

The Importance of Participation of Children with Visual Impairment in Sports and Physical Activities

*A Case Study of Teachers' Perceptions and Experiences in a
Mainstream Primary School in Uganda*

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Abstract

The study mainly focused on teachers' perceptions and experiences about what and how children with visual impairment learn through their participation in sports and physical activities in a mainstream primary school in Uganda. Children with visual impairment seem to have difficulties with a delay in their motor development due to vision loss and yet ability to move constitutes to carrying out desired activities both at school and home.

The study tried to explore and investigate teachers' feelings, interpretations, ideas, notions, discoveries, knowledge, adventures, insights based on Vygotsky's theory of Zone of Proximal Development and Jerome Bruner's concept of Scaffolding.

A case study design was used in exploring and investigating the phenomenon of the study. This was to generate in-depth information concerning teachers' perceptions and experiences about what and how children with visual impairment learn through their participation in sports and physical activities. This was a multiple descriptive case study comprising four cases (teachers). The method of data collection was interview. A semi-structured interview guide was developed and used to collect data from the four cases.

The findings showed that teachers supported and encouraged children in carrying out sports and physical activities. Social interaction between the teacher-child or children and child-to-child seemed to be a central point through which children were able to learn through their active participation in sports and physical activities. Teachers' perceptions and experiences may directly or indirectly influence the kind of sports organized at school. It was established that adaptation of sports equipment and facilities increased children's participation and at the same time contributed to good health which was a prerequisite to increased and regular school attendance of children.

Some recommendations have been put forward that may contribute and help to improve and strengthen teachers' ways of thinking, organizing activities and working towards supporting and encouraging all children regardless of their unique abilities to attain success in carrying out activities.

Dedication

I dedicate this piece of work to my dear and beloved wife, Betty Namwaki, children; Doreen, Rachael, Specioza, Duncan, Bright and Patricia.

I dedicate to all my dear brothers and sisters; Josephine, Joseph, Christine, Lawrence, Mary and Francis.

To my departed parents and my son Deogratus, I pray and ask the Almighty to rest your SOULS in Eternal Peace. Amen.

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1. Introduction

This study was carried out in Manafwa District in Eastern region of Uganda. It aimed at investigating teachers' perceptions and experiences about what and how children with visual impairment learn through their participation in sports and physical activities in a mainstream primary school. The word "*perception*" is used to refer to an impression teachers have, think or belief worthwhile about the children's participation in sports and physical activities in relation to their learning, while "*experience*" is used to mean whatever teachers come across or encounters or undergone when teaching at different levels in a mainstream primary school. Mainstreaming has been advocated for and it has been widely used in educational provision for children with special needs within regular schools in Uganda. Regardless of varying abilities, individuals ought to be taught and actively participate in physical activities. This helps maintain their functional independence and optimize the extent to which one is able to actively participate in society (WHO, 1996).

However, every individual is needed by the society but participation in sports and physical activities draws almost everyone together and unites them increasing the degree of togetherness and solidarity especially when children with visual impairment learn and do most of the activities together with their sighted peers. The basic purpose of sport and physical activities is to bring about the physical fitness, inculcation of team-spirit, discipline and co-operation, hence make a lasting harmony and balance in an individual's social life.

Background to the Study

The role of sport in life enhancement for persons with visual impairment has been recently perceived in schools and other institutions through the Mobility and Rehabilitation Programme for persons with visual impairment in Uganda (Uganda National Association of the Blind General Assembly Report, 1997).

The goal of Mobility and Rehabilitation Programme was based on the theory and experiences that serious visual impairment can cause inactivity for the individual which often results in helplessness and dependency on others (Tellevik and Elmerskog, 2001).

Beashel, et al. (1996) states that sport has two meanings where it refers to the activities people participate in voluntarily and which almost has some kind of challenge during the process of having regular physical exercises or execution of a skill or both. Besides, sport refers to the experience of pleasure or satisfaction which an individual gains through active participation in physical activities. An individual can experience a lot of satisfaction of finishing a race, being the first in a game match or even a gymnastic competition. Pleasure may arise when an individual has mastered a required skill that is needed to achieve the level of physical fitness demanded by someone's choice of physical activity. Sport is an activity that is governed by a set of rules and often engaged in competitively. It includes activities such as mind sports-board games and card games with little to no element of chance, and motor sports where equipment quality is the major determinant. In this regard, the sports initiative was to use different aspects of sports and physical activities to positively influence the stereotypical beliefs, conception and attitudes of visual impairment at individual, societal levels such as at school and community. Both teachers and children with visual impairment seem to have little experience though they are enthusiastic in sporting opportunities. Before the sporting with visual impairment initiative no effort had ever been made to include Persons with visual impairment in organized mainstream recreational or competitive sports activities, although they participated in various kinds of games such as "tug -of-war", "sack-racing", sprinting/athletics among others (Kahrs, 2001).

Despite the importance of sports and physical activities to one's life, for many years children with visual impairment have often been excluded or sometimes excused from participating in such a life-long experience in primary schools in Uganda.

Buell (1983) describe the state of excluding or excusing children with visual impairment from participating in sports and physical activities as appalling and seriously damaging and retarding children's motor development. Children with visual impairment cannot easily monitor their movement due to difficulty in understanding their surroundings. This makes them to have delayed motor development (Best, 1992).

It is often anticipated that children with visual impairment need to experience a wide range of activities in order to improve on their fitness and health (RNIB, 1993).

Kahrs and Sentumbwe (1997) emphasize the need for sporting for persons with visual impairment that through participation in such activities will enhance ones ability to control, man oeuvre, concentrate and above all self initiate and direct faculties of an individual.

Teachers need to have open mind and give children with visual impairment opportunities to always try to participate actively in any sort of physical activities. Once a teacher has developed positive feelings towards blind children, then providing positive experiences becomes comparatively easy (Buell, 1983). Sports play a vital role in everyday life and provide a healthy body, mind and enjoyable leisure pursuit. It is not only for fun, but for mental health and enjoyment which implies a challenge of a physical nature and demands skilful performance. Similarly, according to WHO (2001) health is a state of complete physical, mental and social well-being and not merely absence of disease or infirmity where the focus is on the whole person.

John Dewey provides considerable understanding of the relationship between learning in school and outside school where emphasis is not only school preparation for life but it is life in totality. The purpose of a school is to help all individual children to develop on what they already know, what they can do, support them in identifying needs, interests and also copying with old and new experiences. This idea is emphasized in Vygotsky's zone of proximal development (ZPD). Teachers may need to treat the child as an individual whose life is by experiment; participating in sports

and physical activities helps children to be courageous, able to endure, acquire life skills and become knowledgeable.

Koivula (1999) suggests that sport participation on a regular basis have shown positive effects on physical health, psychological enhancement, stress reactivity and mental well-being, such as reduced depression, anxiety, tension and stress, and increased vigor and clear- mind.

On the other hand, it has been suggested that physical exercise has a positive impact on an individual's body-image, self- concept and to enhance self-esteem.

The need for sports opportunities for the children and previous research studies compelled the researcher to find out teachers' perception and experiences about what and how children with visual impairment learn through participation in sports and physical activities.

1.1 Education of children with visual impairment in Uganda

Primary education forms the foundation of the education system in Uganda although pre-primary early childhood education has been recently established (Ministry of Education and Sports Policy Statement, 2001).

The introduction of Universal Primary Education (UPE) in 1997, gave priority to children with special needs and the girl child to be enrolled first at school. The fact was majority of these children were left out of school. UPE policy advocates for nearby schools for every child to be enrolled.

The Ministry of Education and Sports (MoES) adopted inclusive education and mainstreaming as strategies to help children with visual impairment access education so that they are not left out of the entire school system (Akope, 2003). However, inclusion is that *“schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other needs”* (Salamanca Statement 1994:6). This *“school for all”* or Education for All (EFA) ideology advocates for children with disabilities to attend nearby schools like the rest of the

ordinary children in the same school. Children are to study all subjects reflected in the national curriculum. Sports and physical activities for children with visual impairment for long have not been taught in many schools apart from the teaching of the general physical education programme where majority of these learners did not benefit much.

1.2 Statement of the research problem

It is imperative that a physically active person has a greater ability to tolerate everyday life challenges and so is able to adjust to various learning situations. It is through learning by doing that one is able to attain physical fitness, which contributes to health. This proposes that human beings have a great potential for creativity and adjustment. However, individuals may to a certain extent be restricted by some social factors and conditions and exploited by their fellow men, which may convince them that their fate is correct and acceptable. Beliefs in such illusions create a false consciousness and prevent people from fully realizing their potential. Teachers' perception and experiences may in one way or the other influence the organization of the learning climate that encompasses their feelings that may be associated with a particular classroom setting, type of sports and physical activities, behavioral norms, customs, beliefs, values and above all the teacher-student relationship which will either encourage or discourage an individuals participation and learning.

1.3 Research question

The main aim of the study was to find out teachers' perceptions and experiences about what and how children with visual impairment learn through their participation in sports and physical activities.

Sub-questions;

- What sports and physical activities do teachers organize at school?
- How do teachers organize sports and physical activities at school?
- Why do teachers organize such sports and physical activities at school?
- What sporting opportunities do children with visual impairment have at school?

- According to teachers, why is children's participation in sports and physical activities important?
- According to teachers, how do sports and physical activities contribute to the development of; cognitive aspect especially in individuals changing ways to understand, perceive, remember, reason, pay attention, concentrate and problem solving,; affective aspect, i.e. self esteem, team spirit/work, co-operation, sharing, turn taking, self control and psychomotor skills especially physical fitness and body functioning?

1.4 Purpose of the Study

This case study intended to find out teachers' perceptions and experiences about what and how children with visual impairment learn through their participation in sports and physical activities in a mainstream primary school in Uganda.

1.5 Significance of the Study

This study may enlighten teachers' knowledge and understanding about the importance of including rather than excluding children with visual impairment from participating in sports and physical activities.

Besides, the study can help teachers become more sensitive about the learners needs to participate with emphasize to individual performance when carrying out activities in terms of functionality regardless of the disability.

The findings of the study may act as a source in providing some information for further studies in the area of sports and physical activities for children with visual impairment.

1.6 Limitation of the study

This case study was carried out in one primary school in Uganda. It is a mainstream school where both children with visual impairment and sighted attend classes together but later the children with visual impairment go to the Unit or Annex for extra support in some specific areas such as mathematics, use of maps or diagrams, and science.

1.7 Structure of the thesis

This thesis is divided into five chapters which are interlinked to one another. Chapter one gives a general introduction and background to the study, the statement of the research problem, the research question together with sub-questions, purpose of the study, and the significance of the study. Chapter two presents the theoretical framework and the relevant previous studies. Chapter three is the research methodology and it comprise of the research design, method and instrument for data collection, area of study, the procedure and criteria for selection of the cases, data collection procedure, data analysis, validity and reliability, and ethical considerations and limitation of the study.. Chapter four gives a presentation and analysis of data. Basically, this presentation and analysis of the research findings is done in relation to the emerging themes and sub-themes during and after the data collection. They include; building children's social skills through sports and physical activities, supporting children in meeting their learning needs, children's interest and enjoyment of sports and physical activities, building physical competence of children with visual impairment and organization of learning environment. Chapter five comprise of the discussion of the research findings, conclusion, and recommendations, and the list of relevant references and appendices.

2. Theoretical Framework and Relevant studies

Introduction

The study aimed at investigating teachers' perceptions and experiences about what and how children with visual impairment learn through their participation in sports and physical activities in a mainstream school. It was to generate teachers' insight, impression, ideas, feelings, thoughts, observations, awareness or understanding about how children's participation in sports and physical activities facilitated them to learn. For any effective learning depends upon the mutual understanding between the teacher and the learner. Ministry of Education and Sports during the International Conference on Universal Primary Education held on 9th to 10th 1998 in Kampala, Uganda it stated that teachers' responsibilities amongst several others include; preparing schemes of work and lesson plans, teaching all subjects, providing appropriate guidance and counseling, providing all round education and exemplary leadership to the learners, providing a positive example for the learners, other members of staff and parents, and above all being fully prepared to engaging the learners in the learning activities. The learner has the obligation to attend and study diligently all the subjects according to the syllabus and as guided by the teachers, participate in the maintenance of discipline, community work and also contribute to the maintenance of hygiene and healthy environment in the school. Formal education systems tend to emphasize the acquisition of knowledge to the detriment of other types of learning, but it is vital now to conceive education in a more encompassing fashion...as built on four pillars of learning: - learning to be, learning to know, learning to do and learning to live together (UNESCO 1996).

2.1 Terminologies used

Visual impairment

Visual impairment is defined as the reduced vision caused by eye disease, accident or eye condition present from birth. Some eye conditions can be treated or corrected to

improve vision. Most people (80%) have some vision whereas; a few are unable to see light (World Health Organization, 1995). Visual impairment is a collective term for a great many ophthalmological disorders which have different implications for a person's ability to function in everyday life. Consequently it is a complex concept which has more than just a medical dimension. Hoekstra-Vrolijk (2002) states that in case of visual impairment, one does not deal with a single disorder. Visual impairment is an umbrella term for a great many disturbances in the visual functions. These disorders are the consequences of abnormalities in the visual system.

Adapted Sports

Adapted sports refers to the sports modified or adjusted or created to meet the unique needs of individuals with disabilities and can be conducted in integrated settings where both persons with and without disabilities interact with each other or even segregated environments that only include persons with disabilities (Winnick, 2005).

Child participation in sports aims to encourage and enable children to make their views known on issues that affect them as it is in accordance with Article 12 of the UN Convention on the rights of the child.

Sport touches many aspects of individuals' lives, thus their health and wellbeing, their social networks, their sense of social connectedness among others. The author further suggests that through organized sport; children can grow up well, giving them a sense of achievement while building teamwork, leadership, problem-solving, decision-making and communication skills. Sport also enables children to channel their energy, competitiveness and aggression in socially beneficial ways (Clark, 2008).

Sport can provide lessons for life which young people are unlikely to learn so well in any other way. Lessons like team spirit, good sportsmanship, playing within rules, self discipline and dedication will stand them in good stead whatever their future holds (Department of National Heritage 1995) cited in Arter and Malin (1997).

Physical activity

Physical activity is defined as a process in which bodily movements are produced by the human skeletal muscles and it results into an expenditure of energy measured in calories and it also comprise a broad range of occupational leisure –time and daily routine activities (Winnick, 2000). Participation in physical activities may require light, moderate or vigorous efforts in accomplishment which also may contribute to an individual's improved lifestyle when practiced on a regular basis. Exercise is referred to as repetitive bodily movement which is planned and structured physical activity done to improve or maintain one or more components of the physical fitness (Sherrill, 2004).

Physical education

Physical education refers to the development of physical and motor fitness; fundamental motor skills and patterns; and skills in aquatics, dance, drama and individual and group games and sports including intramural and lifetime sports (Sherril, 2004). The scope of physical education comprise three domains namely, cognitive, affective and psychomotor domain goals.

Physical education is concerned with involvement and development of physical skills, knowledge of the body in action, and attitudes to engagement in physical activity. It also requires children to be predominantly physically active in order to improve skillfulness and develop learning in which growing competence leads to personal confidence and increased self esteem (Vickerman, 2007).

Adapted physical education

Adapted physical education is an individualized programme involving physical and motor skills and patterns, skills in aquatics and dance, and individual and group games and sports designed to meet the unique needs of individuals. Adapted physical education is viewed as a sub-discipline of the physical education that provides for

safe, personally satisfying and successful experiences for individuals of differing abilities (Winnick, 2005)

Most activities are adapted and developed without losing the competitive element which children enjoy. At any level of their participation, a positive approach can be ensured in making them to experience success and enjoyment and with the right opportunities, children with visual impairment will realize the highest standards of achievement in sport (Arter and Malin, 1997).

2.2 Orientation and mobility

Orientation refers to an individual's ability or awareness to determine his/her position in an environment in relation to the objects around him/her. The major concern is the spatial relationships or connections between the individual and the environment. These spatial context changes all the time as a result of changes in the familiar and unfamiliar environments and the movement of the person himself/herself. Good orientation implies being able to answer the questions: where am I, where do I want to go, and how do I get there?

Mobility is the ability of an individual to move effectively and purposefully in one's environment. The movement brings about the actual connections between the desired starting point and the destination which is the goal activity (Stone, 1997 and; Boter and Veldman, 2002).

