Including and teaching blind children in ordinary classrooms

Teaching tools teachers use and their influence on the inclusion of blind children ordinary classrooms in a primary school

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Preface

The purpose of this study is to investigate what teaching tools do teachers use and how do these influence on the inclusion teachers of blind children in ordinary classrooms in a primary school?

My experience in the field of Community Based Rehabilitation enriched my insight on the different categories of Impairments and the opportunity to learn braille to teach blind children. Though knowing braille never meant that I can teach blind children so as a teacher raising a red flag in tolerance of turbulence I encountered a lot of challenges while teaching blind children in a pre-school. I therefore wonder what teaching tools do teachers use and how do these influence on the inclusion of blind children in ordinary classrooms in a primary school since their learning situations present a triple binding challenge given that they are not only challenged by the poor facilities, but also with loss of the vision and its effects. Some effects are on cognitive functioning, with limitations in: the range and variety of a child's experience; inability to move independently; and limited interaction with the environment.

I wonder how blind children in Uganda can remain in primary school until completion hence calling it inclusion, given the un favourable circumstances surrounding them based on literature accessed so far in Uganda, what seems to be known about the teaching of blind children in ordinary classrooms has inadequate research and this prompted me to make an investigation on what teaching tools do teachers use and how do these influence Inclusion of blind children in ordinary classrooms in a primary school.

Abstract

The study aims to investigate what teaching tools do teachers use and how do these tools influence on the inclusion of blind children in ordinary classrooms in a primary school. The study used qualitative approach and Interview method with teachers from one primary school. In depth interviews were chosen as the main instrument of data collection.

Purposeful sampling and qualitative analysis was used in exploring and investigating the phenomenon of the study. Three special needs teachers for the blind in ordinary primary school were chosen as interview participants. This was to generate in-depth knowledge about the phenomenon "what teaching tools teachers use and how do these influence the inclusion of blind children in ordinary classrooms in a primary school using special need teachers as informants.

 The main findings show teaching tools teachers use and their influence on the inclusion of blind children in ordinary classroom in a primary school include: Guidance based on teachers knowledge and skills, assessment during pupils learning process, feedback, instructional conversation, verbal information and task regular checks outs, The use of teaching materials, tactile demonstrations using real objects, creative and friendly learning materials for the blind, Auditory materials, and organizing braille materials basing on individual education plan.

The main findings revealed that teachers had varied differences and similarities in the teaching tools which directly influence on the academic, social and physical inclusion of blind children in ordinary classrooms in a primary school.

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1 INTRODUCTION

1.1 Country Information of Uganda Education system and a road map to Inclusive Education

Uganda is a land locked East African country bordered by Sudan in the North, Kenya in the East, Tanzania in the South and Rwanda in the South west (Rwabogo ,1994). Kabale District, the area of the study is located in the South west part of Uganda.

Uganda's Education system is both formal and non-formal, the four tier educational model is followed whereby one spends seven years in primary level, four in lower secondary, 2 years in Advanced level before tertiary or university education that runs from 2 years to 5 years depending on what course one undertakes. The non-formal aspect emphasizes literacy and practical, hands on skills targeting young adults who have missed out from the formal system. The government of Uganda considers education as one basic human rights for every citizen and this is enshrined in Article 30 of the 1995 Constitution of Uganda which states: 'Every Person has a right to education'. (Constitution of Uganda 1995, P.29). This legal provision underpins Uganda's efforts and commitment to provide basic education to all her citizens of school going age.

As a signatory of the Jomtien Declaration on Education for All (EFA). One of the striking practical steps Uganda has taken in the attempt to deliver the right to education to her citizens was the introduction of universal Primary Education. (U.P.E) in 1997 and more recently universal secondary Education and Training (USE) in 2007. As a result of these initiatives to keep Improving. One important milestone in favour of children with disabilities was the UPE was still meant for only four children per family, the government of Uganda gave the child with disability and the official introduction of Inclusive Education in Uganda. (Ministry of Education and Sports 2004). This led to a huge influx of children with disabilities being enrolled in schools and this implication in both instrumental practices and teacher education Special schools and units still exist, though children with certain disabilities are still preferably educated in those special schools rather than inclusive schools.

The national disability prevalence rate stands at 4.8%, available statistics show that 63% of persons with disabilities have attained at least primary education. The situation is however different for persons with visual impairments. Despite the introduction of UPE and inclusive Education 42.7% of person with disabilities have not attained any education at all. This is a clear indication that children with visual impairment constitute a sizeable proportion of the

Ugandan children who are still missing out of the UPE provision. These statistical information tend to disclose the imbalance that exists in the access to primary education against children with visual impairment. (Uganda Bureau of statisitics, 2002)

As reported by the Ugandan Ministry of Education and Sports, Uganda is undergoing a transformation into a modern economy in which agents in all sectors can participate in economic growth. (Ministry of Education and sports 2008). As part of this transformation the government recognizes the importance of education in the national development. The mission of Ministry of Education is to provide quality education to eradicate illiteracy and to equip individuals with the basic knowledge, skills and attitudes. In 1997 a UPE policy was introduced to ensure free education for all children of primary school aged 6-12. As a result enrolment figures in primary schools have increased from 6.3 million in 1999 to 7.4 million in 2006 (UNESCO, 2009) with a pupil teacher ratio 55:1(Ministry of Education and Sports, 2006). As part of the drive to increase the right of all children to school enrolment, the Government is paying attention to the needs of children with the greatest barriers to learning including children with disabilities). Therefore this research focuses on investigating about what teaching tools teachers use and how these tools influeuce on the Inclusion of blind children in ordinary classrooms in a primary school.

1.2 Decentralization of Education

Since 1993, the Ugandan government pursued a decentralized system of governance under which political, administrative units (Ministry of education and sports, 2006) and noted in a government report on decentralization responsibility for running primary education has created the need to strengthen district authorities capacities to assume this role effectively, (Ministry of Education and Sports 2006). Decentralisation reforms in Uganda have been accompanied by legal and financial structures that encourage and support Inclusive education initiatives (Thomas et al.,1998). As an example Ugandan government policy paper on Education for National Integration and development (Ministry of Education and Sports ,1992) pledged to support special needs Education (SNE) through teacher training with the onus on the local government authorities to recruit personnel based on the district identified needs.

Support for children with special educational needs in mainstream schools in Uganda is coordinated by the Ministry of Education and sports as part of the government decentralization programme (Government of Uganda ,1997) and facilitated through the Educational Assessment and Resource Service Programme. An Office for SNE was

established in each 56 districts in Uganda and each office was staffed by the three experienced teachers known as coordinators. The schools in each district are divided into clusters of 12-15, and each cluster is supported by a special needs education coordinator who is responsible for visiting schools to advise on supporting children with special needs. The system was established with support from Danish International development Agency in the 1990s, provides a firm basis for the Identification for children with Special educational needs.

1.3   Uganda national policies on inclusion

In Uganda the right to education is a human right to children with disabilities and is provided for in a number of Policy documents: The Government White Paper on Education (1992) clearly spells the Government's commitment to provide basic education to all learners irrespective of their ability, ethnic origin, and social group, place of birth or gender. It emphasizes the inclusion of persons with disabilities and special needs into ordinary schools nearest to their homes, The Constitution of the Republic of Uganda (1995). several articles demonstrate policy direction favourable for inclusion and education for all. For instance Article 30 explains that: "All persons have a right to education"
The Children's Statute (1996) outlines the roles of Government and other stakeholders in supporting children with disabilities and states that: "A child has a right to be educated, guided, and immunized, given food, clothing and medical care" In addition, The statute also consolidates the constitutional provisions relating to children and it provides for Local Government's support for the protection of children. For instance, the Local Government Act (1997) currently has an executive officer in-charge of children's affairs at all local councils. It emphasizes the need to provide opportunities for children with special needs with education and special support to enable them reach their full potentials.
The Universal Primary Education (UPE) declaration (1998) was the first attempt to implement the right to education of children with disabilities in the country.

In Uganda inclusive education is viewed as a process of addressing the learners' needs within the mainstream schools using all available resources (UNISE 2002). This definition also emphasizes quality, access, and opportunity to progress for all pupils with special needs is achieved by building on things people can do rather than what they cannot do and diversity bring strength to all living systems.

Full inclusion for all pupils with disabilities in Uganda may not yet be possible for some time due to resource constrains, the severity of some disabilities, insufficient number of teachers trained in special needs education and high teacher- pupil ratio. Nevertheless. Uganda has moved some commendable strides towards implementing inclusive education which may be worth mentioning. The introduction of Universal Primary Education (UPE) indirectly marked the official start of inclusive education since children with disabilities were given affirmative action to be enrolled in ordinary primary schools (Ministry of Education & Sports 1998). Following the UPE landmark declaration, the only institution that trains teachers in special needs education in Uganda at the time in 1997, revised its curriculum and changed from offering a specialized to a general diploma course in special needs education. This was to equip the upgrading teachers with the basic knowledge and skills to meet the needs of pupils with different disabilities in inclusive schools (UNISE 2002). Currently special needs education is officially included in the curriculum of primary teachers colleges and government has recruited some special teachers to teach special needs education in the colleges. Since pupils with disabilities are already guaranteed access to ordinary schools at least by law, it remains to be seen whether the necessary adaptations are made in innovation practices to increase the participation of all pupils in the ordinary schools. The challenge is now to move from legislation towards the practice of inclusion.

1.4   Education for children with visual impairment

The first provision of specialist education for children with visual impairment in Uganda started in the early 1950s with the establishment of a special school for the blind. Subsequently a number of residential units for children with visual impairments were set up in the main stream schools in different parts of the country (Bayo 2005). One of the first training programmes for teachers of children with visual impairments which led to a certificate was set up at the Centre for Training of the blind in Iganga District. The Uganda National Institute of Special Needs Education was set up in 1988, with the support of Danish International Development Agency. This marked the beginning of a national strategy for developing support services for children with Special Educational Needs in Uganda.

1.5 Who is the blind child in Uganda

Uganda has fascinating laws on Inclusion of blind children in Ordinary classrooms in Uganda. Theoretically on paper there is inclusion, practically in the ordinary classroom there is no Inclusion. UNISE (2002) Most children with low vision due to lack of vision aids they end up being blind and this makes them not included in the classrooms and yet if they had those aids they would be able to use their low vision so you find most children with low and total blindness are not categorised.

