How Can We Perceive Education As inclusive?

A study on the perspective of the inclusive education of people with a visual impairment in Sudan

Abstract

This research explores how people with visual impairment in Sudan regard education as either inclusive or exclusive. Drawing on the capability approach, the research explores what is important to people with visual impairment to realize their potential in education and society. Nine participants provided their views through Skype interviews, in a group and individually, and also by email. The research found that the freedom to read and mobility, teacher’s support, reciprocal relationships and respect, self-confidence and social awareness, especially for families, are crucial for education to be inclusive. Education can contribute to the social inclusion of people with visual impairment by developing their self-confidence, the necessary social skills to feel included in society, and their agency to change it.

The research concludes with the following policy implications: enhancing the flexibility in the education system to allow people with visual impairment the freedom to realize what is important to them; reducing the cost for reading and mobility by considering the whole environment; addressing social awareness, especially supporting families; recognizing the agency of people with visual impairment to identify the freedom they value and to achieve it.
Acknowledgements

I would like to express my full gratitude to Professor Colleen McLaughlin, my supervisor, and Dr. Yusuf Sayed for guiding me through the long journey with their advice and encouragement.

I am full of gratitude for my friends in Sudan for their commitment and cooperation to carry out this research, especially for the key participants for their coordination and insightful advice.

I would like to extend my deep thanks to the College Women’s Association Japan, the Chancellor’s International Scholarship, Snowdon Trust, and Professor John Spiers at Kate Root & Kate Spiers Memorial Scholarship for enabling me to study in this programme. My deep thanks go to my colleagues and faculties who supported me throughout the programme and Ms. Victoria Painting who scanned thousands books and realized my freedom to read.
# Table of Contents

How Can We Perceive Education As inclusive? ................................................................. 1  
Abstract .............................................................................................................................. 1  
Acknowledgements ........................................................................................................... 2  
Table of Contents ............................................................................................................. 3  
Abbreviations .................................................................................................................... 4  
1. Introduction .................................................................................................................. 5  
   1.2 Rationale ................................................................................................................... 5  
   1.3 Structure .................................................................................................................... 6  
2. Key Concepts ............................................................................................................... 7  
   2.1 Disability ................................................................................................................... 7  
   2.2 Inclusive Education ................................................................................................ 11  
   2.3 Towards the Analytical Framework ........................................................................ 15  
   2.4 Summary .................................................................................................................. 18  
3. Context .......................................................................................................................... 19  
   3.1 Sudan ........................................................................................................................ 19  
   3.2 Education in Sudan .................................................................................................. 19  
   3.3 People with Disabilities in Sudan ........................................................................... 20  
   3.4 Education for People with Visual Impairment ....................................................... 20  
   3.5 Summary .................................................................................................................. 22  
4. Research Design and Methodology .............................................................................. 23  
   4.1 Aims and Objectives ............................................................................................... 23  
   4.2 Positionality ............................................................................................................. 23  
   4.3 Method .................................................................................................................... 26  
   4.4 Ethical Considerations ............................................................................................. 32  
   4.5 Limitations ................................................................................................................ 32  
5. Analysis and Discussion ............................................................................................... 34  
   5.1 Intrinsic Inclusion/Exclusion ................................................................................... 34  
   5.2 Extrinsic Inclusion/Exclusion .................................................................................. 42  
   5.3 Discussion ................................................................................................................. 46  
6. Conclusion .................................................................................................................... 51  
7. Bibliography ................................................................................................................. 55  
8. Appendices .................................................................................................................... 61  
   Appendix1: Profile of the Participants ....................................................................... 61  
   Appendix2: Guiding Questions for Discussion: .......................................................... 63
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>DFID</td>
<td>Department for International Development</td>
</tr>
<tr>
<td>EFA</td>
<td>Education for All</td>
</tr>
<tr>
<td>HLP</td>
<td>The Secretary-General's High-Level Panel of eminent persons on the Post-2015 Development Agenda</td>
</tr>
<tr>
<td>ICEVI</td>
<td>International Council for Education of People with Visual Impairment</td>
</tr>
<tr>
<td>ICF</td>
<td>International Classification of Functioning, Disability and Health</td>
</tr>
<tr>
<td>ICIDH</td>
<td>International Classification of Impairment, Disability and Handicap</td>
</tr>
<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>UNCRPD</td>
<td>United Nations Convention on the Rights of Persons with Disabilities</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific, and Cultural Organization</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Childrens’ Fund</td>
</tr>
<tr>
<td>WBU</td>
<td>World Blind Union</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
1. Introduction

This research explores how people with visual impairment in Sudan regard education—as inclusive or exclusive, and analyses how these students are included or excluded in education and society. Skype interviews (group and individual) and qualitative analysis were employed in analysis. Although the role of disabled people in developing countries has increasingly been recognized in international development (DFID, 2010) and inclusive education is recognized as the strategy to realize education for all (Peters, 2004), studies about views on education are limited.

1.2 Rationale
1.21 Broad Context
Despite international effort to realize the rights to education for all, approximately 61 million children remain out of school (UNESCO, 2012). Above all, children with disabilities have been left behind, even though persons with disabilities are estimated to form 15.4 % of the world’s population (World Bank and WHO, 2011). UNESCO (2013) estimates that 30% to 40% of out-of-school children have some kind of disability, and 90% of children with disabilities in developing countries have no access to education. As for children with visual impairment, about 4.4 million children out of 6 million children with visual impairment do not have access to basic education (Campbell, 2002). The Salamanca Statement (1994) attracted international attention to inclusive education, as the statement set out the goal of including all marginalized children in education.