Mobility is a precondition for satisfying and meaningful personal functioning. For instance when one is literally capable of getting where he/she wants to go, then this is often figuratively the key to achieving one's own ideals or objectives. It means one is capable of reaching wherever he/she wishes being a school, bus park or play area. From this three aspects arise; the objectives of mobility change over the years, mobility skills are those that develop over time. Learning by experience from an early age will certainly contribute to the mastery of skills years later. The expressions 'learning by doing' and 'what you learn young lasts for life' apply here; and mobility makes a major contribution to a meaningful and, above all, an enjoyable life. It

enables one to move, acquire or learn literally, to extend ones horizons and get a wider view of the world. That is why the very real and often physical limitation of orientation and mobility skills represents a threat to the wellbeing, happiness and enjoyment of people with visual impairment or rather with difficulties in movement from taking part in many activities including sports. *“Life is movement, movement is life”* (Boter and Veldman, 2002:205). Movement, being in motion and being moved are expressions of life and feelings, and at the same time are the preconditions for living. Doing whatever one wants to do, going wherever one wants to go, enjoying sports and leisure pursuits, expressing ones emotions and being moved by beautiful music have everything to do with (inward) movement and freedom of movement. Independent movement facilitates social interactions especially in a wider community that new social contacts are made such as a school where a child is studying. A visual impairment can impede free, relaxed and speedy movement and it is this type of movement which develops posture, improves the muscle tone in the legs and feet and improves the walking gait. However, lack of movement retards good physical development and conversely, poor physical development will prevent coordinated movement.

The role of physical education does not only focus on the physical aspect but also on the social, emotional, cognitive, moral and language dimensions as well. Learning to move is an intrinsic benefit where a teacher identifies skills to be taught and learned by the child in a variety of contexts with a focus on the child’s movement and if having difficulties in reaching the desired activities, then may be modified to accommodate the need (Vickerman, 2007). Education in mobility should start in the early years, continue throughout the child’s school life and beyond because all these learning experiences exposes a child, improves the body coordination and posture (Stone, 1997).

First days at school can be challenging for children with visual impairment whereby cannot easily recognize the teacher or the classmates in a crowded school yard, they certainly won’t be first to reach the coveted tricycle they so badly want to play with,

finding their way around the classroom and around the school is far from easy, and when school is out they not be able to see whoever would be waiting for them (Gringhuis, 2002). A child with visual impairment will not know what the teacher says from the other side of the room. Adults need to be consequently alert about the quality of information the child receives and observes and the time needed for doing it. Children develop their first friendships by observing, imitating and playing together and learning how to behave with each other and adults. The child's social interactions with other colleagues and teachers play an important role in personality development of that child.

Poor vision affects development both directly and indirectly, without essentially changing it. Children with visual impairment sometimes may need to be taught skills more specifically, systematically and at a slower rate than the other children. This applies to skills needed in school and practical skills, in orientation and mobility and also social skills or skills required for leisure activities especially during children's participation in sports and physical activities. Through participation in physical education, children develop their skills in a safe environment at their own speed, with adult support available when it is needed. This also promotes skills of personal organization and responsibility to others and allows for competition within regulated settings (Arter and Malin, 1997).

The sense of sight plays a crucial role in the development of every individual child. This can be referred to as the motors of development which starts it up and keeps it going. For instance in a baby's very first contacts with his environment; the exchange of looks between mother and child and above all the baby's first smile, which cements the emotional relationship between them (Hoekstra-Vrolijk, 2002).

Persons with visual impairment differ considerably from one another and for all sorts of reasons they form a heterogeneous group where as a group they have no common psychological or behavioural characteristics. May be they have some comparable problems (Ibid).

A child with visual impairment has a more limited access to early learning through imitation or primarily visual imitation due vision loss. Most people learn by watching and imitating adults and peers throughout their lives. The early parallel and imitative play of preschool youngsters leads to dyad play and ultimately to the refinement of skills in games and other physical activities of the growing individual. Many children with visual impairment lack such a valuable experience of learning through watching others and this also deprives these children of valuable opportunities to develop physical skills (Scholl, 1986).

2.3 Motivation

A child may not develop and learn effectively in any area i.e. mobility, sports and other physical activities if there is insufficient motivation to get out and about. The child's self confidence and self image are so important in influencing his/her behaviour and actions. Growing confidence and belief in his/her own abilities are achieved primarily through experiencing success in increasingly everyday and practice. Besides the child's interest and ideas are paramount in stimulating learning and achieving goals. The child's social environments that comprise people around him/her have an effect on the behaviour.

Sight continues to act as a motor throughout the development process. An older baby sees a ball a few feet away and crawls toward it and in this case the child is motivated as he/she undergoes varied learning experiences. But then if he does not see the ball there is nothing to challenge him to go exploring. Seeing the environment motivates and promotes the acquisition of experience and learning. Sight seem to play an essential role in most an individual's learning, for instance young children learn by imitation, and by watching others.

Seeing consequently plays a crucial role in the development of a child and his adaptation to his environment. However, poor vision hampers the interaction between the child and his environment, and in the same way hinders his development. A child with poor vision has restricted opportunities to go his own way and thus get a 'regular helping' of experience. Poor vision has an implication for such aspects of

development as perception, cognition, emotion, and motor system. In turn this has an effect on a child's development of skills like play, learning in school such as play, leisure activities, activities of daily living skills, mobility and orientation, social contacts and utility, choosing a career, partner and self-sufficiency (Hoestra-Vrolijk, 2002).

The relationship with the parents, teachers and other peers provides good opportunities for stimulation provided they make sufficient allowance for the child's ambitions, wishes, capabilities, personality and motives (Boter and Veldman, 2002).

Children with visual impairment need a lot of the adult's support so as to get motivated in participating in a number of activities.

The most important factor in all children's learning is motivation, and it's true to all programmes including orientation and mobility. Children need to be stimulated and supported to move around and finding things in the environment early enough in their lives as it may be quite difficulty to motivate them as they grow older. The children who have been actively been encouraged to move, explore, develop and satisfy their curiosity will have a willingness to face the challenges that will come later in life. Participation in sports and physical activities all require one's willingness to experience by carrying out the activities (Stone, 1997).

Brophy (1981) cited in Stipek (1993) defines praise as "...teacher reactions that go beyond simple feedback about appropriateness or correctness of behaviour..." (P.5). simply indicating to a child that his or her answer is correct would not be considered praise. Congratulating the child for a right answer, or saying, "you are really good at this" or "good job" are examples of praise. Praise serves as a reinforcer for most students, especially very young children.

Teachers working with children with visual impairment should address them by name and give clear instructions, and should use their voice to keep in contact with the children, offering regular encouragement and explanations about what is happening (Walker, 1992) cited in Arter and Malin (1997).

The children too, need to be encouraged to take some responsibility for their own learning for instance they can inform the teacher of the difficulties they are experiencing when carrying out activities as a motivating factor. Feedback is very important in any learning situation and it includes verbal and non verbal interactions. It is vital to initiate such interactions especially when inclusiveness is a criterion for a warm, positive climate. Students should be systematically taught to praise each other and to give other kinds of positive feedback (Sherrill, 2004).

2.4 Self concept

Every child develops a self concept gradually and it relates above all to the competence the child observes in himself, the capabilities he discovers that he has and the expectations that he will succeed in the social sphere which later is described as self esteem and self confidence. A person with a positive self concept is able to handle threatening situations in life. Studies have produced conflicting results about whether the view of overprotection in rising of a child can lead to low self esteem. It is said that this can stem from parental feelings of guilt. The child who is overprotected encounters very few threatening situations in life and when he does, they are resolved by his parents and not by him and in turn he does not learn how competent he is or could be himself. (Boter and Wouters, 2002) Therefore, overprotection lowers a child's self esteem and confidence in carrying out activities.

Farrell (1986) emphasizes the need for parents and teachers in providing early learning experiences for children with visual impairment which for many decades continues to be premised on a belief that visual impairment is primarily a problem of access to information that affect how something is learned, not what is learned. By providing opportunities to learn in ways that circumvent the visual impairment as early as possible, there is no limit to what can be learned. It is from these that every child builds self esteem and confidence in carrying out activities in life.

Bandura (1977) cited in Sherrill (2004) proposed self-efficacy theory as conceptual framework for changing fearful and avoidant behaviours bearing in mind the considerable relevance for low-skilled individuals. According to Bandura (1986)

perceived self-efficacy is a “judgment of one’s capacity to accomplish a certain level of performance” (p.391). It is not only concerned with skills but also with what we think we can do with these skills. Self-efficacy is also defined as a situation-specific form of self-confidence (Sherrill, 2004). Bandura (1986) believed that personal mastery of experiences were the most important. He stressed that success raises expectations of further success and discussed structuring the environment to ensure efficacy. Within the context of sports and physical activities, the teachers need to take responsibility for all the children’s active participation regardless of their unique interests and abilities. A good teacher of children places the development of positive self esteem as a priority and displays an attitude of acceptance, empathy, friendship and warmth, while creating opportunities for every child, ensuring a secure and controlled environment beneficial for every individual’s success (Winnick, 2000).

2.5 Zone of Proximal Development and Scaffolding

This study was basically guided by Vygotsky’s concept of “*Zone of Proximal Development*” (ZPD) and Bruner’s concept of scaffolding. ZPD is the difference between what an individual learner can do with or without help and, or the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under the guidance of an adult for instance the teacher teaching sports and physical activities or otherwise in collaboration with more capable peers. The teacher’s role is to provide a child with learning experiences which lie in his/her ZPD, thereby encouraging and advancing his/her learning. Teaching is good only when it “*awakens and arouses to life those functions which are in a stage of maturing, which lie in the zone of proximal development*” (Vygotsky, 1978, p. 86). Vygotskian theory emphasize the role played by significant others especially teachers in guiding and stimulating the learners development and learning.

Gavin (2007) states that the reciprocal teaching that stems from what Vygotsky describes as the ZPD refers to the interaction between the teacher and the child, and how much of this learning can be independently accessed by the child and how much

requires the teacher to mediate in order for the child to access full understanding and develop further additional related concepts. For instance during the demonstration of sporting activities for the child to practice the required skills and the guidance the teacher will try give to the child to carry out the activity.

Based on Jerome Bruner's concept of "*Scaffolding*", teacher's role in helping children move from joint to independent problem solving is emphasized. Scaffolding refers to the gradual withdrawal of adults control and support as a function of children's increasing mastery of a task at hand. Burden (2002) describes the ZPD as the zone where learning can be scaffolded by others, then, when independent cognitive activity takes place, the scaffolding is gradually removed at appropriate time. This can be seen as active rather than passive learning as it is a dynamic process and the child can actually determine the nature and extent of the learning experience. In addition, Wood emphasized that for success, teachers or peers should always focus children's attention on the task and keep them motivated and working throughout such a period or session for example during a sports and physical activity session especially during the time when the teacher or other peers demonstrate the activities to children with visual impairment.

Teachers need to develop confidence and training in independent skills in children with visual impairment through early stimulation and in promoting their motor development, coordinated and purposeful movement pattern.

The process of a child's development occurs through the integration of experiences with enrichment and the child's biological maturation. Human beings all undergo similar milestones and have basic characteristics that are common and independent of the culture the child is born into. Human beings also develop unique characteristics as a result of the environmental circumstances, social expectations and demands which are very much influenced by cultural traditions and other social and physical factors.

Normal child development follows the same pattern of developmental milestones. Children with visual impairment have a delay in their developmental aspects such as

the physical, cognitive, social, emotional, language compared to their sighted peers (Scholl, 1986).

Whatever happens in the infants and children's daily home life constitute to enrichment of experiences in relation to the development of their social, cognitive, language and motor skills. Many caregivers take daily activities with children as normal routine work and not realizing that this is a teaching situation that can promote learning. Some caregivers seem to think and behave in such a way that specific skills are only taught at school which may not be easy for the teacher to handle when imparting knowledge and skills later (Rye, 1985).

Human development is a process of *"peoples changing participation in socio-cultural activities of their communities"*. People contribute to these processes involved in sociocultural activities at the same time that they inherit practices invented by others (Rogoff, 1990, 1998). Babies and the care-givers co-coordinates with each other through joint participation in caretaking routines and the entire time try to establish the foundations for sharing experiences. (Cole and Cole, 1996).

Later, community or school children will engage in activities such as sports that take them far from home and also outside of the immediate supervision by adults.

Organizing good lesson activities in any subject may require the teacher to consider factors such as learners interest, home background, abilities, needs, learning resources, guidelines to follow and above all the teachers own knowledge and experiences.

Mediation of learning experiences by teacher is important besides parents' role as mediators between their children and the surrounding world. The parents' role is to support their children in acquisition of information and experiences early enough and so enable the development of attachment and bonding.

Many children with disabilities who may not receive the required stimulation during their early years may set them to lag behind their other ordinary peers in many aspects of life and learning.

These children may require extra support from the teachers when at school especially in carrying out tasks. This support include; encouragement and motivation ; providing security through satisfying social relationships among children; positive reactions to child's initiatives and performance of tasks; timely feedback; intervention of possible learning difficulties; early identification and assessment for appropriate placement; stimulation in areas such as language, communication, orientation and mobility, motor, cognitive and social aspects and provision of opportunities for exchange of ideas especially through their participation in sports and physical activities.

More recently, there have been reports of the successful use of peer support and learning in the context of helping to raise the achievements of children taking part in an 'integration pilot project' in Hongkong (P.A. Mittler, 1998). Winter: ' children can teach other children and they can learn from doing so...put simply, all school systems are full of students and all classes are rich in students, no matter what other resources they may lack' (Winter, 2000).

Westwood (1997) summarizes four essentials of peer support and learning as:-clear directions as to what they are to do and how they are to do it; a specific teaching task to undertake and use appropriate instructional materials; a demonstration of effective teaching and learning of behaviours; and an opportunity to role play or practice teaching and learning, with feedback and correction.

Children also support one another informally and without teacher planning. Research reviews on inclusion of children with severe learning difficulties report that other children in the schools are generally supportive and accepting (Farrell, 1997, Sebba and Sachdev, 1997), although warm friendships are not frequently reported, cited in Mittler (2000). Spodek, Saracho, and Lee (1984) cited in Allen and Schwartz (2001) pointed out voluntary peer teaching among young children of all developmental levels

can promote; social interactions among disabled and non-disabled children, acceptance play behaviours and appropriate and enhanced use of materials. Children with disabilities often need to be taught to interact with each other children. Teachers help by structuring and supporting a child in one-to-one activities, then moving the child into small group plays, and then finally to helping the child transition to less structured child initiated situations (Allen and Schwartz, 2001).

2.6 Home and school relationship to a child's learning

A child who receives love and good care from his or her parents is likely to extend this perception and show respect for them and other careers including teachers at school (Mwamwenda, 1995).

The process of change of the child from home to school in any way brings psychological, emotional and social challenges to that child, especially with visual impairment due to the movement from a freer environment to another structured one.

Bronfenbrenner's ecological perspective has stressed the interactions of a changing organism in a changing environment which is composed of ones immediate settings and the social and cultural contexts of relation among different settings such as homes, schools and workplace. Bronfenbrenner has tried to specify the properties and conditions of the social and physical environments that may either foster or retard development within peoples "ecological niches." The ecology of human development involves;

"the progressive, mutual accommodation between an active, growing human being and the changing properties of the immediate settings in which the developing person lives, as this process is affected by relations between these settings, and by the larger contexts in which the settings are embedded."
(1979, p.21)

In a similar way, children's indigenous activities especially in form of games has greater influence on the intellectual achievements. (Cole, 1996)

The child actually needs encouragement and reassurance in order to successfully settle in such a new environment from the teachers, school management and other peers.

Children with visual impairment may require independent life skills in order to manage their social life, movement, routine activities laid down on the timetable, school regulations and other school services.

There are many factors that are associated with school. For instance; some teachers may be lacking necessary skills and knowledge to teach or may not be aware of the learner's problems leaving them isolated, withdrawn or even passive/inactive; some teachers may not be sensitive to various needs of the learners in the classroom, hence are left unattended to and perhaps inappropriate teaching/learning resources may also result in children developing more learning difficulties specifically excluding children with visual impairment from participating in sporting activities could further retard their motor development.