UNISE (2002) The two years diploma in special needs prepares the special needs teachers to have a four month study in blindness and according to the International Classification of Functioning, disability and health and International Classification of Diseases (ICD) 10 blindness has many categories which is a short time for teachers to master teaching and inclusion of the blind children in Ordinary Classrooms. Most blind children in Uganda have no enough materials and they cannot read on the black board. So most teachers expect the fellow sighted pupils' to read for the blind children and since they are children they don't know why they should do it, this affects their attention in classroom. In addition you find teachers cannot attend to both the blind child and the sighted at the same time in giving feedback and in home work period you find the blind child is left behind and for real inclusion both children have the right to get the same equal rights for education like ordinary pupils irrespective of their level of severity of visual impairment. Most blind children have no textbooks in braille like the ordinary pupils and automatically this excludes them and in some technical drawings and subjects such as geometry and arithmetic lessons they are left behind. So inclusion for blind children is not real inclusion due to the gaps that are evidenced with the teachers and in the classroom environment. (UNISE, 2002)

1.6 Uganda National Association for the Blind

Uganda National Association for the Blind (UNAB) was eastablished in 1970 as one of the first Disabled persons Organisation in Uganda. It acts as a voice of blind and partially sighted to provide specialised services for the blind and partially sighted including their parents/ guardians. UNAB has a strong focus on the education for persons with visual impaired and also carries out activities aimed at primary and secondary level and its report shows that efforts to Improve primary and secondary education for Visually impaired children include distribution of equipment (Braillers,Braille paper, white canes)

administrations of scholarships and setting up of parents associations inorder to advocate for education for blind children awareness raising among teachers, and more. It has developed a much needed focus on the blind school girls, and works to improve on the drop out rates of girls. It is estimated that the population for the blind persons in 2008 was around 700,000 and now it is 1million blind persons in Uganda. (Okungu & Kittelsen, 2007)

UNAB is mentioned in the thesis in that is one of the national association for the blind in Uganda focuses on the education of blind children amongst other disabled organisations in the country.

1.7 Research question

The research question is: What teaching tools teachers use and how these tools influence on the inclusion of blind children in ordinary classroom in a primary school?

2 LITERATURE REVIEW

The study aimed to investigate what teaching tools teachers use and how these tools influence on the Inclusion of blind children in ordinary classrooms and this enlightens their holistic perspective to the study of the phenomenon and it bridges the gaps on shadows of ignorance. Therefore this leads to awareness rising on their teaching tools regarding on the inclusion of blind children in ordinary classrooms. The literature review of teaching tools teachers use headlight following topics; participation, belonging and responsibility, Guidance based teachers knowlewdge and skills, assesement during pupils learning process, feedback, instructional conversation, verbal information, task regular interval checkouts, the use of tactile materials, auditory materials, organizing braille basing on individual education plan.

2.1   Participation and belongings and responsibility

Belonging is a situation of a person feeling and understanding that he or she is the member of a society. Belonging is the sharing of some of the common things in the society like culture, traditions, values, experiences, attitudes etc. (Bromell & Hyland, 2007; Everett, 2009). Belonging is facilitated by recognizing, valuing, appreciating and celebrating different contributions that every member of the community makes (Kunc, 1992). Likewise, students needs to feel that they belong to a particular school society. The key elements of inclusive schools involve students respecting each other, and being welcomed by the school society regardless of their differences. Also it involves learning to cooperate, feeling that they belong and are motivated to learn (NBACL, 2007). On the other side, participation means involvement of a person in all aspects of life such as socio-economic, political, religious activities etc. (Everett, 2009). That everybody in the society and especially students with special needs in inclusive schools, need to feel that they are given opportunity to participate in the various activities in the school (Bromell & Hyland, 2007; Everett, 2009). In addition, Mmbaga (2002), pointed out that the success of inclusion depends on the attitudinal change among teachers, and that the children's self-image and confidence, depend entirely on the way they are accepted, welcomed and given opportunity to participate by their teachers and peers.

2.2 Guidance based on teachers knowledge and skills

Vygotsky (1978) emphasizes the role played by significant others especially teachers in guiding and stimulating the learners development and learning. The proximal zone makes teaching and learning visible in teaching interactions, development and learning proceed best when assistance is provided that permits a learner to perform at a level of higher than when he /she would be alone. Teaching can be said to occur when assistance is offered at points in zone of proximal development at which performance requires assistance.

2.3 Assessment during pupils learning process

Assessment of learners refers to the systematic procedures of gathering and identifying relevant educational information about a student. The main aim is to understand the specific needs of the student.(McLoughlin & Lewis, 2005). Quality teaching and learning can only be achieved when student's background and prior knowledge, is assessed and known. Assessment of the learning needs of a student with visual impairment, prior to the beginning of the course of study is important for both the student and the teacher. This is because it allows for an understanding of the student's academic ability, learning styles and learning needs (Spungin, 2002). Parents and peers are therefore important partners in provision of information about the learning of students with visual impairments. This is because parents know the needs and interests of their children better than other people. On top of that they know much about their children's learning problems and therefore can suggest better educational intervention (Johnsen, 2001; Spungin, 2002). Assessment can also be through reading students' academic records (Spungin, 2002). Assessment is important for knowing whether a student will need low vision devices, large prints, magnifiers and lenses, braille etc

It is also important to know the learning style, ability and learning pace of the student (Spungin, 2002). Assessment of learners with special educational needs, should aid teachers to plan teaching and meeting individual needs of the student. All these information about students learning should be stipulated and stated in the Individualized Education Plan (IEP) (McLoughlin & Lewis, 2005; Mitchell, 2008; Spungin, 2002). However, in many schools this information, which is important for student's learning, is not gathered in most cases (Johnsen, 2001; Smidt, 2009).

Bishop (1990) points out that assessment help teachers in deciding which factors are present or absent, and whether an integrated placement is likely to be successful or not. We should not be intentionally exposing our visually impaired students to possible failure when we, as educators, may be able to anticipate the probable outcome in advance. Assessment is the framework that gives direction to the teacher on the possible measures he can lay to teach the blind children in ordinary classrooms.

2.4 Feeback

Brophy (1987) defines praise as teacher's reaction that goes beyond simple feedback about appropriateness or correct of a behavior. When a child answer is correct and praised. This serves as a motivator for blind children when they are learning. So this can be a good instruction for teachers to teach blind children in ordinary classrooms.

Bandura (1986) stressed that "success breeds success" positive expectancies in turn enhance motivation to perform and discussed structuring the environment to ensure efficacy within the context of teaching blind children, the teachers need to take responsibility for all the children's active participation regardless of their unique interests and abilities. A best teacher 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

2.5 Instructional conversation

Since students with visual impairments do not see, they rely on the voice of the teacher as one of the main source of information for learning. It is therefore important for the teacher to do some or all of the following: - Firstly, the voice of the teacher has to be pleasant. By pleasant it means that it should produce relaxed tone and pitch. Secondly, the voice of the teacher needs to be interesting to listen to. Speed of talking, volume and pitch are very important to make the voice interesting for students (Best, 1992). Thirdly, a teacher should avoid vague statements. Phrases like "over here" or "this and that" should be avoided as much as possible, because they do not help students with visual impairments to understand what a teacher is talking about (Mastropieri & Scruggs, 2010). Fourthly, during the teaching process a teacher should read the notes aloud while writing them on the board or presenting them on the projector (Spungin, 2002).

Fifthly, teachers should call the names of students first when they wants to address a specific student, ask questions or give specific instructions so that students know specifically whom the teacher is talking to. This seems important, because it helps students with visual impairments feel that they are part of the class and they are effectively included in the lesson (Mastropieri & Scruggs, 2010; Salisbury, 2008). It is equally important to use students' names during class discussions so that students with visual impairments are in the position to understand who is talking (UNESCO, 2001). Finally, the language that has been used for content delivery in the class has been a major hindrance for the level of engagement and academic achievement of some students, especially those with visual impairment (Grace & Gravestock, 2009; Hannell, 2007). The best teacher is the one who uses simple presentation and communication. The best teacher also makes follow up on individual student's tasks in order to make sure that they understand the lesson (Westwood, 1995).

2.6   Verbal information

A teacher of students with visual impairment can write down the answers given out orally by a student with visual impairment. Moreover, a tape recorder can be used to record the answers the student is giving. However, through this way, a student cannot review the answers he or she has given for possible correction. Therefore, students with visual impairment and teachers of students with visual impairment should be consulted before the test is taken, in order to find a better way of assessing a student with visual impairment (Spungin, 2002).

2.7   Task regular interval check outs

Bishop (1996) asserts that when the children make errors in schoolwork, the mistakes are often just tallied and a grade assigned for the work. Few teachers ask why errors occurred. Diagnostic teaching is an instructional approach that attempts to determine the causes of errors, and to remediate those causative factors if possible. For blind children, this is essential since many types of errors are vision related (misreading or miss copying, omissions, faulty concepts based on inaccurate visual observation or experience). The teacher of blind students is trained to look for why errors happen because of the strong influence of vision in learning.

Westwood (1995) point out that the best teacher also makes follow up on individual student's tasks in order to make sure that they understand the lesson.

2.8 The use of Tactile Materials

Teachers must be aware, that students with blindness have deficit in conceptual experiences and understanding due to absence of visual ability, therefore adaptations of teaching materials becomes paramount, if they have to learn all the things other students without visual impairments learn in the class. To help this, therefore, these students should be taught physically using concrete experiences (Bishop, 1996; Pauline, 2008).

Following this proposition, these students should be given an opportunity to explore tactile diagrams. Tactile diagrams are very important to understand images and concepts which are difficult to explain and describe in words. Therefore, they should apparently be used when shapes and patterns are very important to understand the concept but also, when the real objects are not available to help teaching (Salisbury, 2008). Tactile images or diagrams can be drawn on braille papers using a special mat and stylus. This produces a relief image or diagram that can be easily felt (UNESCO, 2001).

Teachers who teach blind children in ordinary classrooms need to provide adequate special materials and equipment. There is almost universal agreement that the special materials and equipment needed by a visually impaired student in a regular school are essential to success. (Bina, 1993; Bishop, 1990; 1996; Hatlen, 1993; Holbrook, 1996; Kadmon, 1989; Kinos, 1993; Lebech, 1990; Lewis, 1994). Therefore every creative effort to acquire the necessary materials and equipment should be explored.