However, inclusive education is understood in various ways (Ainscow et al., 2006). There is little research on the viewpoints of people with disabilities on inclusive education in developing countries, with a few exceptions, such as the work of Singal et al. (2009). As the voices of people with disability tends to be silenced (Singal, 2010) and knowledge flows from the north to the south even in the field of disability studies (Grech, 2009), knowledge about inclusive education based on the perspectives of people with disabilities in developing countries is essential. As different groups of people with disabilities understand inclusive
education differently, this research project focuses on those with visual impairment.

1.22 Personal Motivation
The research is rooted in the personal experience of the researcher—a person with visual impairment educated in regular schools in Japan and committed to supporting education for those with visual impairment in Sudan for more than five years. Although the researcher believes in the value of inclusive education and its potential to meet the needs and expectations of all children, the researcher has had ambivalent feeling towards inclusive education, namely its relevance in meeting the needs and expectations of those with visual impairment in Sudan today as well as its universal relevance in the global discourse. Regarding its relevance to the current situation for children with visual impairment, the researcher has met several students with visual impairment who value their experience in schools for the blind, while others value studying in schools in their communities both in Japan and Sudan. One of the common arguments the researcher encountered in favour of blind schools emphasizes the importance of the social network students can create among peers with visual impairment. On the other hand, studying in blind schools can limit the social networks students form in their communities. There seems to be limited literature on inclusive education that captures the diverse perspectives of those with visual impairment in developing countries. Therefore, this research explores the understanding of the meanings of inclusion and exclusion in education for people with visual impairment in Sudan, and how education can be inclusive to address ambivalent feelings and to add the perspective of people with visual impairment from Sudan to the discussion of inclusive education.

1.3 Structure
The next chapter reviews the key concepts of this research and sets out the analytical framework. The third chapter reviews the context of Sudan, focusing on the educational situation of people with disabilities. The fourth chapter explains the research design and methodology. The fifth chapter presents the key findings and discussion. The last chapter concludes with an overview of the research and policy implications, suggesting that the flexibility in the education system, a holistic approach to reduce the cost of the freedom to read and mobility, addressing the social awareness, and recognising the agency of people with visual impairment are needed to make education inclusive.
2 Key Concepts

This section reviews the discussions on the main concepts of this research. The first part covers the discussion on the concept of disability. The second part deals with the discussions on inclusive education. The third part sets the analytical framework of this research.

2.1 Disability

2.1.1 Models of Disability

Disability is conceptualized in different ways based on its causes and social implications. In the modern era of industrialized countries, the causes of disabilities have been attributed to the condition of body and the health of individuals. This model is the individual or medical model of disability (Albert, 2004). From the perspective of the medical model, disability and limitations that individuals with disabilities experience are understood as unfortunate phenomena belonging to the individual (Albert, 2004). As such, interventions to address these limitations tend to focus on changing the medical conditions of the individual by curing and rehabilitating (Albert, 2004). Specialists and specialized agencies take control in intervention—a situation that sometimes necessitates the segregation of individuals with disabilities for treatment regardless of their will and hopes (Albert, 2004).

Against this perspective, another model has been proposed and developed by scholars and activists with disabilities (Albert, 2004). In this perspective (known as the social model) disability is caused by society, which does not recognize different bodies (Albert, 2004). Therefore, the experience of limitation is a sociopolitical and cultural issue (Albert, 2004). Along with the two models of disability, one can identify a continuum of idealistic and materialistic views (Priestly, 1998). Idealistic views can be understood as falling in line with the postmodernist tradition which assumes that discourses determine the reality, whereas the materialist view is understood in Marxist analysis which assumes that class and structures explain the social phenomena (Priestley, 1998). In the individual-materialistic view, or medical model, disability is “the physical production of biology acting upon individual bodies” (Priestley, 1998:78). In an individual-idealistic view, disability is “the product of
voluntaristic individuals (disabled and non-disabled) engaged in the creation of identities and negotiation of roles” (Priestley, 1998:78).

The social model also can be understood from a materialistic and idealistic viewpoint. In the idealistic social model, disability is regarded as constructed within the social and cultural context (Priestley, 1998). In other words, this view regards disability as constructed by the discourse in society. In the materialistic social model, on the other hand, disability is constructed in the socioeconomic and historical context.

2.12 Critique of Each Model
The main critique of the individual model is its simplistic understanding that limitation in functioning causes the phenomenon of disability (Reindal, 2008; Albert, 2004). It ignores the disabling environment and makes individuals with limited functioning responsible for the phenomenon of disability. The individual model results in an understanding of persons with disabilities as unfortunate individuals, who have moral commitment to exert their effort to cure their limited functioning. This point of view promotes the paternalistic intervention of professionals and institutions, against which disability studies have emerged (Barnes et al, 1999). The individual model also ignores the contextual meaning of limited functioning in different cultures (Reindal, 2008).

The critique of the social model considers the relationship with the body or experience of individuals with limited functioning and society (Reindal, 2008). Because a cause for disability is sought in society and due to the collective disadvantages that people with disabilities face, the social model is criticized for reducing limited functioning and individual experiences to cultural, social, or discursive phenomena (Hughes and Paterson, 1997; Terzi, 2004). Especially in developing countries, the model is criticized for diverting attention from reality, as the majority of limitations in functioning can be cured by simple medical treatments (Albert, 2004).