2.7 Personal and Professional attributes of a teacher

Moyles (1995, p.4) outlines the attributes of a teacher as personal and professional.

Personal qualities as an individual include, unlimited patience, empathy with children, respect for individuals, not being patronizing, sense of humour, positive outlook and attitudes, encouraging, approachable, fair, consistency, honesty, aware of his/her limits and above all be yourself.

Professional qualities include, consistency, honesty, be aware of limits, good organization, flexibility, thinking on your feet, delegation- give children responsibility, appreciate others skills, professional relationship with other staff, parents, children and community, lay down few but clear ground rules, and also know the children you teach.

Being a teacher of any kind requires one to be optimistic as well as realistic thus, not sentimental in any case. Many teachers always go home wondering if at all they

would have enough knowledge, more skills and resources, then their learners would make a break through in their understanding. This situation haunts teachers as much as the missed open goal irritates the footballer (Brighouse, 1995).

Teachers become aware of the child's mind and personalities through their teaching and interacting with them. Learning to teach is all about what you bring that develops your professional personality in harmony with your own personality (Moyles, 1995).

Good school organization and management is very important in influencing the teaching and learning processes of all learners in all activities regardless of their disabilities.

Individualized education programme and use of participatory teaching methods such as child-to-child, peer tutoring encourage and re-organizes the achievements of each individual child especially children with visual impairment in mainstream schools. In light of children's participation in sports and physical activities, Weiss (2000) states that significant others (teachers, parents) are obliged to structure the environment and exhibit behaviours that enhance children's physical competency beliefs, self esteem and enjoyment of physical activity. Giving clear instruction can be most useful to children in a learning situation especially in sporting activities, where a teacher has to introduce the skill, then demonstrate and explain the skill and finally provide the feedback to the child so as to correct the mistakes.

Children have bits of information necessary to construct a meaning and the teacher's role is to assist by providing a structure and questions that provokes their assembling of that information and its organization (Tharp and Gallimore, 1988).

The social view requires paying special attention to adult's power to arrange children's environment so as to optimize their development according to the existing norms. In light of this, it generates the idea of "*zone of proximal development*" and eventually the ideal world, and the education of children would be organized (Cole, 2003).

Bruner's vision of cultural psychology emphasizes the premises that human experiences and actions are shaped by our intentional states. Thus, it locates the emergence and functioning of psychological processes within the social symbolically mediated everyday encounters of the individuals in the lived events of their everyday lives (1990).

Rooted in the pragmatism of John Dewey and other scholars, progressivism proclaims that children should be free to develop naturally and that an individual child's interests as manifested in direct experience are the best stimuli for learning. Sports and physical activities require that children fully participate by themselves in order to keep fit and healthy. The teacher's role from the perspective of progressivism is to provide learning activities that will fully engage the learners and to guide them as they deal with the consequences of their engagement. Teachers can help learners by imparting knowledge of the basics and by involving them in relevant learning experiences. Furthermore teachers can help by communicating, caring, by modeling appropriate behaviour and by setting high expectations (Duke, 1990).

Duke further states that good professional judgment does not imply always knowing what to do to help or provide appropriate guidance to a child to learn but on occasion, good professional judgment involves an awareness of when you are unable to help a student. No one is capable of "*seeing*" all there is to see in a school or classroom (p.37).

Lieberman (2005) emphasizes the need for fostering student with visual impairment independence that can be achieved through physical activity. The author describes the need to develop and maintain a positive attitude about all students. The attitude of the teacher is seen as a determining factor in any learning situation as s/he will provide the learning needs of all in a class. Lack of opportunity to train and difficulty arranging for children's participation in activities can be obstacles to developing fitness. The physical educators must encourage children to feel safe and good about their movements. This can be done through collaboration with parents, caregivers and other influential persons in the child's life (Lieberman, James and Ludwa, 2004).

2.8 Relevant studies

Kim and Taggart (2004) indicate three factors that emerged in the study carried out in Korean school to characterize teachers' perceptions of physical education; thus, low status of physical education programme, teacher's disengagement with the subject matter and their lack of pedagogical knowledge.

In a study carried out in Botswana, by Onyewadume and Onyewadume (2002) which was to provide insight into the career interests towards Adapted Physical Education of students within the Southern African sub-region towards taking up life-long jobs as teachers of individuals with disabilities. This study employed the survey research design where subjects were selected on a cluster-sample basis from a population of 175 physical education undergraduates at the University of Botswana. Considering the results of the other studies in this region and this study in particular, the findings revealed negative attitudes and also the newness of the course in the region.

Teaching of Adapted Physical Education in most Southern African Universities is relatively new; hence inadequate trained teachers for the existing schools and homes for persons with disabilities (Ibid:74). The authors further noted that in most societies, persons with disabilities and those who teach and look after them are looked down upon or relegated to the background of the society.

Attitudinal disposition towards physical educators who intend to pursue a career with persons with disabilities is worse. If care is not taken, the same societal attitude can negatively influence their interests in taking up a career with disabled persons; they being members of the larger society. On the other hand, it is stated that persons with disabilities by their very nature require a lot of support particularly in their bid to perform physical activities. Hence, training persons with disabilities in sports and physical activities is more demanding in terms of the trainers time, energy, patience and socio-psychological support than training the so called able-bodied.

Contrary, reflecting on what the UNICEF Denmark head of education for development said during the four day tour of Karamoja region in Uganda under the Sport for Life Project which opened recently in 2008, Anne Mette Friis said that the tour slated for April that year would help the disadvantaged children. *“Sport is a good tool of creating unity, self esteem and conflict resolution,”* Friis said. Besides, the Projector coordinator also said through sports, they promote health, education and peaceful development of all the children in the region.

In another study carried out in one of Uganda’s districts found in the war ravaged area in the northern region of the country, by Kahrs, Sentumbwe and Sørensen (2005-2007) which aimed at investigating the possibilities of empowering role of sport on the lives of persons with visual impairment in Uganda. Data was collected by interviews among 12 participants at the 9th Annual National Primary School Championships for children with visual impairment in 2006, and from earlier interviews during the 7th Annual National Open Games in 2005 and 18 more participants during the 8th Open Games in 2006 in all totaling to 40. They comprised 12 males and 6 females (adults), 9 youth or children classified as B1 (totally blind), 4 classified as B2 (severe sight loss) and 5 were classified as B3 (less severe sight loss). The results of the study indicate participation as a prerequisite for empowerment through sport. The experience of participation in competitions varied from person to person. Running as an activity is the most preferred and participated in because it does not demand a lot of equipment and it is easy to organize. In the study it was also noted that goal ball was the second popular sport for persons with visual impairment although at times lack of equipment (balls) may limit some persons from taking part. In a nutshell the findings suggested that participation in sport for people with visual impairment in Uganda seem to contribute to empowerment by: giving physical strength and movement skills; building self confidence and self efficacy; demonstration of competence; increasing social status; and giving opportunities for social interaction and friendship.

Research indicates that one's active participation in sports can promote healthy development. According to the American Sport Education Programme (1994), sports participation; builds an appreciation of personal health and fitness, develops a positive self-image, teaches how to work as part of a team, develops social skills with other children and adults for instance taking turns and sharing playing time, teaches both how to manage success and disappointment and, teaches how to respect others. In trying to understand the benefits, much of the research on youth sports has examined how sports enhance aspects of children's social development, specifically how this contributes to the development of social competence thus the ability to get along with and be accepted by peers, family members, teachers and coaches or trainers; and self esteem which is the extent to which an individual believes him/herself to be capable, significant, successful and worthy (Ewing, 1997).

In a paper presented on a 16-week Sport Education (SE) unit with just over 70 year 5 students (M age = 10.04 years) in one United Kingdom school during the spring and summer terms and discussed students' SE experiences, Student interviews were conducted throughout the season and a questionnaire on different motivation aspects was administered prior to and before completing the SE season. In this report they examined the data in relation to hypothesized influences on fun and enjoyment, including being part of a team, autonomy, and improving game play. Some of the reasons, SE may be more enjoyable than previous physical education lessons include the greater opportunities for autonomy, affiliation, and competition, plus perceived learning as highlighted in the report. Participation in physical activity provides physical and mental health benefits to young people (Biddle, Gorely, & Stensel, 2004). Physical education is said to be an important way of promoting physical activity because of its potential to reach young people. It was also mentioned that a desired outcome of physical education was the development of lifelong participation in active lifestyles. The report emphasizes that to achieve this aim, physical education teachers need to positively influence students' motivation to continue in physical activity outside the school (Weiss, 2000). A major reason young people give for participating in sport and physical activity is fun and enjoyment (Crocker, Hoar,

McDonough, Kowalski, & Niefer, 2004). By providing fun and enjoyable physical education, then this may positively enhance one's attitudes toward physical education and, ultimately, physical activity participation.

3. Methodology

Introduction

This chapter presents and gives a brief description of the research design, method and instrument of data collection, area of study, procedure and criteria for selection of cases, procedure of data collection and analysis.

The purpose of this study aimed at finding out teachers' perceptions and experiences about what and how children with visual impairment learn through their participation in sports and physical activities in a mainstream primary school in Uganda.

3.1 Research design

In trying to find out teachers' perceptions and experiences about what and how children with visual impairment learn through their participation in sports and physical activities, a case study design was chosen. *“Case studies are defined as study of a programme, an event, an activity, a process or one or more individuals where researchers collect detailed information using a variety of data collection procedures over a sustained period of time”*(Creswell, 2003:15).

The phenomenon under this study is the “teachers' perceptions and experiences about what and how children with visual impairment learn through their participation in sports and physical activities,” in a mainstream primary school.

A case is a particular instance of a phenomenon. The cases for this study comprised “four primary school teachers teaching sports and physical activities in mainstream school” from whom data was collected.

“A research design is an action plan for getting from here to there. Where here may be defined as the initial set of questions to be answered, and there, is some set of conclusions/answers” (Yin, 1994:19).

“Research design is a plan for collecting and analyzing evidence that will make it possible for the investigator to answer whatever questions he or she has posed. The design of an investigation touches almost all aspects of the research, from the minute details of data collection to the selection of the techniques of data analysis” (Flick, 2006:135-136).

“A good design for a study, like a good design for a ship, will help it to safely and efficiently reach its destination,” (Maxwell, 1996:8). *“A poor design, one which the components are not well integrated or are incompatible, will at best be inefficient, and at worst will fail to achieve its goals,”* (Maxwell, 2005:10).

Researchers do case studies for one of the three purposes: to produce detailed descriptions of a phenomenon, to develop possible explanations of it, and or to evaluate the phenomenon (Gall, et al. 2003). This study is a multiple descriptive case study. A case study involves the widest array of data collection whereby a researcher tries to build in-depth picture of the case (Creswell, 1998).

Bassegy notes that,

“An important criterion for judging the merit of a case study is the extent to which the details are sufficient and appropriate for the teacher working in a similar situation to relate his or her decision- making to that described in the case study. The relatability of a case study is more important than its generalisability” (Bassegy, 1981:85).

He considers that if case studies are carried systematically and critically and if they are aimed at the improvement of education, if they are relatable and if by publication of the findings they extend the boundaries of existing knowledge, and then they are valid forms of educational research (p.86).

Case studies involve broad descriptions of the setting or issues at hand (Stake, 1995).

This study was descriptive in nature whereby the in-depth data about the phenomenon has been interpreted and described case by case and then cross-case analyzed. Although, this information may not be sufficient enough to generalize the findings

compared to the number of cases used in the study but could be useful to relating the information in support to other relevant studies carried out across the globe concerning teachers' perceptions and experiences about what and how children with visual impairment learn through their participation in sports and physical activities.

3.2 Method of Data Collection

The method of data collection was the interview.

Interviews

An interview is a face-to-face or one-on-one, in-person verbal exchange of information between the interviewer and interviewee (Creswell, 2003). Interviews consist of oral questions asked by the interviewer and oral responses by the research participants and their responses recorded (Gall, et al. 2003). Semi-structured interviews are widely used especially in qualitative studies. This is a desire to the expectation that the interviewees' view point is more likely to be expressed in an openly designed situation than in a standardized interview or questionnaire (Flick, 2006). In this respect the interviewer used semi-structured interviews in data collection. Time was scheduled for each of the participants who were teachers and the convenient place (school) was sorted out with them for the interviews.

“An interview inquiry is a moral enterprise, the personal interaction of the interviewer in such a circumstance may affect the interviewee or/and the knowledge produced by the interview may also affect the understanding of the human situation” (Kvale, 1996:109). The study sought to address this situation by seeking agreement with all the four teachers interviewed during the time of making appointments and throughout the entire interview process. Each interview session for each of the four teachers was tape recorded and saved each in a separate folder in the Digital Recorder for data transcription and analysis. The recording and interviewing was done on individual basis at school.

Advantages of using interview

This is a natural way of interacting and exchanging information about issues at hand. Interviews can easily and most appropriately be adjusted or made flexible to suit the current situation. An interview allows freedom of expression and also acts as a source of first hand information as it may be opposed to questionnaire though they require less time to collect much data but cannot give in depth respondents' beliefs, attitudes and inner experiences (Gall et al. 2003). Besides, the interview method can easily be adaptable where a skillful interviewer can follow up ideas, probe responses and investigate motives and feelings which the questionnaire cannot do, for instance the tone of voice, facial expression or even hesitation can all provide information that a written response would conceal (Bell, 1999).

Disadvantages of using interview

Bryman (2004) suggest that tape recording an interview is appropriate enough to retain the information but it consumers a lot of time in transcription for instance one hour of tape-recorded may take five or more hours to transcribe. Creswell (2003) further states that interview provides "*indirect*" information filtered through the interviewee, researchers presence may bias responses, provides information in a designated "*place*" rather than the natural field setting and then people are not equally articulate and perceptive in giving the relevant information.

In trying to minimize some of the factors that would hinder the interview process in getting the in-depth information, the interviewer took time re-playing the tape-recorded work several times during transcription in ensuring validity of the interview method. The interviews were organized and carried out at school and during convenient time schedules for each teacher who participated in the study. The investigator's continuity to visit the school, making appointments for interviews, explanation of the purpose of the study, and the interviewees' will to participate and at the same time could voluntarily pull out at any time helped to minimize such factors that may have limited the use interviews.

3.3 Procedure and criteria for selection of Cases

In relation to the topic of study and the design, purposeful sampling procedure was sought in the selection of the informants who participated in the study.

Purposeful sampling is used to select the cases that are information- rich in response to the research problem (Gall; Gall and Borg. 2003).

3.3.1 Area of Study

This study was carried out in Yaya Girls Boarding primary school in Uganda. It is a main stream school with a Unit/Annex for children with visual impairment. This school is a girl's school but also admits boys with visual impairment. Both children with visual impairment and the sighted do most of the activities and learning together in the same classes. Children with visual impairment only go to the Unit/Annex which is part of the school for some additional guidance and help in areas such as mathematics especially geometry, sets, and social studies. This Unit acts as a resource room which is equipped with special equipment to use.

3.3.2 Selection of the District and School

The criterion for the selection of the district and school was based on the following; having a Unit/Annex for children with visual impairment attached to a mainstream primary school, should be participating in sports and physical activities for children with visual impairment and it could be easily accessed by the researcher.

Manafwa district and Yaya Girls Boarding primary school in particular were chosen because of their geographical accessibility, having the only and oldest unit for children with visual impairment founded in the early 1970s and has been participating in sports activities for the last seven years.

3.3.3 Teachers

The informants comprised of the teacher in-charge of sports in the school and other three teachers teaching sports and physical education. The teachers were purposively selected basing on the criteria that they teach sports and physical activities in primary one, three and primary five classes. The reason for selecting teachers specifically

from these classes was to get a general out look about children with visual impairments' progression in learning and how their participation in sports and physical activities has influenced these children to learn better. Beside this, the teachers could give some valid information about how they feel about sports and physical activities for children with visual impairment and what they might have also experienced in their teaching for the past years.

3.4 Research Instrument

A semi-structured interview guide was developed and used to collect data from four teachers teaching sports and physical activities in Yaya primary school. Teachers were asked a number of questions covering both their perceptions and experiences especially such areas like their teaching background specifically concerning their teaching experiences in a mainstream school for both children with visual impairment and sighted children's interactions, and also how they have been teaching sports and physical activities to these children. The other major areas in which teachers were interviewed include, teachers knowledge about children with visual impairment, teachers feelings about teaching sports and physical activities, organization of sporting activities, kinds of guidance they give to children with visual impairment, the teachers' feelings about the importance of sports and physical activities, the challenges teachers face in teaching sporting activities and teachers expectations or aspirations among others.