In addition to, (Sacks et al, 1992; Hoben & Lindstrom, 1980) Friendly user materials are good teaching materials for the blind children and creative materials which are provided to blind children enhance dialogue and social interaction to complete an assignment.

Ibid states that the more significantly cognitively impaired the student, the greater the need for specialized materials, and the greater the need for the teacher's high expectations that will lead to success in reading. During the instruction of new materials, it is recommended that teachers who adhere to established guidelines to maximize engagement should provide four to six opportunities per minute for students to respond. When students are working with learned during independent practice activities, the recommended number of opportunities to respond need to increase to 8-12 responses per minute with 90% accuracy. Even students with visual impairments whose knowledge of concepts is strong would have difficulty keeping pace with this rate of instruction, unless it is entirely verbal.

Lowenfeld (1973) asserts children who are visually impaired need concrete experiences that become even more important for children who have cognitive disabilities. Using only letters as the beginning reading instruction is abstract and bears little relation to blind children's past experiences compared to these of student's for whom letters are a natural part of their early language experiences, even when environments include braille, children need physical contact to experience it. Sight is a distance sense, learning by touch has to take place within arm's reach, or it is comprised. Unlike letters, familiar words do have meaning, and using words that represent a student's experiences gives the student a meaningful starting point in reading not provided by letters.

2.9 Auditory Materials

Since students with visual impairments rely mainly on verbal information for their learning, audio devices should be incorporated to aid the teaching process. These include things like audiocassettes and compact discs. However, lesson contents with diagrams and tables cannot be well explained in an audio format (Salisbury, 2008). Moreover, a lesson can be tape recorded and given to students with visual impairments for later playback at their convenient time (UNESCO, 2001). Moreover, if a videotape for example has to be shown, it is wise to show it to students with visual impairment so that through a specialized teacher's or a classmate's explanation, they understand all the visual concepts in it before the class watch it. For a film with sub titles, a classmate or teacher can read aloud to the class to help those with visual impairment (Spungin, 2002).

Optical devices such as eye glasses, magnifiers and telescopes use lenses to increase a person's residual vision. They are normally prescribed by a medical specialist while non-optical devices do not incorporate a lens and do not need to be prescribed by a specialist. Things like large prints, braille and braille writer, tape recorders, book stands, recorded and talking, books and calculators etc., are examples of non-optical devices (Simon *et al*., 2010). The role of both optical and non-optical devices is to improve vision and increase functionality of students with visual impairments through the use of other senses. It is the role of a teacher to encourage students with visual impairment to use visual devices and assistive technologies to help them with vision (Spungin, 2002).

2.10 Individual Education plan

Individualized Education Plan (IEP) is a plan of study extracted from the general curriculum which is designed specifically to meet the needs of a student with additional needs. This plan of study comprises a list of specific goals to be met, and the strategies to be used to meet those goals (Salisbury, 2008). There is a team of specialists, including parents and teachers, which work together to determine these specific goals and academic needs of students to enable a teacher to plan and implement teaching (Spungin, 2002). Team planning and implementation of IEP is crucial if we want inclusive education for students with visual impairments to be meaningful. However, IEP does not call for individualized teaching, rather it intends to inform educators to be aware of and meet the individual needs of every student in inclusive classroom (Mitchell, 2008). General and special needs teachers as well as parents are important collaborators in the preparation and implementation of IEP.

(Mattingly et al., 2011) cites that all students with visual impairment, including those with additional disabilities, enter local public schools with sighted peers at the age 6. On the basis of the core curriculum, individual study plans are designed, often with professionals in visual impairment, as a tool for organizing and adapting the educational situation. These plans become the basis for pedagogical support to students. Students are provided extra lessons to introduce them to braille and technical devices for reading and Furthermore, the school can receive supervision from resources centers.

2.11 The summary of literature review

This chapter wraps up the teaching tools teachers use and how these tools influence on the academic, social and physical inclusion of blind children in ordinary classrooms and they help the reader to have an insight on the reflection of teaching tools of the related reviewed literature.

3 RESEARCH QUESTIONS &DEFINITIONS

In order to make the research findings comprehensible for the readers of the thesis, some essential terms should be defined.

3.1 Lexically definition of teaching tool

To reminder the reader teaching tool means, As it is Oxford Dictionary, A tool is, according to the Oxford Dictionary (2014) : a thing used to perform a job.

Operational definition of teaching tool

Teaching tools refers to a thing that can help teachers perform a job. Oxford Dictionary (2014)

3.2 Operational definition of Inclusion

Beirne (1994) describes full inclusion as the full time placement of all students, including those with disabilities in the regular education school systems to the extent appropriate to their needs.

Skjørten (2000) asserts that,"*Inclusion is viewed as a strategy for learners with special educational needs to attend, participate, and contribute to the learning process in any ordinary school hence adjusting and changing the practice in the home, schools and the society at large in order to meet the needs of all children/individuals regardless of their differences.*"

3.3 Blindness

According to the ICD10(2007) a person is blind when he or she has some minimal visual shape perception a case in apoint in Uganda. Some low vision individuals may be considered as blind because of lack of devices. However, because of the lack of reading devices(e.g lighting, magnifying lenses,glasses) This thesis also include children that are able to see some colour and shapes. (WHO, 2005)

4 STUDY DESIGN AND METHODOLOGICAL FRAMEWORK

4.1   Research question

The research question is:

What teaching tools teachers use to teach blind children and how these tools influence on the inclusion of blind children in ordinary classrooms in a primary school?

4.2   Study design

The study is qualitative. The data was gathered qualitatively using semi structured interviews and data was analysed qualitatively. According to Hennick (2011,p.10) Qualitative research is used to provide in-depth understanding of research issues that embraces the perspectives of the study population and the context in which they live and to explore new topics or understanding complex issues, explaining people's beliefs and behaviour. Qualitative research is usually founded by constructivist paradigm which aims at understanding people's lived experiences from the emic perspective, acknowledge that reality is socially created and recognize that subjectivity of both the researcher and the participants. (Hennick, 2011; Rubin and Rubin, 2005;Gall Gall& Borg, 1996) In education research a qualitative research approach seeks to explain what is happening in educational situations using the perspectives of the involved to understand the complexities of educational process and the nature of teaching and learning Burton& Barlet (2009).

Purposeful sampling was used to select teachers who teach blind children in ordinary classrooms. Legibility for teacher's participation in the study was based on the following criteria: (a) experience in teaching blind children with their distance vision assessment results indicating that they are blind with (visual acuity of (3/60 or worse). (b) Teaching ordinary classrooms, (c) fully attending school at the time of the study and (d) gender balance was desirable but not necessary.

The views and opinions on the teaching tools teachers use to teach blind children in ordinary classrooms and how these tools influence on the inclusion of blind children in ordinary classroom in a primary school were collected following in-depth interview method.

4.3   Sampling

Purposeful sampling procedure was chosen for the study. The sampling procedure employed in this study assumes selecting cases such as individuals, group's, places, events, that are likely to be information rich in relation to a particular phenomenon. (Gaul et al, 1996; Cohen, & Morrison, 2007; McMillian & Schumacher, 2006). Purposive sampling involves selection of cases that satisfy an important criteria and yield rich information about the phenomenon. Gall et al, (1996). Hennick (2011) adds that sampling involves using gatekeepers, knowledgeable informants that can provide access to the community. Purposeful approach was used to select the primary school in the district. The school comprised of an ordinary setting where blind children are placed under the Universal Primary Education (UPE) system. The criterion for the selection of the district and the school was based on the following having a unit for blind children attending to the mainstream primary school and it could be easily allocated by the researcher. The selected district has cool weather and a primary school was chosen because of its outstanding history and reputation in teaching blind pupils with the sighted pupils and its geographical accessibility and it is one of the oldest unit for the blind in Uganda.

4.4   Introduction of participants

Three teachers of primary school were purposeful selected pseudo names were given to the school and to each of the three teachers as informant 1, Informant 2, and Informant 3. The Informants experiences and educational background information coming is about teachers education background and experiences in teaching blind children in ordinary classrooms as seen below:

Informant 1 had an educational background of a grade three teaching certificate and a diploma in special needs education and had 10 years' experience teaching the general sighted children and 7 years' experience teaching the blind children and she taught grade one and two ordinary classes and therefore her opinions and views are presented in detailed in the emerged themes below.

Informant 2 had an educational back ground of a certificate in visual impairment, a certificate in braille training from Germany, He had a grade three certificate, a diploma in special needs education and he taught ordinary children for 20 years and he has taught blind children for 45 years and he has a huge teaching experience though now he is retired but

still he is a key figure since the school has few teachers teaching blind children, he taught his fellow teachers and he was the first teacher for the blind children in the region and due to his experience .

Informant 3 is a certified grade three teacher and has 15 years' experience teaching the blind children and he is naturally blind special needs teacher amongst his co -workers. He pointed that he can teach the sighted children but he frankly spoke that he cannot read print this hinders him to mark and identify their mistakes but teaches verbally and other teachers they help out supervising the sighted pupils in general.

4.5 Method of the study and preparation for the field work

4.5.1 The used method

Interviews are mainly used methods in qualitative research design. Descriptive data was collected from the teachers. The in depth interviews were flexible and they helped me to get clarification and deeper exploration of the phenomenon and this increased the comparability of the teachers responses facilitated the coding and analyses of the data. However, as participants are experts of the field and their own situation, a lot of information could be gathered by using un structured interviews. But due to the nature of the thesis and time limits, the topic was narrowed down, so that it would be possible to meet the deadlines. There fore the semi structured interviews were more appropriate. This method provided the researcher with deep knowledge about the topic of the study. Topics and questions could be slightly to ensure a nice flow of the interview. To make participants feel comfortable, to establish a friendly, meaningful and open relationship between the respondents and the researcher. As I was interviewing the participants, I was able to write memos after interviewing's. Also some comments were made in the interviews that helped me to have a close look and deeper understanding of the phenonomemon.

The weakness is that the flexibility of interview in sequencing and wording questions may result in different responses and reduced comparability and standardized wording of questions constrained and limited the naturalness and the relevance of my answers. However the differences and similarities emerged as seen in the data presentation. More still (Hennick, 2011) notes that interviews require a lot of transcription and this was one of the main and most time consuming challenges I encountered in the fieldwork.