On the other hand, the relevance of these different models proposed in the western context is questioned by some researchers (Miles, 2007; Ghai, 2002; Kisanji, 1999a). Ghai (2002) argues that the social model of disability, developed in the western context, does not capture
the realities of those with disabilities in India in that it ignores the issues of poverty, gender, caste, and the urban/rural gap, all of which are important factors of marginalisation in India (Ghai, 2002). In Tanzanian folklore, people with disabilities were described in accordance with the features of their body rather than a collective category of people with disabilities (Kisanji, 1999a). In Jordan, the concept of disability is determined by religion (those with disabilities are seen as tested by god, though recognized as an equal human), culture (shame), and the influence of Western discourse (people in need of medical treatment) (Turmusani, 1999).

Considering these different perspectives of disability, Devlieger (1999) suggests that global knowledge of disability is developed within the interdependent world; that is, the west affects the local knowledge of disabilities in the southern context. However, southern knowledge of disability is also reflected in the western context while emphasizing the importance of recognizing local knowledge (Devlieger, 1999).

2.13 International Understandings
Different understandings of disability are reflected in the international discussion of its conceptualization. In 1980, the World Health Organization proposed the International Classification of Impairment, Disability, and Handicap (ICIDH) (WHO, 1980). ICIDH conceptualizes disabilities at three levels: impairment, disability, and handicap (WHO, 1980). Impairment is understood as any loss or abnormality of psychological, physiological, or anatomical function (WHO, 1980). A disability is the limitation of ability to perform an activity in a manner or within the range considered as normal for a human being (WHO, 1980). A handicap is a disadvantage caused by impairment or a disability that limits an individual’s ability to fulfill roles that are normal for him or her (WHO, 1980). In this model, limited vision is understood as impairment and an inability to read is the disability. The handicap would be, for example, disadvantages in employment resulting from the limitation in reading (WHO, 1980). Although this model recognizes the social aspects of disability (handicap), its basic assumption is closer to the individual model, as it assumes impairment as the cause of disability and handicap.

In 2001, the WHO revised the ICIDH as the International Classification of Functioning,
Disability, and Health (ICF) (WHO, 2002). The ICF understands a disability as an outcome of the interaction between health conditions (disorders and injuries) and contextual factors (WHO, 2002). Contextual factors can be divided into the external environment (social attitude, social structures, and architectural characteristics) and interpersonal factors (gender, coping style, education, profession, and experience). It also identifies three levels of functioning: impairment, activity, and participation (WHO, 2002). These three levels are equivalent to the levels of ICIDH, though the ICF does not see impairment as the cause of the experience of disability but its interaction between the health condition and the environment. The model, however, is criticized for reducing the phenomenon of disability to a disadvantage rather than a form of oppression (Thomas, 2004). This leads to another critique that the model is limited in understanding the agency and autonomy of people with disabilities, as its concept of participation is judged based on that of “normal” human beings (Reindal, 2008).

2.14 The Capability Approach
Some researchers attempt to understand disability using the capability approach developed by Sen (Baylies, 2002; Burchardt, 2004, Terzi, 2004; Dubois and Tarni; 2009). The main concept of the capability approach is the functioning and capability of individuals. Functioning refers to things a person may value doing or being, such as being well nourished or having self-respect (Sen, 1999). Capability refers to possible combinations of functioning that a person has the freedom to choose (Sen, 1999). The capability approach offers an analytical framework of equity by focusing on the fact that equal income does not mean the same freedom to realize the activities or states that are valued (Sen, 1992, 1999, 2004). For example, even with the same income, a person with a mobility disability needs to pay for transportation to go to the market to buy daily food. Based on the capability approach, therefore, a disability is understood as the limitation of the capability or limitation of freedom to realize activities and states that a person may value (Burchardt; 2004; Dubois and Trani, 2009). In this approach, disability is regarded as a part of human diversity (Sen, 1999) and both personal conditions and environmental conditions are considered as determinants to their capability (Terzi, 2004; Dubois and Tarni, 2009). In addition, as capability is about individual choice, it recognises the agency and autonomy of people with disabilities (Burchardt, 2004).
2.2 Inclusive Education

2.21 Routes and Trends

Recent concern regarding inclusive education emerged from the civil rights movement in the 1960s and its critique of the segregated school system in western countries (Barnes et al, 1999; Kisanji, 1999b). There are several discourses that justify special school systems for students with disabilities: it is necessary to meet the needs of children with a disability; it protects children from the harsh world; it has teachers who offer patience, dedication, and love; it offers a special curriculum; it prepares children to participate in the external world; and it is administratively efficient (Barton, 1995). The critiques raised in the late 20th century are summarised as follows: special school systems negatively label children with disabilities and enhance stereotypes; these school systems contribute to the way society disables people with disabilities; children in special schools receive education of a lower quality; and special schools enhance the privilege of the professional as expert (Barton, 1995; Barnes et al, 1999). These critiques are based in a historical context in which children with disabilities are segregated from regular schools as unwanted children or to provide vocational training (Barton, 1995; Barnes, 1999; Kisanji, 1999b). The movement for including children with disabilities in the general education system resonated with political trends in western countries in which social marginalisation was a political concern and broadened the scope of inclusive education to all other marginalized children (Stubbs, 2002).