3.5 Procedure for data collection

3.5.1 Pilot study

A pilot study was conducted with one teacher teaching sports and physical activities to test the interview guide designed for data collection in Uganda. Although interviews provide valuable data, they are said to be quite inclined to bias. The need for the interview guide and procedures to be pilot-tested is to ensure their effectiveness and efficiency in yielding reasonably unbiased data (Gall, Gall and Borg, 2003). During the pilot study, the interview guide was refined in such a way that some questions were referenced and others added in relation to the phenomenon of the study. For instance, the question which was phrased as, "how do you find

teaching a child with visual impairment together with the sighted?” Was re-phrased as, “Could you please tell me how you find teaching a child with visual impairment together with the sighted in the classroom?” One of the questions added was, “there is a saying, ‘a health mind in a healthy body.’ If you think of your work as a teacher teaching a child with visual impairment, what do you say?” Unfortunately this was not tape recorded but it helped the researcher in building up confidence and improving on the interview guide for data collection. It was from the pilot study that the interviewer realized how it was helpful to soften the questioning approach and also improve on the questions and techniques of asking, probing etc. In addition, time schedules needed to be considered especially the place and for how long the interview would take and what about the tape recorder being effective without running out of power.

3.5.2 Data collection

Before the actual interview, there was a delay in meeting the school administrators and the teachers because they were all very busy organizing for the National Music Festival which was to be held soon. Majority of children with visual impairment were among the school choir to participate at the national level. So both teachers and children were busy with the preparation. Now, it was after this music festival that the investigator again approached the school and the teachers in particular to embark on the interview. The interview was done in English which is the official language used in all schools in Uganda as the mode of instruction besides other local languages. The local language spoken in this area was Gishu. Some of the English words such as sports and physical activities sounded like they meant one thing for example they refer sports and physical activities as ‘*Kiminyawoo*’ in Gishu meaning anything associated with playing, enjoyment and having fun. Teachers were able to differentiate these concepts as they were able to mention the sport activities for children with visual impairment carried out at school and other physical activities children are always participating in at school. Some of the unclear terms during this process were clarified to the interviewee. Interviews were conducted based on the interview guide that was developed, tested and then refined during the pilot study.

Four teachers (cases) all participated as it had been earlier planned. Appointments were made through the formal procedure at the school with permission of the head teacher and the four teachers of Yaya Girls boarding primary school. Each of the four teachers was interviewed at school during the specified time agreed upon. Interview sessions for all the four teachers lasted from about an hour to one-half hours. The interview for each of the teachers was done in a small office of the school library and was tape recorded. This was a good place in minimizing some of the noise and distracting conditions that would have disrupted the interview. During and after the interview, the researcher extended appreciation to the teachers interviewed for taking part and giving the relevant information for the study. The investigator promised to keep the information confidential unless otherwise with their consent.

3.6 Data organization and Analysis

The analysis of data started with the transcription of each interviews basing on the individual cases. This was done word by word or by sentences as recorded on the tape for each case without using their names for maintaining anonymity and confidentiality.

The data transcription was not so easy. Some of the teachers were a little fast when talking while others were not audible enough but all the same the investigator played the tape again and again in order to transcribe all the information from the interview carried out in the study. The whole transcription was almost 40 pages of the transcripts.

A step-by-step interpretative approach was used to cross check for similar ideas from the transcripts for each case during the process of data analysis. The emergent themes were identified and developed from the information collected that would be vital in understanding the phenomenon of the study.

3.7 Validity and Reliability

Validity and reliability were strengthened in this study after securing the pilot study, then cross checked the instrument and any other relevant information that were deemed necessary before data collection was done.

3.7.1 Validity

Validity refers to the accuracy or truthfulness of any measurement. Are we measuring what we believe we are or not? Validity is the certainty of measuring what is needed to measure. *“Validity itself is a simple concept, but the determination of validity of a measure is elusive” (Spector, 1981:14).* The components of validity are both internal and external.

3.7.2 Reliability

Reliability refers to *“the extent to which other researchers would arrive at similar results if they studied the same case using exactly the same procedures as the first researcher.” (Gall, Gall and Borg, 2003:460).* Yin (1994:36) says that emphasis of doing the same case over again is not *“replicating”* the results of one case by doing another case study but the major goal of reliability is to minimize the errors and biases in a study. While validity is an expression of how far the researcher actually measured what it was wanted to measure, then reliability is used about the degree of certainty in the actual measuring process (Egelund, 1997). In trying to strengthen the reliability in this study, the researcher played and listened to the tape 4-5 times for each of the four teachers who participated in the study. In addition, the researcher's closeness and being a former teacher at the school facilitated the process whereby was teaching and training children with visual impairment and sighted, together with the very teachers who were interviewed. The relationship and interactions during the data collection process was fairly good.

3.8 Factors that might have threatened the validity and reliability

Some factors that might have contributed or strengthened the validity and reliability may at one time been a threat at the same time. For instance the closeness and being a former teacher at the school seem obvious and so the teachers could have assumed the researcher had the relevant information but wanted to test them. This however, may have hindered most of them from exhausting their views during the interview although effort was made to explain to the teachers from time to time. Also some of the teachers were actually very enthusiastic in sports and physical activities but had little knowledge in specialized sports for children with visual impairment though they were trying to help using a variety of their own techniques and knowledge acquired during their grade three teacher training. On the side of the questions that were designed, some of the questions seemed alike for example sport and physical activities, and might have confused the teachers in giving their responses more especially if they thought about the questions in their mother tongue or language. Fortunately, this was done through face-to-face interaction and so most of the issues were clarified to the interviewee.

3.9 Ethical considerations

Carrying out any research study largely depends on a personal matter where the researchers' decision regarding ethical considerations that arise eventually reflects the depth of his/her moral reasoning and values. Besides, this will reflect ones understanding of the regulations governing the research ethics through formal policies and right procedures in undertaking a research study that have been put in place by professional associations and government (Gall; Gall and Borg. 2003). Flick (2006) outlines the overall ethical involvement of any research: *"However, all aspects of the research process, from deciding upon the topic through identifying a sample, conducting the research and disseminating the findings, have ethical implications."* One who is undertaking the study is confronted with issues at every step of the research. The way you enter the field and address and select the participants raises the

issue of how to inform the same participants, whom to inform about your research, its purposes and your expectations (p.49). In this study, the ethical issues were considered in three levels, thus; the planning level, during and after the study.

3.9.1 Planning Level

Before leaving for data collection in the field, approval of the research proposal including the research instruments and letter of introduction from the University of Oslo authority were adhered to.

The Head teacher of the school selected was approached while in Uganda. Teachers were also talked to and the purpose of the study was formally explained during this process. The study's participants agreed to partake on this basis of information given to them by the investigator.

3.9.2 During the study

In any interview session, having an appointment is very vital. In this respect, appointment was made with the teachers bearing in mind their busy time schedule and place of convenience to be interviewed. In this regard, the investigator interviewed one by one participant most preferably at school by tape recording the information. For each of the interviewee, confidentiality was re-affirmed concerning the information given during this interview process which was carried out in a quiet and secure place within the school premises. Some words that seemed to mean one thing or the other in the mother tongue were all clarified as this was a face-to-face interaction. Transcription of the tape-recorded information was done for further interpretation and analysis of the study. In addition, interviewee quotes have been used reflecting on their very words, phrases, sentences and ideas they put forward during the interview. These have been listened to and quoted as per their intonation and emphasis from the tape recorded data and used in the presentation and analysis.

3.9.3 After the study

And finally, in the process and after the study, appreciation was extended to all the key and main informants involved.

4. Presentation and analysis of the research findings

Introduction

In this chapter, research findings are presented and analyzed concerning teachers' perceptions and experiences about what and how children learn through their participation in sports and physical activities in Yaya primary school in Uganda. Interview method was used in data collection. Four school primary teachers teaching sports and physical activities were studied. The findings are presented in the course of case by case and cross-case analysis in highlighting similarities and differences across the four cases. Analyzing data across all the cases is done to identify the similarities and differences in the degree of formalization of the ordering process and the effects of formalization for instance generalizing the case study results. Emphasize of studying multiple cases makes it possible to build a logical chain of evidence (Yin, 1994., Miles and Huberman, 1994).

Research problem

The focus of the study was to find out teachers' perceptions and experiences about what and how children with visual impairment learn through their participation in sports and physical activities in a mainstream school.

The emergent themes include;

- Building children's social skills through sports and physical activities
- Supporting children in meeting their learning needs
- Children's interest and enjoyment of sports and physical activities
- Physical competence of children with visual impairment
- Organization of learning environment

Background information of the teachers

Four teachers of Yaya Girls were purposeful selected and all participated in the study. Pseudo names were given to the school as Yaya and to each of the “four teachers/cases” as Dismas, Denis, Davis and Darius. Among these was the teacher in-charge of sports and physical activities who is given the pseudo name Darius. They all teach sports and physical activities as well as other subjects in their respective classes at the school. Their teaching experiences in the mainstream school ranged from ten to eighteen years. Dismas has taught for eighteen years, and a diploma holder in special needs education while Denis has taught for ten years in the school and a Grade III certificate holder. Davis has taught for twelve, and holds a diploma in special needs education while Darius has taught for fifteen years, and holds a diploma in special needs education.

4.1 Dismas.

4.1.1 Building children’s social skills through sports and physical activities

Children’s learning through their social interaction

When the teacher was asked what children learn through social interaction regardless of those with or without sight? He expressed that the children’s social interaction within the school and class was okay. He felt it was a good idea and always tried to encourage all the children to participate and compete in sports through which they interact with one another. He said,

“The social aspects that I have seen among these children are that, they learn sharing, they also learn how to help one another, socialize with one another and if so when a child learns how to share with others and also learns how to ask questions in class, then this kind of learning from other peers whichever way helps them to create friendship. Like here, our children in fact they live a normal life, they like each other so much and they have their own entertainment.”

Further expounded that in many occurrences a child may ask, “*my friend help me, what does this question require?*” He expressed that this usually happens if at all one of the children may not have understood well from the teachers explanations. He recognized many things that a child does not know can well be understood through working together as they share, consult and interact with each other. Children have many things that they share and eat during their free time. During the sports and physical activities, he was impressed with how children learn to share materials, cooperate and above all interact with each other. He said.

Designing and creating opportunities for children to participate in sports and physical activities

Dismas said that he has witnessed things sometimes not moving on well, for example having limited facilities and equipment for sports and games limits chances of children’s participation in sporting activities. Otherwise with competitive sports he believed and strongly supported and encouraged the idea of all children participating and competing in sports and physical activities.

He reported that on his personal grounds he has not had many hardships going through and designing sports and physical activities for his class. They move on well, although at the beginning when he had just joined the school some years back, he found it a problem when teaching both children with visual impairment together with the sighted. But later, said,

“I developed interest in teaching these children, that’s why I went for further studies specializing in teaching these children. Right now teaching them in mainstream is not a big problem.”

On the hand, Dismas reported that he has learned it is not always easy to convince children with visual impairment to participate in activities especially for the first time. He said that these children need to be talked to from time to time. This he meant they need to be persuaded in order to participate. He said when it comes to using sighted guides or escorts in performing activities such as athletics, children with visual

impairment may not feel comfortable with some of these guides. This he said is an appalling situation but all the same he has to encourage and support children to come to a common understanding with each other as a class. He said, when you look at a child who participates in sports his/her mental ability is active, they think and reason more faster, they are active they are able to solve their own problems; and so is not like one who does not.

He said in his daily encounters has seen the teacher's continuity of talking and giving pieces of advice as being helpful and it encourages the child to build up his/her confidence, to have high self esteem, and to be active in class and participate fully so as to develop abilities leading to independent living both at school and after school. What if he/she is alone! He/she needs to develop that idea, he said.

4.1.2 Supporting children to meet their learning needs

Teacher support towards a child's skill practice

Dismas said that he has not sensed a lot of problems when supporting children with visual impairment together with the sighted in class, I move on well. He further said people outside or those who may not have had contacts with children with visual impairment should not underestimate their efforts or think that they are not performing to their expectations. He said,

"I enjoy teaching children with visual impairment. I really enjoy teaching them. I have had a good time together with these children."

He also asserted that he has some idea and techniques he has been using to teach and support children with visual impairment together with the sighted. He said, since they have stayed with children with visual impairment, he felt it was normal to integrate them with the sighted children during most of the class activities.

Dismas reported that when it comes to the practical part of executing a required skill in a particular sport or physical activity children with visual impairment need to be informed and given instructions verbally. He said that since children with visual

impairment may not be having clear sight to watch as he demonstrated to the whole class, then the teacher has to come in body contact with the child to show him/her on how to carry out the activity and what steps to follow.

Motivating children with visual impairment to carry out activities

Dismas said he is aware that there are many ways of motivating a child with visual impairment. These he said; other children can clap for their colleagues after answering a question or executing a skill, cheer them up, or even can be given a present after performing well. He also reported that a child can be encouraged and praised after carrying out an activity, say if you get a child who has not been “bathing” but now is able, you can say “*thank you for the good work.*” Concerning organization, like in class he says they have to draw a duty roster for the whole class where each child has part to play or rather some work to do. He further said that they also encourage and use older children to help the young ones as a way of motivating and making them feel secure and confident in carrying out activities.

Child-to-child/peer support in learning

Dismas, said, “*I always encourage peer help, for instance, they come to realize that there are instances or some other things they may need help from others and others too, may need help from them.*” He further conceptualized that through child-to-child approach; children learn to be active in life all the time. This is because they continue doing the activities together with each other. In addition, he said he arranges them to work in pairs or groups with their sighted classmates. This he meant children work and socialize with each other as one without segregating or discriminating one another in any learning situation.

4.1.3 Children’s interest and enjoyment of sports and physical activities

Activities children find more interesting to participate in

Dismas expressed that they have activities such as athletics, showdown, goal ball, chess and also playing cards for children at school. He further mentioned that they

also involve children in sweeping around their classes, arranging desks and at times children carry things from one place to another within the school if there is need. This he said all children are encouraged to work or participate in activities like anybody else in the school but, *“Not to keep them idol.”* He felt and stressed that majority of children with visual impairment are much taken up with showdown, goal ball and athletics.

He said has become familiar with the children’s interest, fun and enjoyment in taking part in activities. He explained, *“That... sound alone, which during the process of playing the showdown and goal ball makes, motivates children with visual impairment like it so much as they hear and listen to it.”* He further noted that besides the sound the ball produces, children also get excited during play time especially when an opponent player miss to track exactly where the ball is passing. This he said is both a challenge to the player and an excitement for the other children who may at that time be watching as spectators. On the other hand he said children with visual impairment together with the sighted are very much interested in most of the indoor games such as playing *“Matatu”* which is playing cards. These cards have Braille symbols and print which allows both children with visual impairment and sighted to play the same game. He said.

Children’s attention and concentration in activities

Dismas explained that children with visual impairment sometimes may not fully participate in some activities. However, he expressed that children with visual impairment perform well in goal ball, running, and showdown. His notion is that all children need to learn and develop interest in carrying out activities at whatever pace depending on the teacher’s guidance and how he/she involves the children. He felt it is encouraging and important to note that a child with visual impairment’s attention and concentration is *“normal”* comparing him/her with other sighted children in class.

He said, *“Although they perform at a slow pace, there is no doubt that they are not performing.”* He affirmed that when you look at children with visual impairments’

learning, they can do most of the things normally. He asserted, *“It is not a big deal that they are not performing at a normal speed looking at their impairment.”*

Organizing competitive sports for children with visual impairment

Dismas said that he is always impressed and fully supported the idea of organizing competitive sports for children with visual impairment, although he said things were not moving on well due to having limited facilities and equipment for sports. On the other hand he said sometimes it may not be easy to convince children with visual impairment to participate at first because of the fear they may have and the kind of sighted guides to assist them participate effectively. He however, went ahead and said when you observe a child who participates in sports, his/her mental ability is very active and able to solve his/her own problems compared to those who may not be involved or taking part at all.