4.6   Developing the interview guide

The interview guide was developed by the researcher using exisiting literature about teaching tools teachers use and how these tools influence on the inclusion of blind children in ordinary classrooms. The researcher tried to interviewed teachers teaching tools they use in the classrooms. Inorder to make the interview guide more efficient i included practical questions about teachers back ground and teaching tools as seen the the appendix 1.The questions were formulated so that I can obtain the information on the teaching tools teachers use and how these influence the inclusion of blind children in ordinary classroom? The interview guide was piloted and the procedure is discussed below. Since I was anticipating to find out what teaching tools teachers use and how these tools influence on the inclusion of blind children in ordinary classrooms. This was solved by the help of the pilot study readers can find the interview guide in the appendix 1.

4.7   Procedures for data collection

The appointments were made to show respect to the special needs teachers I was going to meet individually. During the pre-visit, I took a letter to the school (Appendix 4) detailing the purpose of the study, interview questions guides to the teachers. The in-depth interview guide was developed with thematic aspects upon which participants were interviewed. On the appointed day for interviews.(Appendix 1), I used in-depth interviews and I collected data by recording and writing informants answers. At the beginning of every session, each teacher was given letters of informed consent to sign after accepting to participate in the study. I informed teachers that their participation was voluntary and were free to withdraw from the study if they felt not participating though they said that it was okay, and they were willing to participate and added that they can learn something as they participate. In addition, they wrote their names and school name, neither their names nor school name on the interview guide sheets were disclosed to any third party as a way of ensuring anonymity as an ethical issue. After completion of data collection, an appreciation letter was written and sent to participating school to thank them for their cooperation in the study (Appendix 3).

The interviews took place at the school of the participants and the school was a boarding school. Before the data collection, there was a general strike of all teachers in the country agitating for 20% increase for their salaries by the government and this delayed data

collection for a period of four weeks. Majority of the blind students had gone back to their homes and they took long to resume studies.

The interviews were done in English which is the official language used in all schools in Uganda as the mode of instruction and communication besides other local languages. The local language used in the area was Rukiga. Some of English words such as teaching the blind in ordinary classrooms is translated in Rukiga as *"okwegyesa empumi hamwe na baana batara reba omuriboona bashome"* Teachers were able to give their opinions how they teach the blind children in ordinary classrooms.

Three teachers all were interviewed as it had been earlier planned. Each special needs teacher was interviewed at the school during the specified time agreed upon. Interview sessions for all the teachers lasted for about one and half hours. The interview for each case of the teacher was done in a special unit blind office and was audio recorded. This was a good place to minimize the noise and distracting conditions that would have disrupted the interview, I extended appreciation to the teachers interviewed for taking part and giving the relevant information without teachers and blind pupil's contribution nothing would be done.

Before each interview, the interviewees were briefed about the purpose and the amount of time scheduled for the interview. In each interview session 2 hours is always much for an interview; I used 1 and 30 minutes. The order in which the open ended questions were presented and the wording depended on the interview situation. The In-depth interviews were recorded by an audio recorder. I set the audio reader before the interview and immediately and after informing the informants that I am going to record them, I started recording and immediately when the respondent started answering all the questions on the interview guide I would stop the recording to save the battery for the next informant. In addition, I used a logbook to write notes about each question made to cater for reflective information during the interview sessions. The transcribed data was read back to the particiapnts. The number of interviews to be held with each informant was determined during the data collection process and I made twice interview with each informant.

4.8 Pilot study and Data collection

Opie (2010,p.115) proposes doing pilot interviewing, a trial version of the interview before the data collection in order to avoid any ambiguous or confusing questions and to check confidentiality or confusing questions, anonymity are maintained. The development of

interview guides was very crucial as the central focus of the study. I made pilot study with the neighbor high school for the blind with two teachers to ensure that issues of validity and reliability are appropriately covered during the design of the instruments in the data collection process. The pilot study with the two teachers helped me to adjust on the phrasing the questions in the interview guide by narrowing them down. The reader can check these questions in appendix 1. After the pilot study I narrowed down to only one research question focusing on what teaching tools do teachers use and how do these influence on the inclusion of blind children in ordinary classrooms in a primary school?.

4.9   Data organization and analysis

The analysis of data started with transcribing of each in-depth interview basing on each teacher. This was done word by word as recorded on the audio recorder for each teacher using pseudo names in order to maintain confidentiality and anonymity. Transcribing data was not easy I needed much time to replay the audio to get the actual words to merge this gap. I had to replay many times the audio recorder in order to transcribe all the data from all the interviewed teachers in the study carried out. I got 20 sheets of transcribed data. I interviewed three teachers and I transcribed data for all three teachers. A step by step interpretative approach was used to cross check for similar ideas from the transcripts for each teacher during the process of data analysis. The emergent themes were identified and developed from the information collected that would be imperative in comprehending the phenomenon of the study.

Qualitative research design was followed from the beginning to the end of the fieldwork. Therefore, the method of qualitative analysis was chosen. Descriptive phenomenology analysis seemed to be the most appropriate method for the given type of research. Becker (1992) Phenomenologists study situations in the everyday world from the view' point of the experiencing person. They emphasize the individuals' construction of a life world. Taken together the whole people's unquestioned, subjective experience of their biological world's can be termed as their life world. The life world is the individuals' world of their everyday life. This method provided an opportunity to describe what was said by the participants of the research about the similarities and differences were found in their answers and how certain topics relate to one another. In phenomenology descriptive analysis, it is not important to mention, who said what, but the actual information regarding the research question. Maxwell (2005). Thus, the respondents will remain confidential. Descriptive phenomenology analysis

also enables readers to understand and follow the findings better, as they are shown in relation to one another, not one by one. Topics for analysis were derived according to the interview guide. Several questions were combined under each topic and answers were split into categories, according to the topics. Finally, the topics were related to each other, in order to find out teaching tools and strategies teachers use and how these influence inclusion of blind children in ordinary classrooms in a primary school. Thus, the results are presented below.

4.10 Validity, reliability and Ethics

 "Education research is a very human process and, therefore is prone to error and bias" (Gall et al., 2007 P.11). Thus, this research faced some reliability and validity issues, which were tried to be handled in a way that would not have influenced the results. They will be discussed below in the ethical challenges.

4.11 Validity

Researchers claim, that too many validity threats may influence the results of the study. Maxwell (2005). Several factors may have effected the findings of the research. Furthermore he argues that qualitative researchers generally deal with validity threats as particular events or processes that could lead to invalid conclusions", (p.105). The validity issues were raised while planning, conducting and analyzing data. In this paragraph, the raised threats and their solutions were discussed.

Maxwell (1992) describes five types of validities: Descriptive validity, interpretive validity, theoretical validity, generalizability and evaluative validity. Some of them are important for this study, therefore they are addressed here. Descriptive validity could be an issue of the study but all terms were explained as early as possible. The participants as well as the readers of this thesis had exact information about what was going on. Their answers were transcribed very precisely, tone and peach of their voice was noted during the interviews. This information was used in the analysis.

The issue of interpretive validity was also taken into consideration during the investigation process. Since the research is qualitative and there were open ended questions used for the interviews, all answers were typed word by word. Afterwards the interviews were read back to the participants and all the misunderstandings were corrected right away. In the analysis and the presentation of the results, some quotations are used to justify the findings.

Furthermore as the research has descriptive character, many interpretations are not needed in the presentation of the results. Though previous researches were used for discussion.

Theoretical validity was dealt with by carefully selecting related literature for the discussion part of the thesis. The review of the related literature were scrupulously studied after presentation of the findings of the investigation and were introduced in the second chapter of the thesis.

Another issue I would like to address is generalizability of the findings. Because the study was qualitative, external generalizability is not very crucial part of the research. However the findings may well be generalized in other countries and settings as the research question does not include any site related issues. The topic is more general and is not connected to a specific subject and the study had few participants which may be criticized in terms of validity though qualitative does not put emphasis on the quantity and depth of the findings (Gall et al., 2007)

The study investigated what teaching tools teachers use to influence on the inclusion of blind children in ordinary classrooms in a primary school. To wrap up the study in this section, i presented strengths and weaknesses on the reflections of the study. The findings in form of holistic perspectives on teaching tools teachers use and their influence on the inclusion of the blind children in ordinary classrooms were discussed in chapter five and finally I suggested implications for future research and practices.

The strength of the study ended by reviewing of related literature and this gave me an insight to relate to the main research question and also helped me to answer the questions. It also provided me comprehension of the phenomenon by emerging new knowledge for practices in the field of teaching tools teachers' use and their influence on the inclusion of blind children. The qualitative approach enabled me to get in depth analyses of the phenomenon by selecting suitable special needs teachers for the blind children in a primary school to address the research question using in depth interviews to get the emic perspective of the teaching tools teachers use and their Influence on the inclusion of blind children in ordinary classrooms in a primary school. The relevant literature review enabled me to clearly organize and build on the old knowledge and this facilitated my data analyses.

4.12 Reliability

I would like to point out two major reliability issues. Since the research was planned, conducted and analyzed by the same person, the researcher's bias and reactivity or in other words, researchers influence on the participants could not be avoided, however, I tried to minimize it. The reactivity was opposed by the respondent's validation. The respondents were asked questions to ensure correct understanding of their ideas. If there was anything unclear, participants were requested to explain or describe the case more thoroughly. In addition, the interviews were held in the participant's school and they were familiar to the setting than me.

The researcher's bias may be argued as the most difficult challenge for this particular research. This is caused by the fact, that the researcher being a native of the area to the field of investigation. But during the process of planning, conducting and analyzing the data, professional advice was received from investigator himself and tried to step back and look at the phenomenon from a stranger's view point. Also data was analyzed very accurately, transcriptions provided a strong basis for positive validation.

Gall& Borg, (2003 p.460) asserts that, "*Reliability refers* to "extent *to which other researcher's would arrive at similar results if they studied the same case using exactly the same procedures as the first researcher.* Yin (1994 p.36) points out that emphasis of doing the same case over and over again is not replicating the results of one case by doing the a nother case study but the major goal of reliability is to minimize the errors and biases in the study. In trying to strengthen the reliability in the study I played and listened to the audio recorder several times for the three teachers who participated in the study. Being a native citizen of the area bridged the closeness with the teachers who were interviewed. The relation and interactions during the data collection progressed as I voluntarily in the free time gave free computers lessons to the teachers.