The trend of addressing the issue of marginalized children became an international agenda along with the global movement for the universalisation of education and recognition of the rights of people with disabilities (Stubbs, 2002; UNESCO, 2003; Kisanji, 1999b). In 1994, UNESCO and the Government of Spain held a World Conference on Special Needs Education, resulting in the Salamanca Declaration and Framework of Action (UNESCO, 1994). The document set out the principle of inclusive education as an international agenda (Stubbs, 2002; Kisanji, 1999b; UNESCO, 2003). The documents included all other marginalized children, such as street children, nomads, and those in rural areas (UNESCO, 1994; Stubbs, 2002). Here, the concept of inclusive education includes the following elements: it is a process; it addresses the diverse needs of all children, youth, and adults; it increases participation in learning, culture, and communities; it reduces exclusion and
discrimination; the regular system is responsible for all children; and it requires modification of the system and curricula rather than modification of the child’s condition (UNESCO, 2009; Stubbs, 2002). Inclusive education regards the education system and environment as responsible for including these children, in line with the social model of disability. As such, Article 24 of the UN Convention on the Rights of the Persons with Disabilities affirms the right to inclusive education at all levels of education. As access to education was gradually improved in many developing countries, inclusive education attracted attention in the late 2000s, with a push to reach the last 10% of minorities who are out of school (UNESCO, 2007, 2008 and 2010; Peters, 2004). Even more, in the discussion of the post-2015 development goals, inclusion is regarded as a crosscutting issue (HLP, 2013).

2.22 Different Understandings
Inclusive education is understood in various ways (Ainscow et al., 2006). Dyson (1999) categorises the dominant discourses for inclusive education as follows: the rights and ethics discourse suggesting inclusive education as a way to realize the rights of all; the efficacy discourse, suggesting that inclusive education is more effective in cost and performance than special schools; the political discourse, suggesting that excluded groups politically demand inclusion; and the pragmatic discourse, suggesting that the practice of schools with inclusive culture can be applied to make other schools inclusive, thus paying attention to technical aspect of the practices.

Inclusive education targets different children along with each discourse. For example, the rights and ethics discourse focuses on political targets for those who are excluded from the regular schools, whereas the efficacy and pragmatic discourses focus on those who would perform better within the inclusive schools (Dyson, 1999). The different understandings of inclusive education can be observed among the different disability groups. Notably, the deaf community insists on the importance of special schools where a deaf child can learn sign language among native signers and be part of the deaf community (Bernes et al, 1999).

The different discourses of inclusive education have animated the discussion and contributed to the development of the concept though, it is concerned that the dialogue among the different discourses is not vivid, which would not benefit those disadvantaged in
education (Dyson 1999). The different discourses raise questions, such as whether the right to education means being educated in regular schools or in any other form of establishment; whether studying in regular schools is more effective than in special schools; and whether normative and efficacy justifications are always compatible (Dyson, 1999). These questions necessitate dialogues among the discourses about the causes of exclusion, who is excluded, the principles of inclusion, and what equity is in society (Dyson, 1999). Dyson (1999) warns that the concept of inclusion might be reduced to a discussion of placement in regular schools without a dialogue among different discourses. However, the dialogue among different discourses on inclusive education seems rather static in developing countries, although the importance of localising the concept of inclusion is recognised (UNESCO, 2005; Stubbs, 2002).

In Malawi and Lesotho, inclusive education is understood as educating children with disabilities in regular schools (Johnstone and Chapman, 2009; Chavuta et al., 2008). Research in Cambodia and India has found that inclusive education, which is proposed by donors, does not reflect the local reality, such as culture, the complex causes of exclusion (poverty, gender, caste), and limited resources (Kalyanpur, 2008, 2011). Sayed (2002) re-examines the discourses on inclusion and exclusion in southern context and points out that these are not binary concepts, as celebrated in the west. Including some students might exclude others, or inclusion of excluded students in one aspect of education (such as access) might exclude the same students in another aspect (such as learning). Also, in the western context, research in a primary school in England found that inclusion and exclusion of children with a migrant background is highly contextual at different moments (Benjamin et al., 2003). Therefore, examining who is included or excluded, from what, and in which context is essential to understanding inclusion/exclusion. To understand inclusion/exclusion, Sayed (2002) suggests that the concept of inclusion should be an analytical framework rather than normative framework.

2.23 Dilemma of Difference
Another issue that needs attention in the discussion on inclusive education is the dilemma of difference (Norwich, 2008; Reindal, 2008; Terzi, 2004). This dilemma can be understood in three dimensions: identification dilemma, control/autonomy dilemma, and diversity/solidarity
dilemma (Norwich, 2008; Reindal, 2008; Terzi, 2004). The identification dilemma refers to the dilemma that identifying children who need preferential treatment can stigmatise them as those who need special care (Norwich, 2008). This can be seen in the debate about special education, discussed above. Supporters of special education insist that the special education system offers education that suits the needs of children with disabilities (Allan and Brown, 2001), while others criticise special education as stigmatising children with disabilities (Barton, 1995; Barnes et al., 1999). The control/autonomy dilemma is about choice in education. Because supporters of inclusive education, despite diverse understandings of the concept, seek schools that can educate all children, the dilemma is whether children who need or prefer to be educated in special settings can choose that opportunity within the system (Norwich, 2008). This can also be understood as the debate between the rights/ethical discourse and the efficacy discourse of inclusive education. The rights/ethical discourse argues that education in regular schools with support is ethical, whereas the efficacy discourse claims that inclusive education is more effective. The two propositions disagree over when it is more effective to study in special schools. Nakamura (2006) has reviewed the debates on full inclusion in the United States and found that the debates on full inclusion ignore the categories of disabilities, resulting in the creation of disability minorities such as those with visual impairment. Regarding education for children with visual impairment, special schools and special units in regular schools are regarded as a significant mode of provision of education (Campbell, 2002; Sightsavers 2011).