4.1.4 Physical competence of children with visual impairment

Motor skills

Dismas emphasized that in many incidences children with visual impairment seem to be delayed in several aspects of their physical development especially the fine and gross motor skills. He said,

“To some of the children, their motor development is not well developed simply because, maybe have been sitting in one place.”

He expressed that looking at some children; their limbs are not strong enough whereas, others look to be strong especially with those doing regular exercises or being involved in all activities. He further noted that to those children who might have got good or proper training right from their childhood seem to have lesser problems. He said through observation, children who are having regular exercises are capable of moving around the compound freely.

He reported that it is always good to organize activities for children who might have been victims of under stimulation; as part of the lesson and also during their free time

to keep them active so as to improve on their motor skills. Besides, he said when children with visual impairment join the school, *“they seem to have been isolated or kept behind the kitchens or inside the houses,”* he affirmed that through their active role in activities makes them to play, feel happy and socialize with each other.

Mobility skills

Dismas reported that he has witnessed many children with visual impairment during the time they join the school, their mobility is not as good as those who have stayed for long at school. He proudly said that the children who had been at school for a longer time were more active and could do most of the things independently. However, he further said with the new comers this improves with time as they work and participate in activities. He felt it important that when a child becomes physically fit, then he/she would move freely in class carrying out activities and socialize like any other sighted children without difficulty.

Health and fitness

Dismas expressed that when a child has a health mind in a healthy body, then that child is able to do most of the sports activities and other physical activities such as sweeping in class and playing with others. He has sensed if the child is not healthy, then it becomes difficult to carry out most of the activities. Dismas was of the view that a child's active participation in activities makes him/her to improve on the health status and at the same time is able to perform well in activities both in class and outside.

4.1.5 Organization of learning environment

Adaptation of the learning environment and equipment

Dismas observed that the arrangement of the classes is necessary because for him this allows children with visual impairment to move freely when carrying out activities and also avoiding accidents that may occur if it was poorly arranged. Besides, he said the use of the white canes by children with visual impairment has helped in one way

or the other although the space is not so much congested in his class; it gives them freedom to move and carry out activities. He said,

“Looking at the way the track is made is slightly different with some adaptations for instance lanes are doubled for athletics, the ground is well modified and the area is wider enough for long jump.”

For their special sports and games, he said that they also have goal ball, showdown, with bats modified to suit the abilities and needs of children with visual impairment. He reported that they also have indoor games like playing cards with both Braille symbols and print as an adaptation. Sometimes during their evening free time they participate in this kind activity, he said,

“As the sighted are playing, children with visual impairment are also playing together with them.”

He mentioned that some of the balls used have bells which produce sound like the goal ball and showdown. He further said it was through such kinds of modifications that children with visual impairments’ participation in sports and physical activities are increased. Dismas recognized that it was very important to increase children’s participation in sports and physical activities. This he said,

“It should be done always... daily basis to keep all the children alert and able to carry out all the days learning activities.”

He also desired that all children regardless of their individual differences should always be included in sports and physical activities at all times. This is a positive feeling towards including rather than excluding children from taking active role in sports and physical activities. His wish is for all the teachers to have a positive attitude towards all children so as to allow and encourage them to actively participate in activities and learning in general.

4.2 Denis

4.2.1 Building children's social skills through sports and physical activities

Children's learning through their social interaction

Denis said he has observed through interactions in sports and physical activities, both children with visual impairment and sighted learn to share things, help each other and socialize with one another freely. He gave an example of when children are playing cards which have both Braille and print symbols together as part of their entertainment during their free time. He said in many incidences he has observed and encouraged children in trying to approximate things, fore-tell what the situation is like if one was able to beat the opponents in such a game. Besides, he gave another example of a boy whom he said used to have fun and also made other children dance, and run around doing a lot of practice some previous years. He said;

“Through interaction, children with visual impairment are brought closer to their sighted colleagues. They become very free and comfortable with each other.”

Designing and creating opportunities for children to participate in sports and physical activities

Denis indicated that in many occasions, it has been quite challenging experience in creating opportunities for children to participate in especially for both categories, sighted and children with visual impairment at ago. He said that time is not also enough in trying to meet the needs of children with visual impairment and the sighted. He declared that if a teacher is not careful, he/she may not cover all the work. He also affirmed that well, some materials seem not to be available for children with visual impairment. He further said that sports equipment and facilities are a big problem as this limits a teacher from carrying out all the prepared activities as earlier planned for the class participation in sports and physical activities.

Denis discovered that it is always important to know and perhaps understand children's problems in class as one tries to open avenues for their participation in

sporting activities. As a teacher he emphasized the need for “*patience*” especially when working with children in class. He said, “*Surely, some children who are first learners may think that some children with visual impairment delay them when carrying out activities.*” However, he said usually they have to talk and explain to both the sighted and children with visual impairment to continue working and learning together at whatever pace one may be as they all require teacher’s attention and help at different times in class.

4.2.2 Supporting children to meet their learning needs

Teacher support towards a child’s skill practice

Denis disclosed that children with visual impairment have slightly better memory as they rely much on the listening than their sighted peers. He said,

“It is quite exciting experience... for instance when a challenge or question is raised, a sighted child may fail to give a right answer whereas; a child with visual impairment may give the right one.”

He expressed that he usually encourages and gives children some activities which are related and suitable to their needs so that they do not remain idle and also have to improvise some kind of materials where possible. He said, for the sighted can use drawings and illustrations on a chalkboard while for children with visual impairment may need to give real objects or tactile materials/diagrams. He however, lamented that children with visual impairment are a bit slow but then in such incidences he has to go slightly at a slow pace to help or guide them understand like the sighted ones.

He proudly said there are quite a number of other approaches he uses to make children with visual impairment carry out a required skill, for instance can simply give instructions; the child can feel him; or create landmarks for them. He expounded that or the teacher can ask the child to hold his fingers, or carry the activity together with the child and as the child gets to know, then he withdraws the physical support.

Denis further mentioned different kinds of verbal and non-verbal instructions used in helping children with visual impairment practice and master the skills. He said that, he uses sounds like clappers, clap hands, talking to them, giving instructions, and use the whistle for starting and ending the game. He said, apart from that a child may be put in an activity thus by breaking the activity according to the time limit, or strides the may be making can also be used to fore-tell time, or could be having time limits for example 20 steps the child knows he will be making or taking 4 seconds, throwing a ball, a child may definitely know how long it takes i.e. 2 seconds or 3 seconds. Because there you have to position the child and foot work on the ground, the ball, physical support – let the child feel you and then try. He said.

Motivating children with visual impairment to carry out activities

Denis expressed that in most cases when children do some activities, he normally feels good and a pleasure to call on as to appreciate them, give a token, or through verbal appreciation to all children regardless of their impairment. He further said that talking to the child directly and use of his/her name is very important in motivating him/her to learn and pay attention in class- *“the child feels more comfortable and secure.”*

He also felt, using a child’s name keeps him nearer to the child and the same child becomes very attentive in class and motivated in carrying out most of the given activities.

Child-to-child/peer support in learning

Denis reported that child-to-child or peer support is vital in any learning situation. He felt through child-to-child support in carrying out sports and physical activities, both sighted and children with visual impairment learn to shape their social, intellectual, physical, emotional and moral development. He said children are encouraged to always work together as a class. He said that they also have sighted guides who help to guide their colleagues with visual impairment especially during sporting competitions.

4.2.3 Children's interest and enjoyment of sports and physical activities

Children's interest and enjoyment of sports and physical activities

Denis said that the most common sports and physical activities organized include; running, jumping, kicking, throwing- javelin, short put, discus, long jump mainly, and by good luck the blind have got their special equipment.

He reported that for children with visual impairment, they have got their special sports that include athletics, field events, showdown, and goal ball. He said many children with visual impairment are actively participating in these activities and at the same time in the school choir. Children with visual impairment also participate in activities like fetching water; they all find it very exciting as they always move as a group together with their sighted peers. He said,

“The sighted children tend to call their colleagues with visual impairment to move together as each child carries the basin or jerry- can by him/herself.”

He said that the sighted children, *“only help to guide them on the way.”* He believed this kind of working together in accomplishing tasks is quite encouraging in the school.

Children's attention and concentration in activities

Denis said that children with visual impairment need more space for carrying out their activities and most preferably are made to sit on the wall side in class to protect them from losing their materials and also for easy accessibility in reaching the activities.

He expressed that, the most common participation in activities among children with visual impairment comes through hearing and touch. They hear as you read the question and answer back. He said these children gain much in their learning but there are some aspects when they may be limited especially when it comes to drawings like in Mathematics- Geometry where they tend to have problems identifying shapes. He noted that these are some of the areas that children with visual impairment are attended to in the unit in a more specific way to make them understand such concepts.

However, he felt participation in sports is not as complicated as to their participation in mathematics. He said,

“Here, the children with visual impairment tend to do better so long as they are guided well, and once they are helped they develop along that line.”

Organizing competitive sports for children with visual impairment

Denis expressed his feelings in support of giving every child opportunities to take part in competitive sports. He reported that the school is always positive towards trainings and organizing the competitive sports but at times it becomes quite embarrassing when the district may not be in position to raise the required funds due to its budgetary constraints in supporting the school team to represent the district at National Championships. Besides, he said;

“Competitive spirit among children and exposure has a big impact on both class and outside learning.”

4.2.4 Physical competence of children with visual impairment

Motor skills

Denis in his teaching career for the past years expressed that many children with visual impairment seem to be overprotected by their parents or care-givers. He lamented,

“By overprotecting the child, that child is delayed in many aspects in life.”

He said many children with visual impairment experience difficulties in body coordination which affects their body posture. He expressed that children need to develop both their fine and gross motor skills in order for them to move and carry out activities.

Mobility skills

Denis expressed,

“Remember, children with visual impairment are not going to live in an isolated setting or world. They need to develop and learn skills that will help them fit in society.”

He further pointed out that without good support to these children, then, they would become a burden to society.

Health and fitness

Denis believed to him,

“Sports participation contributes more to other subjects or areas than it does to itself.”

He felt that when a child is very active in Music or sports ... then the same child will remain actively participating in other subjects like mathematics, English and others. He said,

“With my small experience, it is very true that children who are active and healthy tend to go on well with their studies unlike those who are inactive.”

He expounded that a child, who is not active, may develop a tendency of being sickly and this may result into absenteeism. He further said children through their participation in sports and physical activities will make them to stay healthy and physically fit after participating in activities.

4.2.5 Organization of learning environment

Adaptation of the learning environment and equipment

Denis expressed that at times classes are congested especially during the classroom activities unlike for outdoor activities where there is a lot of space for play. He described some of the adaptations made for instance the one metre take-off board for long jump. He gave other examples such as the modifications made on the playing cards having both print and Braille symbols and also the type of ball used for goal ball

and showdown with stainless pellets inside. He further said these adaptations are equally important as they help children with visual impairment to grasp concepts more easily and also increase their participation in activities like any other child in class.

4.3 Davis

4.3.1 Building children's social skills through sports and physical activities

Children's learning through their social interaction

Davis felt, children's interaction in sports and physical activities improves their self esteem, self expression, language, communication and are able to cooperate with one another. He further noted that through interaction, children share a number of things, and are able to compete amongst themselves, learn leadership skills and a sense of responsibility as they continue to learn and work together. He asserted,

“Each child feels that he or she is part of the group or class. In fact, they are aware of each other's needs as they interact and help each other.”

In addition, he said through interaction, children compete favourably with each other.

Designing and creating opportunities for children to participate in sports and physical activities

Davis through his experience in teaching in a mainstream school said it is really tedious work in terms of preparation, and also time consuming in meeting the needs of both the sighted and children with visual impairment. However, he said, *“by use of the little knowledge from the college I keep on tying.”*

On the other hand Davis expressed other challenging factors such as not having enough sports materials and equipment like goal ball being scarce and at times not found on open market either but all the same they are always trying to encourage children's participation in sports and physical activities. He also noted the need for having enough trained teachers in sports for children with visual impairment. He

exposed that apart from the teacher's salary, the teachers needed to be motivated especially those teaching children with visual impairment. He said,

“In fact this is why most people have left teaching physical education, especially when training children with visual impairment; many think it is a lot of commitment.”

He also expressed the need for teacher support/guidance. He said, *“Guidance is very important because children feel more comfortable, confident, and they can easily understand and feel they are protected in such a learning situation.”*

4.3.2 Supporting children to meet their learning needs

Teacher support towards a child's skill practice

Davis expressed that meeting children's needs is a taxing job in relation to the working conditions of teachers especially in his country today. However, he said, he keeps on trying using the little knowledge he acquired from the college in helping children with visual impairment meet their needs. He plans activities that suit the children's abilities and he felt patience is essential during lessons. He also uses appropriate methods in meeting the children's needs. He further said that through pair and group activities, both children with visual impairment and sighted work together during lessons.

Davis revealed that he normally classifies children with visual impairment in three different classes when trying to help them practice the required skill or take an active role in any sporting competition. He said these classification profile include; class B1, class B2 and class B3 of whom they operate at different levels. He also expressed that for purposes of skill practice, some activities are done on individual basis, and others are organized together where the sighted are paired up with children with visual impairment while others do the activity in groups especially during the planned class activity. Davis said,

“This kind of teacher guidance is important because children feel more comfortable, confident, and they can easily learn the skills.”

They feel they are protected and easy learning generally. Pairing them and encouraging them carry out activities helps them to build up socially. He said.

Motivating children with visual impairment to carry out activities

Davis reported that to motivate children in carrying out activities, the teacher must use appropriate techniques and also be creative. He said,

“I normally motivate through praise orally whenever a child succeeds, calling the child by name which makes him or her realize that he or she is under the guidance of the teacher, and also use of words like good, excellent, keep it up, good boy or girl all motivates a child.”

In addition, when Davis was asked how he communicates to a child with visual impairment during sports and physical activity sessions? He said that it is through use of clappers, verbal communication, non verbal, thus clapping, and through instructions. He said that children can be helped by their sighted peers and though having direct body contacts and hands-on experience. He further said that he also uses task analysis- breaking tasks into simpler ones where a child is able to learn from known to unknown and so this also encourages and motivates the child to carry on the activity. He also said doing the activity together with the child and keep on withdrawing as the child masters or getting on well is also vital in the child’s mastery and learning.

Use of child-to-child/peer support in learning

Davis said that he always encouraged children or peers to work and help each other in any learning situation. Children with visual impairment could be in direct body contacts with either the teacher or their peers when carrying out an activity. He said,

“Other peers are used to demonstrate to their colleagues either by touching and say please do this... as it may be required.”

4.3.3 Children's interest and enjoyment of sports and physical activities

Activities children find more interesting to participate in

Davis mentioned that he has been organizing a number of activities among which include; standing jump, goal ball, athletics, javelin. Besides, he said other physical activities such as, pair activities, like arms tug of war, skipping ropes, sweeping, washing, fetching water, swinging and gymnastics are always done by majority of the children at school. He said that the most appropriate physical activities children with visual impairment find more interesting and enjoyable to participate in include, paired activities especially wheel barrow push, and tug of war. This he said, *“Because children feel safe and secure as they push or work in pairs.”*

He expressed that with all the children's participation in activities they all get on well.

Children's attention and concentration in activities

Davis reported that a child with visual impairments' attention and concentration in activities was okay. He noted that this has led to their improved language and transfer of learning in different situations. He said that the child's attention span is improved as from the field after participating in activities. He further expressed that the child's thinking, imagination, and alertness to questions and giving answers improves accordingly through his/her active role in activities across other subjects. However, he noted whereas a child with visual impairment may not perform to his expectation, he said,

“I feel so disappointed but I always keep trying by encouraging and finding out why that child has not performed as usual.”

Organizing competitive sports for children with visual impairment

Davis noted that;

“Children’s participation in competitive sports is so healthy because it promotes a competitive team spirit or mind and it improves the social life of a child with visual impairment.”

He said organizing competitive sports for children with visual impairment was good and healthy. He indicated that through participation in competitive sports children develop their physical fitness, sense of belonging, spirit of competition, self esteem, and socialization.

4.3.4 Physical competence of children with visual impairment

Motor skills

Davis noted that some children with visual impairment before they formally joined the school their motor skills were not very much developed and so, they had uncoordinated movements. This he felt could be as a result of not being involved in taking an active part in activities from their childhood right from their homes. However, he said with time through the child’s participation in sports and physical activities this improves and the child becomes strong.

