the game. That student complained because he could not receive the ball from teammates and he never knew how to throw the ball to them. All that happened because the teaching resource used was not appropriate for such a student. Another thing could be that modification of activities was not properly done. This meant that the resource was not applicable to the teaching of such students.

Finally, PES lecturers encountered challenges with pedagogical practices employed on student teachers with VI in PES classrooms which included among others inadequate knowledge and skills to enable them handle such student teachers. That might have been attributed to not having special training which could have helped them teach effectively. Teaching resources for such students were also lacking. Other challenges included having difficulties in teaching new concepts not learnt at secondary level, lecturing pace, few transcribers in the college, modifying activities, attitude of student teachers with VI and lack of special unit as well as inadequate specialized staff.

6.2 Conclusions

PES lecturers seemed to understand that adaptive and modified teaching is required if student teachers with VI are to actively involve themselves in PES lessons for them to achieve their needs. Even though that understanding was there, they had so many challenges in the use of pedagogical practices which were mentioned and that did not bring about successful involvement of such students in PES lessons. Much of the pedagogical practices employed needed modifications. During lesson demonstration, it was observed that modifications to instructions, the environment, and equipment were not made to allow for success. However, the effort PES lecturers made should be supported. They need to talk to their students with VI to find out what modifications would be useful to make them more successful and help them find enjoyment from the physical activities they learn in PES classes. Orientation and mobility instructors can also be brought in for guidance in terms of movements with regard to performance of physical activities. Much more, CPDs are required by PES lecturers in their institution for them to acquire knowledge and skills which can enable them handle students of that nature in PES lessons. The acquired knowledge can then be transferred to students with VI who in turn can use it in schools and help them teach the same subject and become lifelong participants of movement in society.

6.3 Recommendations

- This was a Qualitative case study and therefore, its findings may not be generalized to the entire inclusive colleges of education in Zambia, but they may be applicable to other inclusive colleges of education facing the same situation as the one used in this study. Therefore, these recommendations are particular to the college of education studied in Zambia.

6.3.1 Recommendations for improvements

The college need to:

- Provide CPDs where PES lecturers can be oriented on how best they can employ pedagogical practices so that student teachers with VI get involved in both theory and practical lessons.
- Procure materials and equipment for college lecturers and student teachers with VI that can help facilitate inclusion of such students in PES classrooms.

- Put in place a disability unit and have enough specialized staff to take care of the needs of students with disabilities.
- Have continued sensitization against negative attitudes by students with VI.

6.3.2. Recommendations for further studies

The present study focused on PES lecturers' pedagogical practices on student teachers with VI in PES classrooms. Data were collected from four male PES lecturers.

- Further research on the same study may be done focusing on female PES lecturers with different methodologies.
- The same study can be conducted using more than one college of education with more sample comprising males and females.
- Another study can be conducted on pedagogical practices used in other learning areas on student teachers with VI.
- It may also be important to carry out a study on student teachers with VI who are greatly affected by pedagogical practices used by PES lecturers in order to include them in lessons.

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APPENDICES

Appendix 1: PES lecturers' Consent Form

Introduction:

I am seeking your consent to be involved in a study related to pedagogical practices employed by PES lecturers on student teachers with VI in PES classrooms.

Description

The study is titled "PES lecturers' pedagogical practices on student teachers with VI in PES classrooms at a selected college of Education." It will involve you responding to the interview on the pedagogical practices you employ as a PES lecturer in PES classrooms.

Risks and Benefits

The only risk associated with this study is that seldom, people do not like to be participants in research studies. The benefits, which may reasonably be expected to result from this study, are that you may be helping to improve our understanding on the pedagogical practices employed by PES lecturers on student teachers with VI in PES classroom at this college of Education.

Ethics and Participant's Rights

This study adheres to research ethics and I assure you that:

1. The study will not interfere with your job as a PES lecturer, a government worker.
2. You will not be identified or named.
3. You can choose to withdraw from the study at any time.

Thank you for considering this.

Participant's Consent

Name Signed

Programme and year of study.....Date

Appendix 2: In- depth Interview Guide for PES Lecturers

The purpose of this interview guide was to explore lecturers' pedagogical practices on student teachers with VI in PES classrooms at this College of Education. Thank you for accepting to participate in this interview to talk about pedagogical practices in PES theory and practical lessons.