Lastly, the diversity/solidarity dilemma is that the normative imperatives of diversity can conflict with the rights to solidarity. In other words, the diversity in classrooms should be valued despite the right to be educated in a certain school where the culture is shared (Norwich, 2008). This applies to the claims of the deaf community, advocating for special schools where children can learn sign language and deaf culture (Barnes, 1999).

The dilemma of difference can also be observed in the international discussion of inclusive education. Rieser (2012) points out the importance of focusing on children with disabilities in the international discussion of inclusive education, as it is broad in scope, covering all children, and tends to ignore the concrete needs of children with disabilities. Terzi (2004 and 2005) attempted to overcome the dilemma of difference using the capability approach. She suggests that focusing on capability, freedom of choice in doing and being, which a person
has reason to value, can overcome the dilemma of difference by avoiding labelling children based on disabilities or categorising them on the basis of educational places. This approach has the potential to contribute to the discussion of inclusive education by offering another framework to consider the dilemma of difference.

2.3 Towards the Analytical Framework
This section sets out the analytical framework of the research for understanding inclusive education. As the analytical framework, it should address the issues identified above. It should be sensitive in capturing the individual/social model of disability without over-individualising and over-socialising the phenomenon of disability. Also, it should recognise that education includes and excludes (Sayed, 2002). Lastly, the framework should address the dilemma of difference. In addition, the framework should have an equity dimension, as inclusive education has concerns about equity (Barton, 1995).

2.31 The Capability Approach
From the discussion above, the capability approach seems to provide a framework to address these issues (Terzi, 2005). As discussed in section 1.4, the capability approach can conceptualise the inter-relational effect of impairment and environment, since its concern is the freedom of a person to choose being and doing those things that he or she has reason to value (Sen, 1999). In the individual model, a blind person cannot read because of his or her eyesight, whereas the social model problematises society where books are not printed in Braille. The question raised from the capability approach is whether a blind person can chose to read books as sighted people can.

This point of view is helpful in approaching the question “Who is excluded from what?” to understand the complex inclusion/exclusion issue. For this study, inclusion/exclusion is conceptualised as the freedom to realise the functionings a blind person has reason to value or the limitations on their freedom. In this sense, special schools might enable a blind person to study in Braille, but they might limit their freedom to study in the community. Regular schools might enable a blind person to be included in the community, but they might not provide these students with access to blind role models. An important aspect of the capability approach is whether a person can choose to realise the functionings or not; as
Sen (1999) illustrates, to fast and to be hungry are different things. Therefore, the capability approach concerns whether a blind person can choose to be educated in a blind school when he or she has a reason to value it. This can conceptualise the point that some might need to exclude themselves as Sayed (2002) argues.

Regarding the dilemma of difference, the capability approach problematises whether or not a person can realise the functionings he or she values rather than the provision of preferential treatment on the basis of impairment versus pursuing an environment that accommodates the needs of all (Terzi, 2005). This approach can conceptually locate the claims of the deaf community to learn sign language and deaf culture in a separate environment within the framework of inclusion/exclusion, as skills of sign language and being included in deaf culture are valuable functionings for a deaf child.

In addition, the capability approach focuses on equity in capability (Sen, 1992, 1999). Sen points out that same income does not mean the same capability when the diversity of humans is considered (Sen, 1992, 1999). It is much harder for a person with a disability to earn income than a person without, and in addition, it would be much harder for the person with a disability to convert the income to a good standard of living, as he or she will have additional costs (Sen, 2004). As such, equality in primary goods such as rights, liberty, or respect, which are the absolute priorities for Rawls’s theory of justice, would not guarantee the same capabilities (Sen, 1992, 2004).

2.32 Rights and Capability
Perhaps the most common framework for inclusive education is human rights (UNESCO, 2003; 2009; Stubbs, 2002). Nonetheless, this research employs the capability approach for the following reasons.

Having the same rights does not guarantee the achievement of the same capability (Sen, 1992, 2004). For example, the rights to free and compulsory education cannot guarantee access to school for children with disabilities when road safety is a big concern. In this sense, the UNCRPD is a strong foundation to guarantee that persons with disabilities are entitled to the rights confirmed in other Conventions and to recognise the special rights of persons with
This point leads to the second reason for employing the capability approach. In the negotiation process of the UNCRPD, the concept of inclusive education, especially the status of special educational environments, was one of the areas most debated. For example, the Centre of Inclusive Education (2006) emphasised its concerns about segregation, whereas the Global Deaf Connection (2006) pointed out the importance of deaf schools. International Disability Caucus proposed that the discussion should focus on the ways of providing education rather than the educational environment. Although the discussion reached consensus as an article of the UNCRPD, the debate demonstrates that the right, as stated, does not capture the interests of all stakeholders. In this sense, as an analytical framework the capability approach is more flexible in conceptualising need in the local context.

The third reason is the need for an analytical approach rather than a normative one. As Sayed (2002) and Dyson (1999) suggest, to keep the discussion on inclusive education vivid in order to develop it, an analytical approach is needed to examine who is excluded from what, by what, and in what context. In this regard, the capability approach is more relevant for an analytical approach, as the rights approach can be too normative.