On the other hand, he said addressing all the life experiences children with visual impairment under-go, it was important to work with their parents through teacher-parent collaborations in understanding matters concerning them and how to go about it. However, he said,

“I always share much of this information with parents to link what their children with visual impairment learn or do at school with what happens at home.”

In doing this, he had drawn a programme in collaboration with the school administrators concerning visits to homes of children with visual impairment studying in the school in accordance with the parent’s knowledge and acceptance.

Mobility skills

Davis observed that some of the children with visual impairment have poor orientation and mobility difficulties where by co-coordinating their limbs and their body posture is poor. He associated these that could be due to parent's negligence, or overprotection and maybe lack of necessary information in helping their children grow up normally.

He said,

“Parents think that when their children with visual impairment carry out tasks, they might hurt themselves.”

He said through trainings the children's physical development improves, they become flexible and improve on their mobility skills, and the hygienic conditions. He further mentioned that children's independent abilities are improved and are now able to do most of the activities on their own without much difficulty.

Health and fitness

Davis said

“A child with visual impairment needs to participate in physical activities like any other child because it enables him to improve socially, morally and physically.”

He said their active participation in activities also helps develop their language, physical fitness and the child is able to solve problems on his/her own.

He asserted that for instance a child's participation in competitive sports is so healthy because it promotes a competitive team spirit or mind and it improves social life of that child.

4.3.5 Organization of learning environment

Adaptation of the learning environment and equipment

Davis described that children with visual impairment are slow in grasping most of the concepts and so they need more time and guidance. He said understanding their needs is good because the child may be helped by their sighted peers. He said,

“Personally I always try to improve on the learning environment especially the children’s sitting arrangement in the classroom.”

This he said has enabled movement of the teacher to reach every child in giving necessary support and likewise children themselves. He said improving children’s participation in sports and physical activities depends on the way equipment and facilities have been modified to suit their needs for active participation. He wished that children’s participation should be binding in all schools as through this builds the child’s cognitive development.

Well, he further emphasized that other sighted children and parents were equally important in helping children with visual impairment grow up like any other child in a home and school. He noted that like him, *“other teachers should join and change negative attitudes or beliefs other than saying your child or children with visual impairment.”*

4.4 Darius

4.4.1 Building children’s social skills through sports and physical activities

Children’s learning through their social interaction

Darius understood that children’s interactions is of paramount value as it creates a sense of equality and cooperation among children as they will always be working and interacting together as one team or class. For instance he gave an example of a team that wins is overjoyed as they celebrate together while the losers slowly accepts defeat as a team though looking forward to winning. He further said children will also meet new friends through participation for example when ‘school A’ is playing with

‘school B.’ He said, *“During this time, children interact with one another including their teachers.”*

In addition, he said through interaction, children learn how to take turns as means of having orderly way of carrying out activities or even expressing their needs and also being responsible for example if one child is made a team captain/leader may be responsible for mobilizing others in accomplishing the tasks assigned to them.

He expressed;

“It is through this kind of interaction that these children feel and love each other as brothers and sisters and their relationship becomes so strong.”

Designing and creating opportunities for children to participate in sports and physical activities

Darius said that there are a number of opportunities for children to participate in sports and physical activities and encourages every child to do so but somehow encounters difficulties when designing and creating such opportunities for the class at certain levels. He mentioned lack of enough equipment for example tandem cycling; financial constraints and lack of enough sports facilities. He also said it becomes a big problem when transporting a school team that they have trained for competition unless the district, through the education department comes to support them financially. In addition he also mentioned less skilled manpower that he said are quite few in the country compared to the number of schools having children with visual impairment.

On contrary, Darius revealed that teaching children with visual impairment together with the sighted is not very easy, but to him, *“if there is enough time, enough tactile materials, and concrete objects,”* then there would be enough guidance by the teacher. He said that the learning of a child with visual impairment in a mainstream is slightly slow but when s/he picks up, they are so good.

4.4.2 Supporting children to meet their learning needs

Teacher support towards a child's skill practice

Darius said, he happens to get relevant information and support from other colleagues and teach children with visual impairment slowly by slowly. He asserted, teaching children with visual impairment together with the sighted is not easy, but he said,

“It is interesting once given enough time they all get information like their sighted peers. You give them enough time, enough tactile materials, or concrete objects and guidance so that when they touch they learn better. My feeling is that a child with visual impairment is like any other child. I like them, I love them, they are all equal, they are all human beings and I have to treat them equally.”

Darius re-affirmed that teacher guidance is important in any learning activity. He said that the teacher can demonstrate, guide, or take some more time to explain and motivate the children to learn. He also mentioned task analysis as one of the useful means of meeting the needs of children with visual impairment in carrying out activities effectively. He said,

“I normally guide them by breaking the tasks into small units, and also have to teach them from what they know to what they do not know.”

He further elaborated that he usually base on the child's experience to determine the kind of help or guidance to give. He felt in so doing it helps him to find the areas that children may need more support in class.

Darius explained and said that it is important to assess and classify children with visual impairment as B1s, B2s and B3s for purposes of supporting them carry out a skill or even competitions.

He said during skill practice one can use familiar units, ask the children to use their body parts to tell direction such as right hand or left, and also using the clappers or any sound source for example when rolling the goal ball to the child. For Darius, during many occasions he felt this kind of support helped children with visual

impairment to know which direction the ball was moving to or coming from. He further said,

“Hands-on experience and taking the right position should equally be checked when demonstrating to avoid misleading the child in skill acquisition.”

He believed that teacher guidance during skill practice is very important because children feel more comfortable and confident and to perform the required skills. He also disclosed that children feel they are actually protected and cared for especially by calling each child by name to avoid labeling during their learning.

Motivating children with visual impairment to carry out activities

Darius expressed that when motivating children, he has a variety of ways to thank them for performing such activities. He said,

“I may say well-done or reward them, such words shows that they are appreciated.”

In addition, he said this is a general way done to all children regardless of their visual impairment or special needs either on individual basis or in group participation. He also disclosed that these activities are organized in such a way that these children are grouped for example sighted together with children with visual impairment or they are paired to work together.

Child-to-child/peer support in learning

Darius disclosed that in many incidences some children with visual impairment may not see things clearly; so, he said, as a teacher need to talk direct to the child, and/or most importantly use other peers in class. He said that they used other peers to help or work together with children with visual impairment.

4.4.3 Children’s interest and enjoyment of sports and physical activities

Activities children find more interesting to participate in

Darius said that the kind of sports they have include, showdown, goal ball, ball throw, athletics, tandem cycling and field events like long jump, javelin. He listed the physical activities such as laying their beds, fetching water, sweeping, picking rubbish etc. He said these activities are organized in such a way that the children are grouped for example sighted together with children with visual impairment or they are paired to work together, or help each other.

Children's attention and concentration in activities

Darius understood that children with visual impairment can participate in activities like any other children given the task and time. He cited some special play materials like balls with bells inside them where children with visual impairment become so much excited and active when playing because they have to rely on their listening. He said,

“Children with visual impairment feel overjoyed as they play with such materials and their learning is quickened.”

He also sensed that these children with visual impairment rarely cannot forget so easily like any other children. He felt children with visual impairment are always trying to cope with whatever work they are doing like any other child in class. He said he always begun by giving warm up activities, then individual, pair, and then group activities.

Organizing competitive sports for children with visual impairment

Darius said;

“I believe competitive sports develops a child's self esteem, builds confidence and self actualization--- where a child can say I can also take part here as he or she affirms, or financial gain for instance winning a gold medal, prize or something of the kind.”

He further said through competitive sports, children build up their curriculum vitae and also makes them adventure or rather reach new places especially during competitions held at different levels and places. He observed that through this kind of

arrangement, the community and other people are spectators during such important occasions seeing all the great potentials children with visual impairment have to participate in a number of sporting events. These in turn, he felt raises awareness and eventually change of negative attitudes towards persons with disabilities and recognize and value them like any other persons with abilities and potentials of competing in sport.

4.4.4 Physical competence of children with visual impairment

Motor skills

Darius said to him, in many cases children with visual impairment's general development sometimes, it is delayed. He felt this could be as a result or might have been under stimulated. He further expressed that some children with visual impairment have poor co-ordination which he contends could be due to overprotection of these children by their parents. He also reported that the children's fine and gross motor skills are delayed although some can try to grasp or grip objects. However, he said with time all children are encouraged to get involved and participate in activities in order to grow and develop their bodies well.

Mobility skills

Darius said for the time being he has been in the school, many children with visual impairment seem unable to walk well, and so there is a kind of poor body posture which affects their sitting position and walking. He asserted,

“When there are regular exercises, the child becomes physically fit; his or her speed increases, becomes flexible and strong enough to carry out tasks.”

Health and fitness

Darius pointed out that through regular exercises three key domains are developed; the cognitive, affective and psychomotor. He referred to this as, *“All round development”* of an individual. He said,

“One has to do some practice to keep healthy and fit in the body; I see it as a necessity for health.”

He further said that he sees no excuse that one can develop a healthy body without having regular exercises.

4.4.5 Organization of learning environment

Adaptation of the learning environment and equipment

Darius expressed that when it comes to his class arrangement, he makes sure that there is some order especially sitting arrangement. He said,

“There is need to have order in class. Children with visual impairment need to be positioned well perhaps to those with some residual vision to see properly, hear or get instructions clearly.”

He felt as a teacher he has been trying to design good materials both in print and Braille to help both categories of children who are sighted and those with visual impairment in his class. He emphasized change of attitudes amongst the population as this in one way may hinder children’s participation in sports and physical activities. He said, *“I always feel proud when I see all children in my class doing the activities regardless of some having visual impairment.”*

He also suspected that some other teachers outside especially those who have never had contacts or interacted with children with visual impairment may think it was not possible for children with visual impairment to participate and learn like any other child, but he argued that it only depends on the way sports equipment and facilities are adapted to suit their needs.

4.5 Cross-case analysis

This section sums up the similarities and differences from the four cases concerning teachers’ perceptions and experiences about the importance of children’s participation in sports and physical activities. Cross –case analysis search for patterns and requires

one to look at the data in many different ways. This in turn helps to treat the evidence fairly in trying to produce analytic conclusions answering the original “how” and “why” research questions of the study. Examining the individual responses of each case presented and through cross-case analysis similar, responses and some individual differences regarding the phenomenon of the study were identified.

4.5.1 Building children’s social skills through participation in sports and physical activities

Dismas, Denis, Davis and Darius expressed and gave similar responses concerning how they have been trying to build children’s social skills through participation in sports and physical activities. They said it was a very good idea to encourage all children to participate in sports and physical activities through which children interact and socialize with each other freely. They pointed out that children learn to share many things, helping each other, cooperating amongst themselves, turn-taking, asking questions, being responsible, learn leadership skills and also creation of friendship. In particular, Denis said through interaction during sports and physical activities, children with visual impairment are normally brought closer to their sighted colleagues and become free and comfortable with each other. According to Davis’ experiences, children’s interaction through sporting activities improves their self esteem, self expression, communication and language. Darius said encouraging and building social skills among children brings about orderly way of doing things as children feel and work together as brothers and sisters and their relationship become stronger.

On the other hand Dismas, Denis, Davis and Darius indicated that they are sometimes constrained in one way or the other in designing and creating opportunities for children with visual impairment to participate in sports and physical activities. They felt time allocated and insufficient sports facilities and equipment limits their efforts. They also said it was not easy in convincing children with visual impairment to participate for the first time as they needed to be talked to from time to time. Davis believed low moral among teachers was yet another issue where many teachers opt not to organize sporting activities with the assumptions that it needs a lot of

commitment. In the way Denis, Davis and Darius expressed that it was important to understand a child's difficulties in class because it assists in designing appropriate sports activities for him or her. They also said a teacher needs to be patient with each child's speed in carrying out activities. Davis expressed that when a teacher keeps around explaining and guiding in carrying out activities this in turn helps the child to build up his or her confidence, feel comfortable and learn easily. Dismas emphasized that children need to be helped to build their social skills through participation in sporting activities as this helps them to remain mentally alert and active in solving problems in life.

4.5.2 Children's interest and enjoyment

Dismas, Denis, Davis and Darius all reported that children with visual impairment do well in most aspects especially through participation in sports and physical activities. They said have witnessed children with visual impairment concentrate and perform well in sports like goal ball, showdown and athletics. They disclosed that much of the learning of children with visual impairment was through auditory and touch/feeling. Besides, they said, children with visual impairment can cope up with any kind of work or activities so long as the teacher supports and guides them well using the appropriate techniques. Denis said that children's learning through participation in sporting activities was not as complicated as in learning mathematics or science. In a similar way, Davis said that children's participation in activities improves children's alertness to answering questions, their imagination, thinking and reasoning. Darius said that children with visual impairment have good memory and cannot forget easily; and more so the adapted equipment excites, brings joy and motivates the children to listen attentively.

4.5.3 Strategies used in supporting the participation of children in sports and physical activities

Dismas, Denis, Davis and Darius all pin-pointed that at times they have been constrained in a few aspects when trying out several ways to address the learning needs of both children with visual impairment and sighted in the mainstream. Although they said that through a number of strategies they kept on trying. Majority

of their responses when it came to supporting children in carrying out activities were similar. They mentioned giving information through verbal instructions, demonstrating the required steps to the children, being in direct body contact especially with children with visual impairment, designing suitable activities, improvisation of some materials, use of sound sources such as clappers, and talking to the children while carrying out the activities. Denis and Darius felt it important that children with visual impairment were classified in three levels as B1s, B2s, B3s and their activities broken down into step by step so as to help them perceive the concepts well. Davis disclosed that teachers needed to be patient with children when carrying out activities.

In light of this, the four cases reported that they encouraged child-to-child approach through which both sighted and children with visual impairment work together, help each other and at the same time learn from one another. In particular Denis said, both categories of children learn to shape the social, intellectual, physical, emotional and moral development through child-to-child learning.

Concerning motivation of children and giving of timely feedback during the sporting activities, Dismas, Denis, Davis and Darius all observed many similar ways they have been using such as; asking other children to clap for their colleagues for the right step taken to carry the activity, calling the child to appreciate or praise by saying thank you, well done, good boy or girl, excellent work, keep it up, and also organizing activities on individual and group method as they all feel secure and confident. Denis said that it was good to use the child's name as it kept him nearer the child. Darius disclosed that it was important to motivate all the children either on individual basis or in a group.

Davis, Dismas, Denis and Darius reported that it was important for them to organize the learning environment by adapting the sports equipment and facilities for children with visual impairment's active involvement and participation in activities. They suggested good classroom arrangement that allows free movement, double lanes for athletics, wider take off board for long jump, use of sighted guides/escorts, need for

more time, and the good positioning of the child among others. They felt such adaptations increased the child's participation in sports and physical activities. Darius and Davis further said that teachers should desist from giving unnecessary excuses regarding ensuring good adaptations of learning environment and other materials to help a child with visual impairment carry out activities like any other child in class.

Regarding the competitive sports, similar views were raised by the four cases. They all said the school was positive and they themselves have been instrumental in training and encouraging all children to participate in a number of sports and physical activities right at school up to the national level. They mentioned that plenty of sporting activities organized include, athletics, goal ball, showdown, and other games like playing cards, chess. During many occasions, they said children with visual impairment are much interested in showdown, goal ball, athletics, singing and playing cards. Dismas and Denis said children need to be kept active through participation in competitive sports. Davis, Denis and Darius said that through competitive sports children are exposed to the outside learning through which they develop team spirit, social life, and physical fitness, sense of belonging, self esteem, and confidence. Darius said it was through competitive sports that a child improves on his or her self-actualization, build curriculum vitae, for financial gain and/or raise awareness in the community and eventually change of negative attitudes when people come to see such events.

4.5.4 Building physical competence of children with visual impairment through participation in sports and physical activities

Concerning motor skills, Dismas, Denis, Davis and Darius all contend that before children with visual impairment formally joined school; they seemed to have a delay in many aspects in life especially the development of their fine and gross motor skills. They associated this delay perhaps due the parents' negligence, overprotection and lack of information about how to support their children during such period of childhood by involving them in activities like any other child at home. They were all in agreement that teachers need to organize activities and encourage children to

participate in order to stimulate their physical development by improving on their movement, body coordination and posture and ability to carry out activities independently. Davis specifically said that all along looking at the life issues of children with visual impairment, it was important for him to develop a programme of teacher-parent collaboration through which he has been sharing information with parents and linking whatever was done at school to the child's home and vice-versa.