4.12.1 Threats to validity and reliability

Being a new researcher, the interviewed participants suspected me to be an inspector of schools who had come to test their teaching competencies.

Strike of the teachers for one month de-motivated the teachers to effectively teach, they just taught for a period of 20 minutes and they would go out of school back to their homes, this was a threat to my study in that they were very brief and concise.

4.13 Ethical considerations

Svinicki and Mckeachie (2011) *notes that ethical standards are intended to guide us in carrying out the responsibilities we have to consider in different groups with whom we interact and maintain that " ethical dilemmas occur when multiple responsibilities conflict or have more than one right answer" (p.316). Studies that involve collecting data from participants, researchers should consider protecting participants from possible harm and how to secure privacy and confidentiality and make a plan of how to do this*. A consideration was given to both the national and international regulations concerning ethics. (Gall et al, 2007). Ethical issues were raised. One of the concerns was participant's confidentiality. The participants were ensured of confidentiality via the letter of consent. No personal data was collected while reporting the results. They were given pseudo names to neutralize their identity and they had the right to withdraw from the research at any time before, during and after the interview, until the data analysis had started. The participants of the study were asked to sign the letter of consent before the interviews.

The researcher has to obtain approval first from the school district administrators, second from the school principal and last from the teachers (Gall et al., 2007) after the research proposal was approved and the instruments adapted, I sought permission to do the research in Norway. I secured a form from NSD Norwegian social Science and Data services an introductory approval letter was got from Norwegian Social Science Data Services, Bergen Norway and a copy was sent to the University of Oslo Norway (Appendix 5). In Uganda district approval letter from special needs education officer was secured and from the school principal and the teachers. (Appendix 6) At local council level a letter of introduction to the participating school was got from the local council   (Appendix 7) a pre-visit was then paid to each of the school to make appointments with school authorities and teachers.

4.13.1 Informed consent

Before leaving for data collection in the field, approval of the research proposal including the research instruments and letter of introduction from Norwegian Data and Social Services were adhered to. The head teacher of the school selected was approached while in Uganda to seek for permission to conduct the research and enable me collect data in the primary school. Teachers were also talked to and the purpose of the study was formally explained during this

process. The study participants agreed to partake on the basis of the interview questions in line with professionalism. Gall et. al (2007) points out that the researcher must inform and get informed consent from individual participants about the research process as well as information gathered by the researcher during the field study. I asked for permission and appointment from the school leader if it was fine with her to participate in the study and she granted me authority to interview the special needs teachers I first greeted them and asked if it was fine with the teachers then I explained the purpose of the study briefed, them about interview guides to gain understanding on the study. Before the study I assured the teachers that their participation was voluntarily and they were free to adjourn if they felt insecure without any threat or penalty.

During the process with the interview, every session has to be organized and respecting the person you want to meet, appointment was made with the teachers bearing in psyche that they had busy time schedule and they had a convenient interview room in the special unit. In this regard, I interviewed one by one teacher most preferably at school by audio recording the information. For each of the interviewee, confidentiality was re-affirmed concerning the information given during this interview process not to be shared with any third party only to be used for the purposes of study. The interview took place with the school in the special needs unit. The teachers used in some way local language to clarify on some words that seemed arbitrary in the mother tongue in a face-to-face interaction. Transcription of the audio-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 intonations and emphasis from the audio recorded data and used in the presentation and analysis. And finally, in the process and after the study, letter of appreciation was extended to all the key and main informants involved that is to the school for offering me the opportunity, the head teacher, teachers and to the blind pupils.

4.13.2 Getting Permission for the field work

According to the new regulations of 2010, regardless where the research is going to take place, all students in Norwegian higher educational institutions are required to obtain a permission for the fieldwork form the Norwegian Social Science Data service "NSD"

NSD (2010). For information please, visit the webpage of NSD at: http://www.nsd.no

After completing the interview guide, preparing a letter of consent and a letter of request for participants. An application was filled in and sent to NSD together with the attachments for approval. The application included precise information about the researcher and project advisor, background and affiliations, procedure for recruiting the participants, rights and the obligations of the participants and the investigator, ethical issues, confidentiality, recording, storing and use of the collected personal data and non-personal data, data collection procedures, analysis of the results. As the sampling procedures, preparing interview guide, data collection, ethical considerations and final report are described in the relevant subchapters, only some of the given information will be reviewed here. The completed application form can be found in the Appendix 5.

NSD two months and two weeks to reply to my application and a letter of approval was sent to me, there was misunderstanding of recording and storing the data. It was not clear of how the data was going to be recorded and stored. A question about this issue was sent to them, how data would be handled. It was planned, that I would use an audio recorder and transcribe the data to the computer after each interview. After clearing with NSD from Norway I had to obtain an introductory letter from home district office in Uganda, the Local council, school. This was done to get permission to do the research.

5 PRESENTATION OF RESULTS

5.1   Outline of the chapter

This chapter deals with results of the study presented in themes and sub themes that is teaching tools teachers use and how do these influence on the inclusion of blind children in ordinary classrooms in a primary school. Interview was used as the main instrument in data collection and three certified special needs teachers teaching blind children in ordinary classrooms were participants in the data collection. The findings are presented in views and opinions of informants by high lighting emergent themes. Emphasis of studying cases makes it possible to build a logical chain of evidence (Yin, 1994; Miles and Huberman, 1994). The focus of the study was to find out teaching tools teachers use to teach blind children in ordinary classrooms in a primary school. The emergent theme include: Teaching tools teachers' use and their influence on the inclusion of blind children in ordinary classroom in a primary school.

5.2   Teaching tools teachers' use to teach blind children in ordinary classrooms

The Information emerging from this theme is about teaching tools teacher's use and their influence on the inclusion of blind children in ordinary classrooms in a primary school comprise of: Guidance based on teachers knowledge and skills, assessment during pupils learning processes, feedback, Instructional conversation, verbal information, and regular interval check outs as seen below:

5.2.1 Guidance based on teacher's knowledge and skills

Informant 3 pointed out that guidance helps out to teach the blind children in ordinary classrooms,*"The teacher who is guiding the blind children in ordinary classrooms is supposed to know more than the blind pupils who are being guided, that is why very many blind children have fallen victims to wrong teaching. Guidance is needed for blind children since they can hear, it is easy for them to learn"*.

5.2.2 Assessment during pupils learning process

Informant 3 reported that assessment draws a road map for teachers on how to teach the blind children in ordinary classrooms, *"As a teacher I should not intentionally expose my blind pupils to possible failure when I can anticipate the probable outcome in advance that is why I listen carefully to assess pupils understanding and guide in the process of making a plan which is indicative of reaching the goal."*

5.2.3 Feedback

Informant 1 added that feedback is also a teaching tool she uses to teach blind children in ordinary classrooms, *"I motivate them by giving the sighted children who read for the blind acknowledgments"*

Informant 3 notified that praising is a form of motivation and feedback teaching tool,

"Praising blind pupils when they have done well and discouraging blind pupils from doing bad when they are doing badly."

Informant 3 noted that, *"My Intention as a teacher in most times I assist blind pupils in learning through goal guiding conversations by asking questions and answers and using prompts by calling their names and when they give me a wrong answer, I make sure that they have to repeat the exercises so that they understand slow but sure that is how the blind pupils can learn"*,

5.2.4 Instructional conversation

Informant 3 emphasized instructional conversations as another teaching tool to teach the blind children in ordinary classrooms,*"As a teacher you have to talk as you teach and you have to act as an example by sharing experiences and giving short and clear instructions, and you have to repeat many times so that blind children can easily remember"*.

Informant 1 asserted the best way to teach blind children is evidenced through giving realistic information: *"Realistic information creates a room of trust and this makes blind children speak out their challenges to teachers in the hope of seeking for possible solutions to cope with their school problems"*.

5.2.5 Verbal Information

Informant 1 narrated how verbal Information works well when teaching blind children in ordinary classrooms: *"For seventeen years I have taught the blind pupils in this school, verbal teaching works well, the blind children always listen carefully, because they have nothing to distract them in the class. So when you explain clearly they understand what you are teaching."*

Informant 2 noted that, *"Teachers do lessons orally"* The teacher believes that oral information is functional and this has been used for quite a long time.

Informant 3 stated that, *"It is good to expand vocabulary, listen to the problems of the blind pupils, respond to their requests, assist them when they need help, interact daily with them, provide frequent opportunity for communication with blind pupils, and encourage use of first language that is Rukiga and second language as English to make them better understand"*

5.2.6 Task regular interval checks outs

Informant 3 asserted that in order to teach the blind children in ordinary classrooms,

"You have to check blind pupils at intervals to see what they have written. I don't know what the sighted do? That is what we do; if you don't check them in intervals you find when the blind children have made many mistakes.

5.2.7 The use of teaching Materials

Informant 1 pointed out that I seldom use tactile materials to teach blind children in ordinary classrooms, *"Tactile materials are not used much in my class. Mainly I use verbal and sometimes I use tactile materials especially when teaching blind children in ordinary classrooms which shows that I am near them."*

Informant 2 asserted that to teach the blind children in ordinary classrooms, *"We use educational materials for the blind students we have to get tactile to use for blind pupils, materials to use by tactile, and the sighted have to use the materials you use by sight."*

Informant 3 pointed out that, *"Enough braille paper, styluses for writing, hand frames to use in writing and tubes for mathematics, when you are planning for educating blind children you have to plan it very well, you plan depending on the number of blind children that attend*

class even when the number of the blind pupils increases blind pupils have to find them ready."