Fourthly, the rights approach can be overly rhetorical, thus running the risk of not being implemented (Robeyns, 2006). In this sense, the rights approach should be strategically employed to realise capability (Robeyns, 2006). Lastly, the rights framework does not capture the extrinsic value of education (Robeyns, 2006). As inclusive education has extrinsic implications (to promote social inclusion), both intrinsic and extrinsic aspects of education should be considered (Sen, 1999).

2.33 Limits of the Framework
Although the capability approach seems helpful for this research, its limitations should be recognised. The first limitation is the difficulty in drawing concrete policy implications using the capability approach (Robeyns, 2006). Despite its scope as an analytical framework, it is...
still difficult to identify fundamental capabilities as policy implications. Although Nanbusum identifies the basic list of capabilities, Sen argues against predetermining the list (Burchardt, 2004). In this sense, Sen (1999) argues that fundamental capabilities should be identified through democratic public discussion. Yet, Sen’s approach has limitations in proposing concrete policies.

The second limitation of the approach is the difficulty in comparing the set of capabilities with a complete order of valued functionings (Sen, 1992). It is impossible to make a complete ranking of valued functionings (the fundamental reason for incompleteness), and even if it were possible to make the list in order, we could not identify it (the pragmatic reason for incompleteness) (Sen, 1992). Therefore, it is hard to identify the set of functionings that sighted persons value in a complete order, and those that persons with visual impairment value. In this sense, the capability approach does not indicate methods of social arrangement as a theory of justice (Deneulin, 2006).

2.4 Summary
This section reviewed the key concepts for the study—disability and inclusive education—and set out the analytical framework for the research. For disability, the causes of disability are the area of the debate; that is, the individual model and the social model of disability. In inclusive education, different discourses on inclusive education and the dilemma of difference were identified as the areas of discussion. In addition, throughout the discussion the question of who is excluded from what was found to be crucial to understanding inclusive education. To approach these questions, the capability approach was found to be an effective analytical framework.

Therefore, in this research, inclusion/exclusion in education is operationalised as to whether a person with visual impairment can choose doing and being what he or she values as those without disabilities can in education.
3 Context

This chapter summarises the Sudanese context of education for people with disability, especially those with visual impairment.

3.1 Sudan

Since its independence from Anglo-Egyptian condominium Governance in 1955, the Republic of Sudan has experienced two major conflicts (1955-1972 and 1983-2005) between the north, where Arabic speaking Muslims are the majority, and the south, where several Christian African tribes are the majority (Abdelhay et al., 2011; Jok, 2007). These conflicts have hampered the development of the country in various ways (Republic of Sudan, 2012). The southern states seceded in July 2011 following the Comprehensive Peace Agreement in 2005 and the referendum in January 2011. In this study, Sudan refers to the Republic of Sudan or the northern states before the secession.

3.2 Education in Sudan

Sudan’s education system consists of 13 years of basic education, 2 years preschool, 8 years of primary school, and 3 years of secondary school (general and vocational track), and higher education in universities and other higher education institutions (World Bank, 2012). In a decentralised system, the Federal Ministry of General Education is responsible for setting policy for primary and secondary education and policy setting and service provision for higher education (World Bank, 2012). The state governments are responsible for service provision of primary and secondary education (World Bank, 2012). Along with the general education system, Khalwa (traditional Quran school) is a part of the education system (World Bank, 2012). Participation of education in Sudan remains limited compared to the neighbouring regions, as Table 1 shows.

Table 1: Access to Primary Education in Sudan 2008

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Net Enrolment Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>Sudan</td>
<td>65.3</td>
</tr>
<tr>
<td>Arab States</td>
<td>86</td>
</tr>
</tbody>
</table>
The internal efficiency of schooling is another issue, as the primary completion rate is about 54% (World Bank, 2012). The completion rate of the secondary school is 25%, which is much lower than that of primary education (World Bank, 2012). For tertiary education, about 6.7% of the population at age of 6 and over has tertiary level qualifications.

3.3 People with Disabilities in Sudan
In Sudan, a person with disabilities is defined as ‘...a person who is permanently unable due to physical or emotional or visual or hearing defect to perform actions done by healthy persons of their age’ (ILO, 2004:5). This is close to the individual model of disability. Among the population with disabilities, people with visual impairment is the largest group, consisting of 36.8% (32.8% for low vision and 4.0% for totally blind).

3.4 Education for People with Visual Impairment
As Table 2 shows, about 30% of people with visual impairment have no educational qualifications. They are more marginalized as the level of education gets higher. Khalwa (traditional Quran school) plays an important role in provision of education, especially in rural areas.
**Table 2** The educational qualification of people with visual impairment 2008.

<table>
<thead>
<tr>
<th>Area</th>
<th>Qualification</th>
<th>Difficulty in Seeing</th>
<th>Blind</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>not stated</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>no qualification</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>primary</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>secondary</td>
<td>20</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>above secondary</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>kahlwa</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>not stated</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>no qualification</td>
<td>31</td>
<td>28</td>
</tr>
<tr>
<td>Urban</td>
<td>primary</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>secondary</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>above secondary</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>kahlwa</td>
<td>26</td>
<td>33</td>
</tr>
<tr>
<td>Rural</td>
<td>not stated</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: Calculated from the Census 2008 Datasets
The situation of education for children with visual impairment can be summarized as follows, based on CAPEDS (2010 and 2012):

Only three blind schools are available throughout the country. Although the federal school can accommodate about 100 students, the capacity of the other schools is assumed to be small. For example, one in Al-Gadarif state is in a local house accommodating about 40 students (personal communication). The limited capacity of the schools cannot meet the demands of children with visual impairment. In the case of the federal blind school, there are more than 50 applications for the ten seats in first grade every year (personal communication). Other options for visually impaired students include studying in regular schools or Khalwa, otherwise those children have no access to education. At the secondary level, blind schools are unavailable. Lack of Braille textbooks is one the biggest challenges for blind schools. For example, the text/pupil ratio of English textbooks was less than 1/3 until this researcher’s organization produced the textbooks.