In addition, they all responded that before children with visual impairment joined school, they have been training them in orientation and mobility skills so as familiarize them in the new school environment and improve on their movement patterns especially through participation in sports and physical activities. They said when children become physically fit they are able to move freely, socialize with each other and carry out activities independently. Davis said although parents think that involving their children with visual impairment in carrying out activities would hurt them but when children's mobility skills are developed, they become flexible and their personal hygiene is improved. Besides Denis contemplated children need to develop their mobility skills in order to reach desired goals and fit in society; if not they would become a burden and so felt it important to be supported in developing the required skills for survival. Darius said that it was a good idea that through regular exercise, children with visual impairment have become physical strong, fit and their speed has increased in carrying out activities.

Dismas, Denis, Davis and Darius all gave similar responses concerning children's health related issues and general body fitness. They expressed that when a child is healthy then the mind is healthy too. They said good health contributes to active learning of children; and at the same time a child's active participation in activities improves on his or her general health status. Denis said that he has realized participation in sports and physical activities contributes more to the learning of other subjects than it does to itself; and also if a child is not healthy usually develops a tendency of being sickly and irregular in class attendance. Denis also said a child with visual impairment need to be encouraged to participate in sports and physical

activities like any other child to enable him or her improve on the social, moral and physical development. Whereas Darius observed three domains that are developed through a child's participation in sports and physical activities thus; cognitive, affective and psychomotor domain goals which he referred to as all round development of an individual; and he believed that every individual need regular exercises in order to keep healthy and fit in the body as health is a necessity to everyone.

5. Discussion of findings, conclusion and recommendations

Introduction

The purpose of the study was to find out teachers' perceptions and experiences about what and how children with visual impairment learn through their participation in sports and physical activities in a mainstream primary school. Four cases (teachers) were studied. A semi-structured interview guide for teachers was used in data collection. The discussion was based on the research findings which are presented in the previous chapter four and in relation to the theoretical framework. The study was based on Vygotsky's theory of Zone of Proximal Development (ZPD) and Scaffolding. ZPD refers to the interaction between the teacher and the child, and how much of this learning can be independently accessed by the child and how much requires the teacher to mediate in order for the child to access full understanding and develop further additional related concepts. For instance during the demonstration of sporting activities for the child to practice the required skills and the guidance the teacher will try give to the child to carry out the activity.

Based on Jerome Bruner's concept of "*Scaffolding*", teacher's role in helping children move from joint to independent problem solving is emphasized. Scaffolding refers to the gradual withdrawal of adults control and support as a function of children's increasing mastery of a task at hand.

The term '*perception*' was used in the text to mean teachers' awareness, understanding, sense, impression, feelings, idea, notion, recognition, observation, consciousness, conception, insight or perceptiveness while '*experiences*' is used to mean the occurrences, discoveries, feelings, endurances, pride, encounters, evidence, trials, exposure, understanding, (Knowledge), adventures, and what has been lived through or undergone.

'Participation' was used to mean the act of taking part or sharing in something and often encouraged by the teacher. This could be sharing in sports and physical activities of a group, class, involvement or any engagement in any kind of activity.

5.1 Discussion of the findings

The discussion of the findings of the study focused on the research problem which was to investigate teachers' perceptions and experiences about what and how children with visual impairment learn through participation in sports and physical activities in a mainstream primary school in Uganda. The discussion was in line with the research findings presented through step by step interpretation for each, case by case and cross-case analysis in chapter four.

5.1.1 Social interaction

The findings revealed that there was child-to-child and teacher-to-child interaction throughout their participation in sports and physical activities. This has been reflected on how the teachers have been trying and encouraging children to build their social skills through participation in sports and physical activities. Teachers all appeared to be instrumental and positive towards children's interaction both in class and outside class. Besides, the study showed that through interaction children were able to learn many things which could be very useful in their lives; and maybe lead to improvement on their self esteem, self expression, communication, language and have strong social relationships with each other. Teachers' feelings are reflected in the ways they have been encouraging and supporting children in carrying out the desired activities.

Vygotsky (1978), states that social interaction is the medium for every child's development. Rogoff (2003) suggests that the social context is basically the essence of the child's learning and development through actively participating in dynamic and progressive activities. In light of the findings reflected in the previous chapter of the study, teachers seemed eager to involve children in sports and physical activities so as to improve on their social skills. Encouraging and supporting children to build their social skills would bring about an orderly way of carrying out activities and the

children themselves feel and work together as brothers and sisters without any kind of discrimination.

According to Mittler (2000) with emphasis suggests that any kind of support in any learning situation should include ensuring that all learners take the fullest part in a learning activity; that they have opportunities to interact with the teacher and each other, and they achieve success. The concept of support should not, therefore devalue or deskill existing good practice. It may be useful to think of a continuum of support, beginning in the natural environment of the ordinary classroom and using the experienced teachers' natural repertoire of skills in ensuring that all pupils participate and are included.

In this respect, the present study established that teachers were encouraging children to work in groups or pairs and on individual basis. Children were able to learn how to take turns in their interactions while expressing themselves as the teachers tried to motivate them by asking the rest of the children to either clap for them or praise them after doing the right thing.

According to Allen and Schwartz (2001) suggest that including young children with disabilities in the educational mainstream implies equal social status with other ordinary children and this promotes awareness, the community also become more accustomed to children with disabilities and so leads to a greater acceptance. McCormick (1990) cited in Allen and Schwartz (2001) points out that, "*separating young children with disabilities from normal experiences creates distance, misunderstanding and rejection.*" The findings of the study indicate that both children with visual impairment and sighted peers were able to socialize and interact freely with each other without any kind of bias. The findings showed that through interaction children built stronger relationship, became free and comfortable with each other as they participated in sports and physical activities. In light of the findings of the study, the teachers encouraged child-to-child approach through which sighted and children with visual impairment worked together, helped each other and at the

same time learned from one another in shaping their social, intellectual, physical, emotional and moral development.

According to Mittler (2000) children supporting children is seen as a successful inclusion which aims at making them participate in activities. Their own support to each other is given casually and without teacher planning or intervention. Although in countries with large classes, teachers ensure that children of varying abilities are sitting next to each other, so that more able children are helping their colleagues who may be struggling to understand what they are supposed to do.

Furthermore the findings of the current study, showed both sighted and children with visual impairment helped one another in solving some questions, shared materials and some peers demonstrated the required steps that they were to follow in accomplishing certain sports and physical activities while the teachers' seemed optimistic in encouraging child-to-child learning through which children were able to learn from each other become responsible and build friendship.

Peer relations are highly important to children's development. Friends provide companionship and support, allow children to take part in social recreational activities they cannot do on their own and are important to children's social skills development (Muijs and Reynolds, 2005). The study found out that peers worked and helped each other throughout their learning through participation in sports and physical activities. Some children who were made leaders tried to mobilize their friends while others helped their colleagues with visual impairment as sighted guides in carrying out activities with teachers' encouragement and support.

5.1.2 Opportunities for children's participation in activities

Regarding opportunities for children's participation in sports and physical activities, the findings suggested some constraints that the teachers were faced with in designing and creating such opportunities for children. It looked like the school was positive and teachers were able to organize some sporting activities although under hardships where some children with visual impairment hesitated to participate at first, time

factor and lack of enough equipment and facilities limited their efforts. It was established from the findings that teachers' patience and understanding of a child's state of live was important especially when designing appropriate sporting activities.

Teacher's working conditions also seemed to be another issue in regard to preparations and creating learning opportunities for all the learners in class more specifically concerning children's participation in activities. It was suggested that teachers needed prior preparation that includes both the equipment and facilities to use and that may be adapted so as to be suitable for all the learners bearing in mind their varying abilities.

Allen and Schwartz (2001) emphasize that teachers must take responsibility in supporting and facilitating successful interaction among children. They say, teachers should recognize the value of play as a an avenue of learning for children with disabilities as well as for typically developing children and also structure a learning environment in which children with and without disabilities are helped to participate together in a variety of activities related to their areas of development.

According to Lieberman (2005) as put in chapter two, fostering children with visual impairment's independence can be achieved through their involvement in physical activities depending on the teacher's way of developing and maintaining a positive attitude about the child.

The present study established that adaptation of the learning environment increased children's participation in activities and some teachers were using adapted sports equipment such as balls with bells and they tried to adapt some of the facilities to allow children with visual impairment participate more effectively.

The findings further showed that it was important for teachers to organize by adapting the learning environment for children with visual impairments' active involvement and participation in activities.

Adapting is good teaching. *“All good physical education is adapted physical education”* (Sherrill, 2004). The study further indicated that having good classroom arrangement allowed free movement, and having double lanes for athletics, wider take off board for long jump, use of sighted guides/escorts, need for more time, and the good positioning of the child when demonstrating an activity all sounded important to the teacher. It was realized that adaptation of equipment and facilities increased the child’s participation in sports and physical activities. The study established teachers tried to adapt sports equipment and facilities which contributed to excitement, joy and motivated the children to listen attentively in the process of carrying out activities.

According to Allen and Schwartz (2001) state that appropriate adaptations enable every child to engage in all types of activities organized. A friendly classroom promotes social development. It is a teacher’s job to offer or facilitate activities and special interest areas that facilitate comfortable peer interactions.

In reference to what was earlier found out in the study Onyewadume and Onyewadume (2002) had carried out in Southern Saharan Africa which provided an insight about teaching of Adapted physical activities as being relatively new and having inadequate trained teachers for the existing schools,; In regard to the findings of the current study, the few teachers studied seemed to be interested in supporting children with visual impairment although expressed low moral among other teachers, as teaching children with visual impairment necessitates patience and commitment in carrying out activities.

According to Bandura, 1986, Winnick, 2000 and Sherrill, 2004) as in chapter two, self-efficacy reflects one’s personal mastery of experiences as a form of self esteem and confidence. The findings of the present study indicated that some children with visual impairment seem to have feared to participate in sports and physical activities at the beginning may be due to having not acquired enough earlier experiences which could affect their performance. This finding was in line with what Rye (1985) had earlier pointed out by suggesting that a child’s daily home life constituted to the

enrichment of experiences in relation to the development of his/her social, cognitive, language and motor skills. In support, Cole (1990) emphasized children's indigenous activities in form of games as having a greater influence on their learning achievements.

Furthermore, it was revealed that through competitive sports, children with visual impairment got exposed to the outside world, through which they developed team spirit, improved social lifestyle, and physical fitness, sense of belonging, self esteem, and confidence, self- actualization, built curriculum vitae, and for financial gain. This finding relates to the analyses of the previous results of the study carried out by (Kahrs, Sentumbwe and Sørensen (2005-2007)) which clearly indicated that participation in sports competition has an empowering role on the lives of persons with visual impairment.

Anne Mette Friis earlier suggested that disadvantaged children can benefit a lot through taking part in sports which the author referred to as a good tool of creating unity, improving ones self esteem and resolving conflicts in society. In this regard, the findings suggested that through such competitions beside children benefiting, society too, could perhaps change their negative attitudes towards persons with visual impairment and those with disabilities in general and the world over where people come to see or watch children with visual impairment participating in sports and physical activities during competitions. This could act as a platform for raising awareness about each child's potentials regardless of their varying abilities.

5.1.3 Children's motivation and enjoyment in activities

In regard to the findings concerning motivation and enjoyment, teachers observed various ways that they have been using to motivate and support children to enjoy sports and physical activities. It was revealed that teachers could ask other children to clap for their colleagues, praised by saying thank you, well done, good boy or girl, excellent work, keep it up, were are all good means of motivation. It was further noted that not only was it good to use the child's name but also this contributed to the child's alertness and being kept nearer to the teacher in any learning situation.

According to Brophy (1981) cited in Stipek (1993) as previously stated in chapter two, praise is taken as an example that teachers use to show to the child whether his or her answer is correct. Participation in sports and physical activities involves children observing teachers or the peers as they demonstrate the required skills to be practiced. As reflected in the Zone of Proximal Development the concept of scaffolding, indicating to a child for his or her being good at carrying out an activity is a motivating factor. Praise serves as a reinforcer for most students especially the young children. Motivating children by giving timely feedback and vice-versa during the sporting activities may be good to both the teacher and the child.

The findings established that majority of children with visual impairment do enjoyed and performed well in sports like goal ball, showdown and athletics. The study further disclosed that children with visual impairment were able to cope up with any kind of activities provided there was appropriate teacher support and also much of their learning was through auditory and tactile. Besides motivation and enjoyment through sporting activities, the findings indicated that children's participation in activities improved their alertness to answering questions, imagination, memory and improvement in their thinking and reasoning.

According to Allen and Schwartz (2001) noted that teachers who arrange play spaces and activities well for all the children to be included easily and naturally convey a powerful message about human values: "*All children can play together and have fun.*" Having fun together promotes genuine integration (p.215).

Stipek (1993) pointed out that students should always be given assistance or help when they need it, but unnecessary help can prevent children from taking credit for completing a task. Such children who are given a great amount of help will not attribute outcomes to their own efforts and competencies. They may not experience the feelings of pride or competence that accompany successful mastery efforts and will not be motivated to pursue future tasks on their own. This seems to be in line with the concept of scaffolding where the teacher's help moves from joint to independent problem solving.

The study established that when children are helped in any way and then left to complete the activity at his or her pace it eventually builds self confidence and feels motivated in carrying out similar tasks at will.

5.1.4 Motor skills

In regard to motor skills the findings indicated that children with visual impairment seem to have a delay in many aspects in life especially the development of their fine and gross motor skills which was associated due to the parents' negligence, overprotection and lack of information about how to support their children during such period of childhood by involving them in activities like any other child at home. According to Boter and Wouters (2002) overprotecting a child with visual impairment may have a limitation on him/her experiencing life situations and in turn lowers the child's self esteem and confidence in performing activities in an appropriate way.

According to Lieberman (2005) Children with visual impairment's delays in motor skills have multiple causes including the reduced opportunity for "*rough and tumble*" play with parents, heightened protective instincts of parents and caregivers, the infant's own fear of being moved suddenly, lack of vision that motivates movement, and the lack of opportunity to observe others moving (p.209). The author further emphasized that children with visual impairment must be provided with opportunities and motivation to move in safe environments so as to minimize the development of motor delays, and also enthusiastically encourage and positively reinforce their movements by physically demonstrating and verbally encouraging that it is safe to move.

The present study showed that both parents of children with visual impairment and teachers needed to organize or arrange activities and keep encouraging children to participate in order to stimulate their physical development by improving on their movement, body coordination and posture and ability to carry out activities independently. The findings further indicated that although teachers were constrained in providing more opportunities for participation, they kept on trying to encourage

children taking part in sports and physical activities training and competitions so as to stimulate and develop their motor skills.

Development of good motor skills both gross and fine motor abilities are all important prerequisites for formal orientation and mobility skill training. Efficient gross motor skills facilitate environmental exploration and movement through the environment. While efficient fine motor skills facilitate the exploration and manipulation of objects and are necessary for learning how to use a cane or other assistive devices (Hill, 1986).

It was revealed that looking at the life issues for children with visual impairment, was important for teachers to develop a teacher-parent collaboration through which they would be sharing information and linking whatever was done at school to the child's home and vice-versa. This in turn would be a corner stone in developing the child's motor skills to improve on the body posture, coordination, self esteem confidence.

In light of the need for orientation and mobility skills, the findings suggested that before children with visual impairment joined school, their orientation and mobility skills were poor but later they improved through participation in sports and physical activities. Similarly the findings indicated that parents' lack of knowledge about how to involve their children with visual impairment in carrying out activities may have contributed to such a delay of their children's mobility skills and affected their personal hygiene. On the other hand the findings of the study suggested that the development of mobility skills can be achieved through participation in activities and it was important in helping individuals with visual impairment to reach desired goals and fit in any society. Orientation and mobility is important support service in the comprehensive delivery service for persons with visual impairment. Teachers had a duty to orientate the children from the very day they joined school so as to get used to the school environment and being able to carrying out activities.

Promoting independence through orientation and mobility instruction has many inherent values and can positively impact on the individual in a number of ways such

as; contributes to one's positive self concept, development of gross and fine motor skills, creates more social opportunities for an individual, and enhances and facilitates one's participation in activities of daily living (Hill, 1986).