Background information

Name:

Age:

Sex:

Number of years in service:

Interview questions:

1. What pedagogical practices do you employ in PES theory lessons when teaching student teachers with visual impairment in inclusive classroom?
2. How helpful are the mentioned pedagogical practices in question 1 to student teachers with visual impairment?
3. What pedagogical practices do you prefer using in PES practical lessons?
4. How important are the mentioned pedagogical practices in question 3 to student teachers with visual impairment?
5. Explain how you ensure that student teachers with VI benefit from pedagogical practices employed in a PES theory lesson.
6. Explain how you ensure that student teachers with VI benefit from pedagogical practices employed in a PES practical lesson.
7. Describe the types of resources you use for teaching student teachers with VI in an inclusive PES classroom.
8. Describe challenges you face when teaching student teachers with VI in an inclusive PES theory lesson presentation.

9. What challenges do you face when teaching student teachers with VI in an inclusive PES practical lesson presentation?

THANK YOU FOR YOUR PARTICIPATION

Appendix 3: Observation Checklist for a PES Theory Lesson Presentation.

Theory lesson observation was conducted to answer questions one, two and three. The questions are indicated below together with the checklist.

1. What pedagogical practices do you employ when teaching student teachers with VI in inclusive PES theory lessons.

Aspects to consider:

- i. Using questions and answers.....
- ii. Lecturer method.....
- iii. Demonstration.....
- iv. The use of group discussion.....

2. How do you ensure that pedagogical practices you employ in PES theory class benefit student teachers with VI?

Aspects to consider:

- i. Lecturer's use of the language.....
- ii. Calling student' names.....
- iii. Lecturer's support during the lesson.....
- iv. Extra time allowance.....
- v. Making follow-ups.....

3. What resources do you use to facilitate the learning of student teachers with VI in PES classrooms?

Aspects to consider:

- i. Teaching resources used.....
- ii. Resources PES lecturers encouraged student teachers with VI to use

Appendix 4: Observation Checklist for a PES Practical Lesson Presentation.

Practical lesson observation was conducted to answer questions one, two and three. The questions sought to find out if pedagogical practices employed by PES lecturers benefited student teachers with VI in PES classrooms. The following aspects were considered:

1. What pedagogical practices do you employ when teaching student teachers with VI in PES practical lessons?

Aspects to consider:

- i. Part whole method.....
- ii. Whole-part-whole method.....
- iii Demonstration.....
- iv. Group work/Pair work.....

2. How do you ensure that pedagogical practices you use benefit student teachers with VI in PES practical lessons?

Aspects to consider

- i. Additional instruction for student teachers with blindness.....
- ii. Collaboration of student teachers with blindness with their peers during the lesson.....
- iii. Lecturers support during the lesson.....
- iv. Making follow-ups.....
- v. Extra time allowance.....

3. What resources do you use to facilitate the learning of student teachers with VI in

inclusive PES practical lessons?

i. Teaching resources used.....

ii. Teaching resources for student teachers with VI.....

Appendix 5: In- depth Interview Guide for Student Teachers with Visual Impairment.

The purpose of this interview guide was to have an understanding and obtain information on issues related to pedagogical practices PES lecturers employed on student teacher with VI in PES theory and practical PES lessons in your classes. Thank you to have agreed to participate in this interview. What was talked about was lecturers' pedagogical practices in both PES theory and practical lessons.

Background information

Name:

Age:

Sex:

Year of Study:

Interview questions:

1. What pedagogical practices do PES lecturers employ when teaching you as student teachers with VI in PES theory lessons?
2. How helpful are the mentioned pedagogical practices in question 1 to you, as student teachers with VI?
3. What pedagogical practices would you prefer your lecturer to use in PES practical lessons?
4. How helpful are the mentioned pedagogical practices in question 3 to you as a student teacher with VI?
5. Explain how your PES Lecturer ensure that you benefit from pedagogical practices employed in a PES theory lesson.
6. Explain how your PES Lecturer ensure that you benefit from pedagogical practices employed in a PES practical lesson.
7. Describe the types of resources your PES Lecturer use when teaching for you to benefit in an inclusive PES classroom.

8. Describe challenges you face when teaching student teachers with VI in an inclusive PES theory lesson presentation.
9. What challenges do you face when teaching student teachers with VI in an inclusive PES practical lesson presentation?

THANK YOU FOR YOUR PARTICIPATION