5.2.8 Tactile demonstration of concrete real life objects

Informant 1 asserted that in order to make sure that the blind pupils understand in ordinary classrooms notes that, "*Real objects like a radio, a bag are brought to class and I explain the use of the obejects, describe how they looklike and howthey work, forexample, if I want a bag I bring it, something i can bring i must understand the use of that thing how it works, may be if i want to describe the dog i explain to them in order for them to understand a dog, i explain that it has four legs, it is in a structure of a goat and then i do explain the difference of a dog and a goat."*

Informant 2 added that, "*Blind pupils have to get real objects and they have to be very few in number, forexample, I divide the blind students into small groups, I demonstrate tactile individually what you explain to one blind child is what you explain to another blind pupil."*

5.2.9 Auditory materials

Informant 2 pointed out that recording can be the best teaching tool that can be used to teach blind pupils in ordinary classrooms, *"Recoding is another teaching tool teachers use to teach blind children in ordinary classrooms when blind children go back in their leisure time they play back and remember what they learnt in the classroom".*

5.2.10 Creative and friendly learning materials for the blind

Informant I point out that,*"Education materials are necessary because they help the blind children understand more the concept you are teaching in the classroom."*

Informant 3 notes that teachers provide enough learning materials to teach blind children, "*If teachers can organize and prepare learning materials for all blind and sighted children in ordinary classrooms, then for inclusion to be inclusion blind pupils should not lack learning materials.*"

Informant 3 suggested teachers resourcefulness results in creation of adapted learning materials for blind children in ordinary classroom, *"If you are innovative, you make the blind pupils creative, innovative and this can attract them to enjoy your lessons, they like new learning materials and they love to get new things for example if you create new learning*

materials which they are not familiar. Blind children always have interest to find out how these materials work and how to use them."

5.2.11 Organizing braille materials basing on individual education plan

Informant 1 asserted in order to make sure that the blind pupils understand in ordinary classrooms is by organizing braille materials in special separate classrooms, *" Blind pupils in this unit they don't go for kindergarten, some are brought straight to grade one and grade two and this is a problem, so when they reach in grade one you find the sighted children already have mastered the reading and writing, then I teach them separate, no matter how many years they will take to read and write braille, as soon as, they know braille then they begin to study with the sighted peers,"*

Informant 3 declared special separate teaching, *"Grade 1 and 2 blind pupils should be taught separately and differently when they join with the sighted pupils they should go for socializing, for grade 1 and grade 2, it is better to teach them alone and that is why we are here alone for social aspect they mix with others but, for the sake of learning they have to learn alone until they learn braille literacy, the art of reading and writing raised dots.In higher classes they should be given remedial lessons to compensate for their severity of visual impairment on math and science subjects."*

5.2.12 Summary of teaching tools

The matrix below shows the analysis of teaching tools teachers use to teach blind children in ordinary classrooms. Informants reported similar and different teaching tools and how they influence the inclusion of blind children in ordinary classrooms in a primary school as seen in the below table: As you see below, I have put the initials of the teachers as informants in numbers such as Informant (1) Informant (2) and Informant, (3) and where there is (1),(2),(3) that is the similarity of the three teachers and (1and 2), (1and 3),(2 and 3) represents a difference for two teachers where there is single letters such as (1), (2)and (3) stands for individual differences amongst three teachers.

Table 4.1

Themes	Informants
Guidance based on teachers knowledge and skills	Informant 3
Assessment during pupils learning Process	Informant 3
Feedback	Informants1, 3
Instrumental Conversation	Informants 1,3
Verbal information	Informants 1,2,3
Task regular interval checkouts	Informant 3
The use of Teaching materials	Informants 1,2,3
Tactile demonstrations using real objects	Informant 1,2,3
Creative and friendly learning materials for the blind	Informant 3
Auditory materials	Informant 2
Organizing braille materials basing on individual education plan	Informant 1and 3

6 DISCUSSION

6.1   Application for the results to the exisiting literature review

This chapter reviews and discusses the main findings of the study. The results are discussed in relation with the existing literature review of previous research, which have been mentioned in the chapter two of the thesis. Only the main findings, which are significant to the research question are discussed here. Identified teaching tools teachers use include guidance based on teachers knowledge and skills, assessment during pupils learning process, feedback,instructional conversation, verbal Information, Task regular interval check outs, The use of teaching materials, Tactile materials and demostration using real objects, creative and friendly learning materials, Auditory materials, and organising braille materials basing on individual education plan. To remind the reader the research question of the study, it was: **What teaching tools do teachers use and how do these tools influence on the inclusion of blind children in ordinary classrooms in a primary school?**

6.2   Teaching tools teachers use and thier influence on the inclusion of blind children in ordinary classrooms

In this section the findings show the teaching tools teachers use and their influence on the inclusion of blind children in ordinary classrooms in a primary school?

6.2.1   Guidance based on teachers knowledge and skills

The study shows that in the three informats one points out that guidance based on teachers knowledge and skills is one teaching tool teachers use to teach blind children in ordinary classrooms and this tool influences on the academic inclusion of blind children in a primary school. The informant believes that teachers guidance and instruction helps teachers teach the blind children and In discussion of this findings this is not the case to most teachers in Uganda. Most teachers have limited skills to guide well blind children and many blind children are not fully included in the ordinary classrooms though they attend same classrooms and this affects their academic inclusion and the two year training teachers get at and certificate and diploma level doesnot equip teachers with enough knowledge and skills needed to gain standard competence to teach blind children in ordinary classroom and this is

in relation to Vygotsky (1979) who points out teachers guidance stimualtes learners development and learning and that teaching can be said to occur when assistance is offered at points in zone of proximal development at which performance requires assistance. So this situation if the teachers teaching doesnot have the knowledge and skills this is a gap in the area of investigation. In my opinion I agree that with the findings that guidance help blind children to learn favorably in ordinary classrooms and I believe that blind children like sighted children if not guided and supported face a lot of challenges. Guidance helps blind children to understand and cope with the learning situations in ordinary classrooms and this influence their academic Inclusion.

6.2.2 Assessments during blind children learning process

The findings revealed that assessments during pupils learning process helps teachers to discover the weak zones of the blind children and action plans are designed for solutions to help them learn and this influences academic inclusion of the blind children when a teacher knows the abilities of blind children this can help him/her to plan a best individual education plan and which can yield good results for the blind children and this is in relation to Bishop (1990) points out that assessment helps teachers in deciding which factors are present or absent, and whether an integrated placement is likely to be successful or not. We should not be intentionally exposing our visually impaired students to possible failure when we, as educators, may be able to anticipate the probable outcome in advance. Assessment is the framework that gives direction to the teacher on the possible measures he can lay to teach the blind children in ordinary classrooms.

In discussion to the findings most teachers don't carry out assessment for blind children in ordinary classrooms for enrolling them in the ordinary classrooms and in most cases the blind children encounter challenges and their learning needs are not put in consideration beforehand and a case in a point. The children with low vision in most cases who need a simple corrective lens end up being blind when they are not assessed and this impacts on the Inclusion of the blind children in ordinary classrooms. Academic inclusion can be influenced if teachers carry out assessement for the blind children they are teaching in ordinary calssrooms. However, blind children fall vicitms in the sense that teachers for the blind hardly carryout asssessement and they think it is the work of the doctors and others have no idea of the efficancy of assesement and this takes along time for the teachers to discover the

talents and abilities of blind children. If assessment is done properly in time, this influences both academic, social and physical inclusion of blind children in ordinary classrooms in a primary school. This is in relation to McLoughlin & Lewis (2005) suggests that assessment of learners refers to the systematic procedures of gathering and identifying relevant educational information about a student. The main aim is to understand the specific needs of the student teaching and learning can only be achieved when student's background and prior knowledge, is assessed and known. Assessment of the learning needs of a student, with visual impairment, prior to the beginning of the course of study is important for both the student and the teacher. This is because it allows for an understanding of the student's academic ability, learning styles and learning needs (Spungin, 2002). Parents and peers are therefore important partners in provision of information about the learning of students with visual impairments. This is because parents know the needs and interests of their children better than other people. On top of that they know much about their children's learning problems and therefore can suggest better educational intervention (Johnsen, 2001; Spungin, 2002). Assessment can also be through reading students' academic records (Spungin, 2002). Assessment is important for knowing whether a student will need low vision devices, large prints, magnifiers and lenses, braille etc. In my view to sum up this finding if feel that teachers before teaching the blind children, assessment should be the first step so as to identify possibilities of the blind children and this helps to make a plan of action in planning individually adapted services and resources thus not exposing blind children to failure which can be anticipated.

6.2.3 Feedback

The findings from the two informants 1 and 3 revealed that feedback is a teaching tool teachers use to teach blind children and this influences academic inclusion in the ordinary classrooms in a primary school. This is in relation to Brophy (1987) defines praise as teacher's reaction that goes beyond simple feedback about appropriateness or correct of a behavior. When a child answer is correct and praised. This serves as a motivator for blind children when they are learning so this can be a good instruction for teachers to teach blind children in ordinary classrooms. Feedback helps teachers to help blind children understand themselves better why they did something wrong and how they can improve what they did wrong. In discussion to the findings when feedback is genuine this influences academic inclusion of the blind children in ordinary classrooms, however most teachers find it hard to

give feedback in big ordinary classes including blind children. In Uganda blind children don't get feeback service in time due to several reasons and this could be whether one teacher attending to fifty children and dividing time appropriately becomes a problem and this gap has influence on academic Inclusion of blind children in ordinary classrooms in primary school. In my view, if feel that positive and negative to both sighted and blind children gives positive energy for sighted children to work with blind children and when positive feedback is given to the blind children on what they do wrong and why they are doing so, they get motivation to learn, this is a good teaching tool teachers use to teach blind children in ordinary classrooms and also I think that if the teacher gives and praise when blind children does something and showing recognition is a very important approach and explaining to the blind children with reasons why she/he did badly makes blind children understand and this helps them to differentiate good from bad.

6.2.4 Instructional conversation

More still, the findings from two informants 1 and 3 revealed instructional conversation as a teaching tool teachers use to teach blind children in ordinary classrooms. In discussion to the findings Instructional conservation gives a detailed information to the blind children how something should be done and this helps blind children to understand better what they learn in ordinary classrooms in a primary school. This is in relation to (Best, 1992) who asserts a teacher should avoid vague statements. Phrases like "over here" or "this and that" should be avoided as much as possible, because they do not help students with visual impairments to understand what a teacher is talking about (Mastropieri & Scruggs, 2010). Points out that during the teaching process a teacher should read the notes aloud while writing on the black board or presenting on the projector (Spungin, 2002).