5.1.5 General health

Concerning children's health related issues and general body fitness, the findings seem to indicate that good health can contribute to active learning of children; and at the same time their regular active participation in activities improved the general health status and all round individual development. In addition, the findings suggested that participation in sports and physical activities may contribute more to the learning of other subjects than it does to itself. This was revealed in relation to the children's improved and regular school and class attendance as opposed to those who might have a tendency of being sickly and often absent themselves from school.

According to Koivula (1999) as earlier pointed out that participation in sports and physical activities on a regular basis positively contributed to an individual's general health, increased vigor and having a clear mind, the findings of the current study showed that children's regular participation in sports and physical activities contributed to the development of their motor skills making them to become more flexible, increased speed in carrying out activities, and being physically strong and fit.

According to Vickerman, (2007) Children with disabilities like their non-disabled peers need to experience physical movement, learning and development in a wider range of activities and environments as part of their education. It is believed that supporting the development of children's movement patterns promotes their physical development and also is seen as an essential aspect of their social, emotional, intellectual development. Physical activity enhances children's fitness, fosters growth and development and helps teach them about their world. Schools should continue to provide high quality physical education programme and sports in promoting physical activity as part of a lifelong healthy lifestyle.

Allen and Schwartz (2001) suggest that physical skills and general good health of an individual significantly influences every area of development. They further suggested that children with disabilities require a specific intervention programme having multiple opportunities to practice new skills and abundant support from parents, caregiver, and teachers.

In a similar way, the study established that teachers had a notion that health was a necessity to everyone and were neither biased but tried to encourage all children both sighted and children with visual impairment in taking an active part in sports and physical activities through which they seemed to believe could enable children to improve on their health status.

5.2 Conclusion

This study investigated teachers' perceptions and experiences about what and how children with visual impairment learn through their participation in sports and physical activities. It generated their ideas, feelings, impression and knowledge about how children's participation influenced them to learn through social interaction, thus learning how to get along with others and the kinds of support given to the children so as to encourage them participate effectively. The school is one of the social agents charged with the responsibility of developing and promoting children's social interaction and learning. The teachers' roles and their interactions with the children may influence their behaviours and ways of learning. Teachers who have regard for pupils feelings and dignity contributes to the establishment of a positive relationship between the teacher and his/her pupils (Mwamwenda, 1995).

The findings of the study showed that interactions between the child-to-child and then to teacher was of paramount benefit in any learning situation as it was seen as the medium and context of a child's learning with a continuum of support through actively participating in sports and physical activities. Teacher's structuring by adapting the learning environment may enhance every child's participation in sports and physical activities and keep the child fit and healthy. Besides, children exhibit

good behaviours that may promote their self esteem, confidence, enjoyment of physical activity, motor skills, and mobility skills or independent life skills.

According to Farrell (1986) earlier suggested that early education for children with visual impairment continues to be premised on a belief that visual impairment is mostly a problem of having access to information that in one way or the other may affect how something is learned, not what is to be learned. Providing opportunities to the child such as through sports and physical activities could be some of the ways to learn and try to minimize the effect of visual impairment as early as possible, then, there is no limit to what can be learned by the child. This kind of support and provision of opportunities for participation for children regardless of their varying abilities is dependent on effective collaboration between the teachers and the parents.

The results of the study established children's participation in sports and physical activities seem to have a great impact on their social, moral, physical development and well-being. Competitive sports may have a direct exposure of children reaching new places, meeting and interacting with other people and creating friendship. Children learning together and carrying out all the sports and physical activities contributed to their equal status without any kind of discrimination. There are several ways by which children's participation in sports and physical activities could improve regular school and class attendance including enhanced interest, attention, alertness, concentration, problem solving and orderly way of doing things. Peer support in addition to teacher's guidance is of great value to children's learning.

5.3 Recommendations

Strengthening children's participation through sports and physical activities is a good gesture to their learning and development. Children should be involved early enough in activities so as to interact with one another, stimulate and develop their motor skills, orientation and mobility skills, auditory and listening skills and on their general body improvement.

The government through the ministry of education and sports should ensure the provision of sports equipment and secure accessible facilities in all schools to encourage children taking part in sporting activities at all levels.

Schools should establish good teacher-parent working relationship as this may be equally beneficial in trying to link whatever is done at school to the home and vice-versa in helping a child with visual impairment grow up like any other ordinary child. It is through such venture that parents of children with visual impairment can get relevant information on helping the child develop and learn early enough.

Besides teacher support in learning situations, and child-to-child support is equally important and should be emphasized and encouraged in all schools. It is through this that both children with visual impairment and sighted learn to stay together and build a stronger relationship as brothers and sisters without being discriminated or segregated as having an impairment or disability.

Sports for children with visual impairment have been newly introduced in Uganda and the few teachers who participated in the study were enthusiastic in acquiring more knowledge, skills and values in teaching and organizing competitive sports in schools. There is need for other research studies in this field and more trained teachers with such competence in creating opportunities to develop children's talents and abilities through active participation in sports and physical activities for all regardless of their unique needs and abilities across the country.

References

- Allen, K.E and Schwartz, I.S. (2001). *The Exceptional Child Inclusion in Early Childhood Education*. Fourth Edition. New York. Delmar
- Beashel, P. and Taylor, J. (Ed) (1996). *Advanced Studies in Physical Education and Sport*. UK. Thomas Nelson and Sons Ltd.
- Bell, J. (1999). *How to complete your Research Project Successfully. (A Guide for first-time Researchers)*. New Delhi. UBS Publishers
- Bell, J. (2005). *Doing your Research Project: A guide for first-time researchers in education, health and social science*. Fourth Edition. New York. Open University Press.
- Best,A.B (1992). *Teaching Children with Visual Impairment*. Milton Keynes: Open University Press.
- Buell, C.E. (1983). *Physical Education for Blind Children: Second Edition*. Illinois. Charles Thomas Publisher
- Burden, B. (2002). *A Cognitive Approach to Dyslexia. Learning styles and thinking skills in Gavin, Reid and J. Wearmouth (eds). Dyslexia and Literacy: Theory and Practice*, Chichester: Wiley.
- Cole, M. (1996). *Cultural Psychology. A Once and Future Discipline*: New York. Harvard University Press.
- Creswell, J.W. (2003). *Qualitative Inquiry and Research Design: Choosing Among Five Traditions*. Carlifornia. Library of Congress.

Creswell, J.W. (2003). *Research Design: Qualitative, Quantitative, and Mixed Methods, Approaches*. Second Edition. New Delhi. SAGE Publications, Inc

DePauw, K.P and Gavron, S.J (1995). *Disability and Sport*. Champaign. Human Kinetics Press.

Duke, D.L. (1990). *Teaching: An Introduction..* University of Virginia. Singapore. McGraw-Hill International Editions.

Education for All (EFA) Global Monitoring Report (2009). *Overcoming inequality: Why governance matters*. UNESCO

Egelund, N (1997). 'The Use of Qualitative Methods.' *Research in Special Needs Education: UNISE, Kampala*

Gall, M.D; Gall, J.P and Borg, W.R (2003) *Educational Research. An Introduction: Seventh Edition*. New York. Pearson Education. Inc.

Gavin, R. (2007). *Dyslexia: Second Edition*. New York. Continuum International Publishing Group.

Gringhuis, D; Moonen, J and Woudenberg, P.V (Eds) (2002). *Children with partial sight-Development, parenting, education and support*. Voorburg, Netherlands: Bartime'us.

Kahrs, N and Sentumbwe, N (1997). 'Sporting with visual impairments, project description.'

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- Kahrs, N and Sentumbwe, N (2001). The Uganda Mobility and Rehabilitation Programme Final report on the Sporting with Visual Impairment Project Description. Oslo.
- Kahrs, N., Sentumbwe, N and Sørensen, M. (2007). 'Sport and Empowerment: Experiences from the Blind Sports activities in Uganda.'
- Kim, J and Taggart (2004). 'Teachers perception of culture of physical education' Investigating the silences at Hana Primary School in Korea.
- Koivula, N (1999) 'Sport Participation': Differences in motivation and actual participation due to gender typing. *Journal of Sport Behaviour*, Vol. 22, 1999
- Kvale, S. (1996). *Interviews: An Introduction to Qualitative Research Interviewing*. Thousand Oaks, Sage Publications, Inc.
- Mason, H and McCall, S with Arter, C., McLinden, M and Stone, J (Ed) (1997). *Visual Impairment: Access to Education for Children and Young People*. London. David Fulton Publishers.
- Maxwell, J.A (1996). *Qualitative Research Design –An Interactive Approach*. Thousand Oaks, London, New Delhi: SAGE Publications, Inc
- Maxwell, J.A (2005). *Qualitative Research Design –An Interactive Approach*. Thousand Oaks, London, New Delhi: SAGE Inc.
- Ministry of Education and Sports UPE Handbook an outcome of the National Conference on UPE Programme, held in Kampala, Uganda on 9th to 10th 1998

- Moll, L.C., (Ed) (1990). *Vygotsky and Education. Instructional Implications and applications of Socio-historical Psychology*. New York. Cambridge University Press.
- Moyles, J (Ed) (1995). *Beginning Teaching: Beginning Learning in Primary education*. Buckingham, Philadelphia. Open University Press.
- Mwamwenda, T.S (1995). *Educational Psychology: An African Perspective*. Second Edition. Durban. Butterworth Publishers (Pty) Ltd.
- Muijs, D and Reynolds, D. (2005) *Effective teaching: Evidence and practice*. Second edition. London. SAGE Publications
- Onyewadume, I.U and Onyewadume, M.A. (2002). 'Southern African Physical Education Undergraduates' Career Attitudes towards Adapted Physical Education: The University of Botswana Case.' *African Journal of Special Needs Education*, Vol. 7. No. 2, pages, 73-76
- Rogoff, B. (2003). *The Cultural Nature of Human Development*. New York. Harvard University Press.
- Rye, H.H (1985) *Early Intervention in Deprivation and Disability. A contribution to International Child Development Programme*. First Draft. Oslo
- Sacks, S.Z and Silberman, R.K (Eds) (1998). *Educating students who have visual impairments with other disabilities*. New York. Paul H. Brooks Publishing Co. Inc.
- Sarantakos, S. (1998). *Social Research*. Second Edition. London. Macmillan Press Ltd.

Scholl, G.T., (Ed) (1986). Foundations of Education for Blind and Visually Handicapped Children and Youth: Theory and Practice. New York. American Foundation for the Blind.

Sherrill, C (2004) Adapted physical activity, recreation and sport: Cross- disciplinary and lifespan. Sixth Edition. New York. Mc Graw Hill.

Stakes, R and Hornby, G (2000) Meeting Special Needs in Mainstream Schools. 2nd Edition. London. David Fulton Publishers.

Stipek, D.J. (1993) Motivation to Learn: From Theory to Practice. Second Edition. Massachusetts. University of California.

Tellevik J.M. and Elmerskog B. (2001) The Mobility and Rehabilitation Programme in Uganda: A Socio-cultural Approach to Working with Visually Impaired Persons. Tambatrun Resource Centre, University of Oslo. Unipub Forlag

The New Vision: Karimojong kids to tour Denmark. Vol. 24 No. 015 Wednesday, January 21, 2009: www.newvision.co.ug

Uganda National Association of the Blind (UNAB) General Assembly Report, 1997. Kampala.

Uganda Society for Disabled Children (USDC) ABILITY, Volume 2 No. 1 August, 2003. Bringing out the potential in disabled children. Kampala

Vickerman, P. (2007) Teaching Physical Education to Children with Special Educational Needs. London. Routledge Taylor and Francis Group

Vygotsky, L.S (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Winnick, J.P (2000) (Ed). *Adapted Physical Education and Sport*. Third Edition. New York. Human Kinetics.

Winnick, J.P (2005) (Ed). *Adapted Physical Education and Sport*. Fourth Edition. New York. Human Kinetics.

Yin, R.K (1994). *Case Study Research: Design and Methods*. Second Edition. New Delhi. Sage Publications.

World Health Organization (1980). *International Classification of Impairment, Disability and Handicap*. Geneva. UNESCO.

Appendix 1: Interview Guide for Teachers

1. Teacher's Background

Which class do you teach?

How long have you taught in this class?

What are your teaching qualifications?

For how long have you been in the teaching profession?

How long have you been teaching in the mainstream school?

How do you experience teaching in a mainstream school?

What subjects do you teach?

Do you have any special training in teaching sports and physical activities to children with visual impairment? If yes, specify... If no, how do you teach...?

2. Knowledge about children with visual impairment

Could you please, tell me how you find teaching a child with visual impairment together with the sighted in the classroom?

How does a child with visual impairment participate in activities?

What are your feelings about teaching a child with visual impairment?

How do you feel when a child with visual impairment performs the activities at slightly a slow pace than usual?

How do you describe the learning of a child with visual impairment in a mainstream class?

How do you motivate both children with visual impairment and sighted in learning sports and physical activities?

3. Organization of Sports and physical activities

Can you tell me the kind of sports and physical activities you always plan in your class for a child with visual impairment?

How do you organize these activities mentioned in (i) above to suit the ability of a child with visual impairment?

How do you organize sports and physical activities for a child with visual impairment together with the sighted?

How many times in a week do you organize such sports and physical activities?

Why do you organize such activities mentioned above?

Which activities does a child with visual impairment find most appropriate to participate in? Why do you think so?

How do you communicate to a child with visual impairment during sports and physical activity sessions?

What else do you think could be other ways of communicating during sports and physical activities?

How do you demonstrate activities to a child with visual impairment?

Do you also encourage other peers to help each other? If, yes, how..? Or if no, why?

What kinds of guidance do you provide to a child with visual impairment during the sporting lessons?

Why do you think this guidance is necessary in your class?

How often do you organize competitive sports for children with visual impairment in the school?

What is your view about organizing competitive sports for children with visual impairment?

What opportunities are there for a child with visual impairment to participate in sports and physical activities?

What is your view about children's participation in competitive sports?

What challenges do you experience in organizing sports and physical activities for children with visual impairment?

What do you suggest could be done to minimize such challenges you have mentioned?

4. Importance of sports and physical activities

What cognitive aspects do you recognize in a child as a result of his/her participation in sports and physical activities?

How are the aspects you have mentioned important to CWVI learning?

What social aspects do you think are developed through participation in sports and physical activities among the children?

How do you find those social aspects mentioned relevant to a child with visual impairments' learning in your class?

How have you been helping the CWVI to build up socially in your class?

How is the learning environment favoring a child with visual impairment to learn in your class?

How do both children with visual impairment and sighted feel towards each other?

What do you say about the motor development of a child with visual impairment?

Can you tell me how you find each of the aspects of physical fitness useful to a child with visual impairment?

There is a saying, “a health mind in a healthy body”. If you think of your work as a teacher teaching a child with visual impairment, what do you say?

Is there anything you may wish to share with me related to children’s participation in sports and physical activities?

Thank you so much for your co-operation, time and willingness in providing this kind of information which will be kept confidential and only used for the purpose of this study.

Appendix 2: Introductory Letter



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FACULTY OF EDUCATION

TO WHOM IT MAY CONCERN:

This is to certify that **KHAEMBA, David Kam**, date of birth 18.03.1967, is a full-time student pursuing a course of study at the Department of Special Needs Education at the University of Oslo, Norway, leading to the degree of Master of Philosophy in Special Needs Education (M. Phil. SNE).

This is a continuous two-year programme run on the "sandwich" principle, which involves periods of study and field work/research in both Norway and the home country. The student has concluded the initial study period in Norway and will be working on the collection of data and the writing of a thesis during the autumn semester 2008. This involves a period of field work in Uganda from 1 July to 31 December 2008. The student will then return to Norway for the final part of the degree. The period of study will be completed at the end of May 2009.

The main responsibility for supervising the research, developmental work and thesis remains with the Department of Special Needs Education, University of Oslo, Norway. However, we would kindly request that the relevant authorities give the student the access required to the schools and educational establishments necessary in order to undertake field work and research. We would also be most grateful for any assistance that is afforded to the student which enables him to carry out this work, particularly the use of facilities such as access to telephone, fax, e-mail, computer services and libraries at the various educational establishments.

Yours sincerely

Ass. Professor Steinar Theie
Academic Head of International Master's Programme
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