3.5 Summary
In Sudan, access to education is still far from universal due to the long conflicts. The access to education is better in urban areas and for males and those without disabilities. In this situation, the access to education for people with disabilities is the area which needs particular attention. For those with visual impairment, more than 40% have never accessed education. Those with low vision have better access than their blind peers. Those with visual impairment study at limited special schools, regular schools or traditional Quran schools. The next chapter discusses how this research approaches the perspective of people with visual impairment on educational inclusion and exclusion to deeper understand the marginalisation.
4 Research Design and Methodology

4.1 Aims and Objectives
This study interprets how people with visual impairment in Sudan see education as inclusive or exclusive based on their experiences. To understand inclusion/exclusion analytically, the study employs the capability approach as the framework. Therefore, the terms inclusion and exclusion are operationalized as the realization or limitation of capabilities; namely, the realization or limitation of being, doing, or having that which they value achieving.

To answer the overarching question above within the framework, the study sets the following sub-questions.

- What kind of education does a sample of people with visual impairment in Sudan experience?
  1) Is it in regular schools or in blind schools?
  2) How do they study in classrooms?
  3) How has education affected their lives afterwards?

- What do people with visual impairment think is important in education and life?
  1) What are important things to be and to learn in school?
  2) What is important for students with visual impairment to learn from school?

- How do different educational experiences realize or limit the important things?
- How do people with visual impairment understand inclusion and exclusion in education and the problems of each?

4.2 Positionality

4.21 Basic Assumptions
It is vital for a researcher to question his or her assumptions in ontology, epistemology, and human nature to conduct a robust research inquiry (Dunne et al., 2005; Cohen, 2007). For
an ontological debate, realists claim that there are absolute realities, like the natural world, whereas nominalists see realities as created by discourse (Cohen et al., 2007). As for the epistemological debate, positivists view knowledge as hard, objective, and tangible, whereas anti-positivists view knowledge as soft, subjective, and unique (Cohen et al., 2007). In terms of assumptions regarding human nature, determinists assume that humans behave as determined by the structure, whereas voluntarists assume that humans have free will to choose their behaviour (Dunne et al., 2005).

This research takes a critical realistic approach, which recognizes some absolute realities independent of discourse in the ontological debate, but also recognizes that knowledge is arbitrary to discourse (Sayer, 1992; and Scott, 2010). It understands the world as stratified realms of the real, the actual, and the empirical within the belief system of ontological realism and epistemological relativism (Scott, 2010).

For this research, it is important to recognize some realities that exist outside of discourse, as reducing every reality to discourse or social construction runs the risk of ignoring the real body and experience of people with disabilities, as discussed in the second chapter. A reality that one has a disease that makes his or her vision lower than others would not change no matter how he or she is categorized in society. Meanwhile, the concept of disability is obviously determined by different discourses in society. As the critical realist approach recognizes the arbitrariness of knowledge, the power relation in knowledge production through discursive formation (Foucault, 1976) is one of the concerns of the research. It requires this research to be sensitive to the power relations in knowledge production, including power relations between the global north and the global south, and the researcher and the researched.

In addition, the basic assumption here is that knowledge is developed through interaction with realities and persons (Sayer, 1992). In this sense, the research is based on the voluntaristic assumption of the human nature. This assumption recognise the agency of an individual with visual impairment to interact with the environment, reflecting on the critique of the ICF model (Reindal, 2008). Therefore, the research tries to develop knowledge with people with visual impairment in Sudan who are interacting with their realities.
4.22 Reflectivity
As “research is a social activity reflecting the various contexts within which researchers themselves are embedded” (Ballard, 2006:243), the positionality of the researcher should be acknowledged in design, interpretation, and presentation of the research. The following points should be recognized, as they frame the position of the researcher on the topic.

• A foreigner as an outsider
The Japanese background of the researcher might influence the relationship between the participants and the researcher. The research is an outsider, thus limiting the capacity of the researcher to understand the wider sociocultural context and deeper implications in the discourse of the participants. Also, Japan is among the economically developed countries, which might affect the researcher’s power relationship with the participants.

• A person with visual impairment
As the researcher has a visual impairment, the interpretation of the researcher could be influenced by his personal experience. In particular, the experience of being educated in regular schools in Japan will influence his interpretation. With respect to the participants, the researcher’s visual impairment could influence the responses and viewpoints expressed about disabilities. In interviewing participants with visual impairment, the position of the researcher might facilitate further understanding of the context.

• Personal relationships
As the researcher has been working with people with visual impairment in Sudan for more than five years, personal relationships between the researcher and the participants might affect the data positively and negatively. The positive effect is the rapport of participants with the researcher. As discussed, the education of children with visual impairment in Sudan is not a new topic for the participating group. The negative effect could be that discussion might be directed to areas where interventions can be made, thus ignoring the wider sociocultural and economic context. Although the motivation of
the researcher for this research is to improve the education of people with visual impairment in Sudan, and the research should be action directed, the researcher needs to be careful not to exclude the wider context.