Asserts that teachers should call the names of students first when they wants to address a specific student, ask questions or give specific instructions so that students know specifically whom the teacher is talking to. This seems important, because it helps students with visual impairments feel that they are part of the class in the lesson (Mastropieri & Scruggs, 2010; Salisbury, 2008). Notifies that it is equally important to use students' names during class discussions so that students with visual impairments are in the position to understand who is talking (UNESCO, 2001). Finally, the language that has been used for content delivery in the class has been a major hindrance for the level of engagement and academic achievement of some students, especially those with visual impairment (Grace & Gravestock, 2009; Hannell, 2007). The best teacher is the one who uses simple presentation and communication.

Further more, In discussion to this findings good instructional conservation to the blind children influences both social and academic inclusion of the blind children in ordinary classrooms of a primary school, however, due to severity of impairment instructional conservation doesnot work if the teacher doesnot clearly go to the point when teaching ordinary classrooms since blind pupils cannot read the visual clues of the teachers and teachers with poor instructional conversation skills with limited competence as a result of low education which is not enough to teach blind children and this influence on the social and academic inclusion of blind children in ordinary classrooms in a primary school. And in my view I feel that goal guiding conversations help the blind children to understand when you ask blind children questions and they respond by giving answers in classroom exercises. And i also feel that since blind children miss visual cues and written instructions, considering talking through classroom activities while teaching helps blind children understand the description of non-verbal messages, responses, lesson introduction, transitions, and closure to all activities. And if feel that giving sincere information makes blind children feel secure to speak out their difficulties and this helps the teacher in making a plan of action and ultimately this influences on academic inclusion of blind children in ordinary classrooms in a primary school.

6.2.5 Verbal Information

Furthermore, both three informants revealed that verbal information is one of the best teaching tool teachers use to teach blind children, yes this is true however, this has gaps in addressing the comprehension of blind children in ordinary classrooms. This is in relation to (Spungin, 2002). Asserts that a teacher of students with visual impairment can write down the answers given out orally by a student with visual impairment. Moreover, a tape recorder can be used to record the answers the student is giving. However, through this way, a student cannot review the answers he or she has given for possible correction. Therefore, blind children and thier teachers should be consulted before the test is taken, in order to find a better way of assessing a blind children in ordinary classrooms.

In otherword in discussion to the findings, verbal Information infleunces both physical,social and academic inclusion, however verbal information alone cannot make the blind children understand and access the same education together with the sighted pupils at the same time. For inclusion to be inclusion despite their differences the blind children have the same education rights to have same quality education like the sighted children or else the blind children will always be left behind and this influences their

academic,physical and social inclusion. Verbal information has to be supplemented with other teaching tools since most vital verbal aspects are missed by the blind children due to their severity of impairment in ordinary classrooms in a primary school. In my view i agree that verbal teaching has been used for a long time and it works well when teachers explain clearly so that blind children can understand if they listen carefully in the class. To some extent verbal information is works best as a teaching tool that influence on the inclusion of blind children in ordinary classroom in a primary school not in all occasions because sometimes blind children fail to understand verbal information that needs visual comprehension teaching. In my view still when teachers use the local mother tongue language this helps the blind students get the concept clearly hence, this is one way to teach blind children in ordinary classroom. I agree with the teachers view in a way that verbal information bridges the gap for the blind children to develop vocabulary when they think in their mother tongue language and this helps them to communicate and understand effectively.

6.2.6 Task regular Interval check outs

The findings revealed from respondent 3 that task regular interval check outs as a teaching tool teachers use to teach blind children and this influence their inclusion in ordinary classrooms and this plays a crucial role in teaching blind children in that this helps blind children to avoid cumulative mistakes that leads them to lag behind. For inclusion of blind children, teachers are supposed to check their works and they give instant feedbacks so that they learn at the same pace with the sighted children. This is in relation (Bishop, 1996) asserts that when the children make errors in schoolwork, the mistakes are often just tallied and a grade assigned for the work. Few teachers ask why errors occurred. Diagnostic teaching is an instructional approach that attempts to determine the causes of errors, and to remediate those causative factors if possible. For blind children, this is essential since many types of errors are vision related (misreading or miss copying, omissions, faulty concepts based on inaccurate visual observation or experience). The teacher of blind students is trained to look for why errors occurs because of the strong influence of vision in learning.

In discussion to this finding, regular interval checks influences both social inclusion forexample when sighted children read notes on the blackboard for the blind children and in that process the social interaction is at hand and when teachers assisiting the blind children ask general questions to the whole class and physical inclusion can be when teachers check if

blind children can easily access and move indepedently to and from classroom alone without a guide and academic inclusion could be when teachers identify the mistakes which blind children encounters and the teacher can intervain how to help the blind children improve by making them understand and to focus due to the fact that they have no sight. It becomes easy for them to track their progress. However, if a teacher delays to make regular check outs this makes blind children lose focus and concentration and if they make a mistake and when it is not corrected very early some are impatient and they lose even interest as the saying goes, "A stitch in time saves nine". Therefore, regular interval checkouts influence both physical, social and academic inclusion of blind children in ordinary classroom in a primary school.

6.2.7 The use of teaching materials

In continuation, the findings revealed that the use teaching materials as a teaching tool teachers use to teach blind children and these influence on inclusion of blind children in ordinary classrooms and include: Tactile materials using real objects, creative and friendly learning materials, auditory materials and organizing materials basing on individual education plan.

6.2.8 Tactile materials and demonstration using real objects

The study shows that both respondents,1,2,3 revealed that tactile materials and demonstrations using real objects as a teaching tool teachers use to teach blind children in ordinary classrooms and these tools influence academic inclusion of blind children in the sense that they compensate for non-visual clues which blind children miss by enhancing their understanding through touch. This findings is related to (Lowenfeld ,1973; Pauline, 2008) asserts children who are visually impaired need concrete experiences that become even more important for children who have cognitive disabilities. Using only letters as the beginning reading instruction is abstract and bears little relation to blind children's past experiences compared to these of student's for whom letters are a natural part of their early language experiences, even when environments include braille, children need physical contact to experience it. Sight is a distance sense, learning by touch has to take place within arm's reach, or it is compromised. Unlike letters, familiar words do have meaning, and using words that represent a student's experiences gives the student a meaningful starting point in reading not provided by letters.

In discussion to the finding tactile materials influences on the academic inclusion of blind children in ordinary classrooms and without tactile means that teachers are denying the blind children equal right for education in the ordinary classrooms since they cannot see. In Uganda most ordinary school don't have adequate tactile materials and they are very expensive however, Tactile materials compensates for what blind children miss as teachers teach in ordinary classrooms due their severity of impairment in pratical subjects and gives some glimpse of direction to the blind children as they are learning and it helps blind children understand concepts by using their hands and this increases their participation and they feel belonging to the ordinary classroom and this influence on the academic inclusion of blind children in the ordinary primary school.

 I agree with this findings of the teachers   tactile materials play a sensitive and a very functional role to blind children when blind children touch objects they get a mental picture of the object and this helps blind children to understand better and sometimes tactile materials are difficult to understand and some times it is not a guarantee that all blind children are learn best using tactile materials. Due to the fact that blind children are different and have diferent learning needs from one another. In most cases tactile materials help sometimes but not all of them. So this varies however, tactile materials are highly recommended as the best teaching tools that gives substance in that   he use of hands on materials provides opportunities for kinesthetic and tactile learning that help blind children to be at the same pace with sighted children and in addition I agree with the the teachers findings that points out that providing enough materials such as braille papers, styles, tactile tubes, graphs and frames help blind children learn and understand concepts and this helps teachers to provide equal opportunities for blind children to participate favorably without leaving anyone behind hence this influence academic inclusion of blind children in ordinary classrooms.

In addition that I agree with this teacher finding real life examples and concrete materials can assist in describing relations between abstract learning and blind children experience, it is remarkably important to use real concrete life objects when teaching blind children, this increases their understanding and these objects can be easily accessible at school and in their homes and therefore this influences academic inclusion of blind children in ordinary classrooms in a primary school.

6.2.9 Creative and friendly learning materials

The findings from one respondent 3 revealed that creative and friendly learning materials for the blind as the teaching tool teachers use to teach and this influence both academic, social, and physical inclusion of blind children in ordinary classrooms in a primary school. When blind children share materials with the sighted children and this helps teachers to influence social inclusion and academic inclusion of blind children. This is in relation to (Sacks et al, 1992; Hoben & Lindstrom, 1980) Friendly user materials are good teaching materials for the blind children and creative materials which are provided to blind children enhance dialogue and social interaction to complete an assignment. Ibid states that the more significantly cognitively impaired the student, the greater the need for specialized materials, and the greater the need for the teacher's high expectations that will lead to success in reading. During the instruction of new materials, it is recommended that teachers who adhere to established guidelines to maximize engagement should provide four to six opportunities per minute for students to respond. When blind students are working with sighted pupils during independent practice activities, the recommended number of. Even students with visual impairments whose knowledge of concepts is strong would have difficulty keeping pace with this rate of instruction, unless it is entirely verbal.

In discussion of this finding not all learning materials are friendly and not even all teachers understand how to illustrate them to the blind children and teachers for the blind children noted that they don't have brailled textbooks which blind children can use at the the same time with the sighted children to influence academic inclusion and teachers find it hard to demonstrate maps for the blind children and so this still creates a gap on the academic inclusion of blind children in ordinary classrooms.

6.2.10 Auditory materials

The findings from informant 2 revealed that auditory materials are used by teachers as teaching tools to teach and these influence on the inclusion of blind children in ordinary classrooms in a primary school. Blind children in their free times use audios' to play back and compensate for what they did not capture well in class due to their severity of impairment. This is relation to (Bina, 1993; Bishop, 1990; 1996; Hatlen, 1993; Holbrook, 1996; Kadmon, 1989; Kinos, 1993; Lebech, 1990; Lewis, 1994). Teachers who teach blind children in ordinary classrooms need to provide adequate special materials and equipments. There is almost universal agreement that the special materials and equipments needed by a

visually impaired student in a regular school are essential for success. Therefore every creative effort to acquire the necessary materials and equipments should be explored. Most blind children are not in position to access these materials because they are expensive and in most cases the school and the parents cannot afford and this ploughs a gap in the inclusion of blind children in the ordinary classrooms in a primary school.

In discussion to the finding above auditory materials are covenient and they give a room for blind children to grasp their proximal zone of understanding since they can have all the degrees of information in the ordinary classrooms and they can replay in remedial classrooms to gather more understanding and I agree with this finding audio recording plays an extra ordinary role and this helps blind children to master what they learnt when they repeat and replay the teaching session of previous lessons and this influences academic inclusion of blind children in ordinary classrooms in a primary school. In Uganda most blind children don't have auditory materials to record lessons in ordinary classrooms because they are expensive and even the school, teachers cannot afford to buy them for all the blind children and This finding is in relation to (UNESCO, 2001; Simon *et al*., 2010; Spungin, 2002).

6.2.11 Organising braille materials basing on individual education plan

The findings shows that organizing braille materials basing on individual education plan influence on the academic inclusion of blind children in ordinary classrooms in a primary school. This is in relation to (Everett, 2009). That everybody in the society and especially students with special needs in inclusive schools, need to feel that they are given opportunity to participate in the various activities in the school (Bromell & Hyland, 2007; Everett, 2009). In addition, Mmbaga (2002) pointed out that the success of inclusion depends on the attitudinal change among teachers, and that the children's self-image and confidence, depend entirely on the way they are accepted, welcomed and given opportunity to participate by their teachers and peers. In addition, Individualized Education Plan (IEP) is a plan of study extracted from the general curriculum which is designed specifically to meet the needs of a student with additional needs. This plan of study comprises a list of specific goals to be met, and the strategies to be used to meet those goals (Salisbury, 2008).

 In discussion to the above findings i agree with this finding individual education plan for blind children influences on the academic inclusion of blind children in ordinary classroom in a primary school and this helps blind children to benefit much more than being placed in the ordinary classrooms when he/ she is in ordinary classroom.

The teacher considers organizing braille materials in special separate classrooms which work effectively to teach blind children. Braille needs extra time to be comprehended and in addition they get more insights of previous lessons on what they missed and what they did not understand in these special units and this influences their academic inclusion in ordinary classrooms in a primary school.

The teacher feels that taking into consideration their diverse and individual learning needs of blind children they require individual adapted braille lessons in special separate classrooms for blind children to understand explicitly and this influences academic inclusion of blind children in ordinary classrooms in a primary school.

The teacher feels that individual explanation works efficiently due to their severity of imapirment you may find that blind children need additional explanation; it is outstanding that teachers when they adapt individual explanations can be fruitful to teach blind children comprehension and this influences their inclusion in ordinary classroom in a primary school. The situation in Uganda most teachers for the blind hardly makes the individual plan for blind children and they are taught in ordinary classroom and sometimes those who try to do it, try it for a short time and due to the fact that blind children learning needs are not identified they endup being passive and this is creates a gap in the area of investigation.

6.3   Final Reflections

The study aims to investigate what teaching tools do teachers use and how do tools Influence on the academic, social and physical inclusion of blind children in ordinary classrooms in a primary school. The study used qualitative approach and Interview method with teachers from one primary school. In depth interviews were chosen as the main instrument of data collection.

Purposeful sampling and qualitative analysis was used in exploring and investigating the phenomenon of the study. Three special needs teachers for the blind in ordinary primary school were chosen as interview participants. This was to generate in-depth knowledge about the phenomenon "what teaching tools do teachers use and how do these influence on the inclusion of blind children in ordinary classrooms in a primary school using special need teachers as informants.

The main findings show teaching tools teachers use and their influence on the inclusion of blind children in ordinary classroom in a primary school include: Guidance based on teachers knowledge and skills, assessment during pupils learning process, feedback, instructional conversation, verbal information and task regular checks outs, The use of teaching materials, tactile demonstrations using real objects, creative and friendly learning materials for the blind, Auditory materials, and organizing braille materials basing on individual education plan.

The main findings show that teachers had varied differences and similarities in teaching tools which directly influence on academic, social and physical inclusion of blind children in ordinary classrooms in a primary school.

6.4   Implications for future research and practices

The study suggests need for further research studies investigating good working relations between special needs teachers and ordinary teachers who teach blind in ordinary classrooms.

The study recommends further research on what teaching tools teachers use and how these influence inclusion in ordinary classrooms on a large scale using quantitative approach or similar study in another area.

There is need for carrying out research on how teachers can teach simple technologies to blind children at an early age in ordinary classrooms in a primary school.

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Appendiks

Appendix 1: Interview Guide for Teachers

Topic: Teaching and including blind children in ordinary classrooms.

An Interview study of what teaching tools teachers use and their Influence on the Inclusion of blind children in ordinary classrooms in a primary school?

Teacher's Background and Teaching tools

Which class and subjects do you teach? How long have you taught in this class? What are your teaching qualifications?

How long have you been teaching in an inclusive school?

Do you have any special training in teaching blind children in ordinary classrooms?

What teaching tools do you use to teach and include blind children in ordinary classrooms?

As a special needs teacher teaching blind children, Is there anything you may wish to share with me related to how you teach the blind children in ordinary classrooms?

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 3: Letter of appreciation to the school

xxxxxxxxxxxxxxxxxxx

xxxxxxxxxxxxxxxxxxx

20th Dec 2013

The Head Teacher,

The Teachers,

Blind children,

Dear Sir/ Madam,

Re: <u>Thank you</u>

I am writing back in connection with the data for my research in which your precious school participated. Data collection is not usually an easy task for researchers. In my case, it was very successful because I got a maximum support and cooperation both from your school administration and from the teachers and the blind children all of whom willingly participated in the research. Without your support and cooperation during the data collection I would have done nothing.

Therefore I would like to extend my heartfelt thanks to all the teachers, whose efforts made it possible for me to obtain data for my study from different classes that I visited. I hope that I finish the final part of my research successfully when I return to Norway in January 2014

God bless your school.

I wish you a merry Christmas and Happy New Year 2014

Yours sincerely,

Niwagaba Gilbert

University of Oslo

Masters of Philosophy of special Needs Education Student.

Appendix 4: Permission to participate in the research study in your school

xxxxxxxxxxxxx

Dear Sir/Madam,

Re: <u>Seeking Permission to participate in the Research study in your School.</u>

I'm   Niwagaba Gilbert a student pursuing masters of philosophy in special needs education in the University of Oslo Norway.

As a partial fulfillment of the requirements for the course, I'm expected to carry out a research entitled Topic: Including and teaching blind children in ordinary classrooms"

"An interview study of what teaching tools teachers use and how they influence on the inclusion of blind children ordinary classrooms in a primary school"

The study will investigate on "Teaching tools teachers use and how these tools influence on the Inclusion of blind children in ordinary classrooms "

I hereby request you to accept participate in this study by answering a few questions through interview. The interview is going to take 1 and half hours. All information in this study will be held confidential and you are also informed that you are free to pull out of the study any time without repercussions.

  The research data collection is scheduled to take place between September 2013 to Jan 2014.

Your acceptance will be highly appreciated.

Yours sincerely, Niwagaba Gilbert

gniwazi@yahoo.com

Tlfn: 91265676 -Olav Troviks vei 36 HO 107 0864 Oslo Norway

Appendix 5:   An introductory approval letter from Norwegian Social Science Data Services

Norsk samfunnsvitenskapelig datatjeneste AS
NORWEGIAN SOCIAL SCIENCE DATA SERVICES

NSD

Harald Hårfagres gate 29
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Tone Larssen
Statped sørøst
Postboks 4416 Nydalen
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Vår dato: 05.07.2013   Vår ref:34771 / 3 / KH   Deres dato: Deres ref:

TILBAKEMELDING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 17.06.2013. All nødvendig informasjon om prosjektet forelå i sin helhet 04.07.2013. Meldingen gjelder prosjektet:

34771	*A case study of an Inclusive classroom of Visually Impaired children in Uganda*
Behandlingsansvarlig	*Universitetet i Oslo, ved institusjonens øverste leder*
Daglig ansvarlig	*Tone Larssen*
Student	*Gilbert Niwagaba*

Personvernombudet har vurdert prosjektet, og finner at behandlingen av personopplysninger vil være regulert av § 7-27 i personopplysningsforskriften. Personvernombudet tilrår at prosjektet gjennomføres.

Personvernombudets tilråding forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, ombudets kommentarer samt personopplysningsloven og helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering. Endringsmeldinger gis via et eget skjema, http://www.nsd.uib.no/personvern/meldeplikt/skjema.html. Det skal også gis melding etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet.

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database, http://pvo.nsd.no/prosjekt.

Personvernombudet vil ved prosjektets avslutning, 30.12.2013, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen

Vigdis Namtvedt Kvalheim

Kjersti Håvardstun

Kontaktperson: Kjersti Håvardstun tlf: 55 58 29 53
Vedlegg: Prosjektvurdering
Kopi: Gilbert Niwagaba, olav Troviks vei 36 HO 107, 0864 OSLO

Appendix: 6 Introductory Letter from District Special Needs Education Office Kabale .

KABALE DISTRICT LOCAL GOVERNMENT

OFFICE OF THE DISTRICT SPECIAL NEEDS EDUCATION OFFICER

P. O BOX, 221 KABALE UGANDA

30th Sept 2013

To whom it may concern

Dear Sir/Madam,

RE: MR NIWAGABA GILBERT

Mr Niwagaba Gilbert is currently Pursing a master's of Philosophy in special Needs Education in the university of Oslo Norway.

He would like to access a purposeful sampled school in the district for research.

This is to introduce him to your office and request for any possible support that he may need in relation to his study.

Yours sincerely,

Ms Grace Munyambabazi

Ministry of special needs education

District special needs Education officer- Kabale District

Appendix 7: Letter of introduction from the Local Council – Kabale Municipality

KINYUNGUSI CELL
LOWER BUGONGI
NORTHERN DIVISION
KABALE MUNICIPALITY
27/9/2013

CHAIRMAN
KINYUNGUSICELL
LOWER BUGONGI
TEL.0756853905, 0701955427
DATE. 27-9-2013

TO WHOM IT MAY CONCERN:

Dear Sir/madam.
RE MR Niwagaba Gilbert:
This is to certify that the bearer is
a residence of the above mentioned
address, he is a student of Oslo University
in Norway.
he is a well behaving boy and Coopative
So any assistance regards to him
is highly welcome.

Yours Faithfull
Byaruhanga Joseph

CHAIRMAN
KINYUNGUSICELL
LOWER BUGONGI
TEL.0756853905, 0701955427
DATE. 27/9/2013

Mr. David Tindyebwa   0782 344314
1/c Braille Section

Please assist him accordingly.

30/09/2013

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