• Educational experience in western school

As a student at the University of Sussex, a western higher education institution, I have to be aware that my epistemological position is based on the western thought. Although the research tries to approach the viewpoints of people who are concerned, most of the issue in the local context, the design, analysis, and presentation of the research is framed by the western school of thought. By acknowledging the positionalities of the researcher, the study seeks to reduce the inequality in research as discussed in the next section.

4.23 Approach of the Research

Chambers (1997) points out that the reality of the powerful determines that of powerless. Ryen (2000) argues that cross-border research, especially in north-south relations, needs careful consideration, as northern researchers have objectified southern participants by looking for rationality through northern eyes. Therefore, this study seeks to establish the relationship between the researcher and the participants as much as possible. For this purpose, the researcher learned from the participatory approach which aims to develop and accumulate knowledge among participants (Dentith, 2009). The difference between the participatory approach and a conventional approach is the location of power in designing the research at every stage: that is, participatory research concerns who sets the agenda, who controls the process, and who owns the knowledge (Cornwall and Jewkes, 1995). In addition, a participatory approach aims for action and empowerment of local participants (Cornwall and Jewkes, 1995; Chambers, 1997). This research seeks an approach in this direction with the practical limitations, as explained in the next section.

4.3 Method

4.31 Research Design

As the research needed to be relevant within a Sudanese context (Cornwall and Jewkes, 1995), the research questions above, the framework, and the procedures for data collection were discussed with the key participants. One participant is a co-founder of the organization
and the researcher has known him as a close friend for more than ten years. Another participant is the first participant’s brother and he is a country director of the organization. The researcher stayed with him for eight months, and together they coordinated projects. The researcher consulted with these participants about whether the research question was worth researching, how the research could be carried out in the most appropriate way and whether the framework of capability seemed relevant in Sudanese context. The research question and the analytical framework were approved to be relevant. After the initial consultation, potential additional participants were approached and the research design explained. The rest of the participants were colleagues from the blind school where the researcher worked as a voluntary teacher while staying in Sudan, or through the network of the colleagues. Other participants made recommendations for data collection plan as discussed in the next section.

4.32 Data Collection

Plan and implementation
As interviewing is an interactive production of knowledge (Kvale and Brinkman, 2009), it fits the purpose of this research to develop local knowledge about inclusive education within Sudan. The interviews were conducted on Skype as it was difficult for the researcher to travel to Sudan. Flexibility in time arrangement was required since most of the research period was over Ramadan, the Islamic fasting month. While telephone interviews can reduce the cost of traveling and increase time flexibility, they can limit non-verbal communication, thus reducing the rapport of the interviewer (Cohen et al, 2007). Nevertheless, Skype was more appropriate as the disadvantage could be mitigated by the already established personal relationships between the researcher and interviewees. Also, the communication style of people with visual impairment where the weight of non-verbal communication is lower than for sighted individuals was another reason for choosing Skype interviews. Furthermore, one of the key participant led the group interview including scheduling, and asking questions and facilitating the discussion.

Individual interviews were raised as the method for data collection in the initial consultation with the key participants, group interviews were proposed after the key participant discussed
this with others. The group interview was more relevant as it allowed for a common understanding about the questions, created a relaxing atmosphere for the interview and reduced the inequality in power relations between the interviewer and interviewee (Cohen et al, 2007). However, each participant can be influenced by others within the group (Cohen, 2007). After analyzing the data from the group interview, the initial plan was to have a focus group discussion on issues which would have emerged through the analysis of the group interview but this was cancelled due to the time constraints and the devastating effects of the flood which hit Khartoum on 15 August, 2013 affecting 17,000 families (Sudan Tribune, 17 August 2013).

Table3: Planned and Implemented Research Process

<table>
<thead>
<tr>
<th>Stage</th>
<th>Planned</th>
<th>Implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Consultation with the participants</td>
<td>Consultation with the key participants and some feedback from others</td>
</tr>
<tr>
<td>2</td>
<td>Group interview</td>
<td>Group interview, individual interview and email</td>
</tr>
<tr>
<td>3</td>
<td>Analysis and feedback for all the participants</td>
<td>Analysis and feedback for the key participants</td>
</tr>
<tr>
<td>4</td>
<td>Focus group discussion about the identified issues</td>
<td>Individual discussion with the key participants on the key issues</td>
</tr>
</tbody>
</table>

Table4: Implemented Research Timeline.

<table>
<thead>
<tr>
<th>Research Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
</tr>
<tr>
<td>25 May-30 Jun</td>
</tr>
<tr>
<td>1, July</td>
</tr>
<tr>
<td>2, July</td>
</tr>
<tr>
<td>5, July</td>
</tr>
<tr>
<td>Date</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>9, July</td>
</tr>
<tr>
<td>10-28, July</td>
</tr>
<tr>
<td>29 July-9 August</td>
</tr>
<tr>
<td>16 August</td>
</tr>
<tr>
<td>17-20 August</td>
</tr>
<tr>
<td>20-29 August</td>
</tr>
</tbody>
</table>

**Participants**

Ten participants were involved (Six males and four females), including the key participants. Seven participants were selected through the network of one of the key participant and the researcher’s ex-supervisor at the blind school. The criteria were their motivation to participate in the research and the relationship with other participants to encourage a relaxed discussion. It should noted, however, the participants are homogeneous to some extent as they are close to the key participants. The participants are those who regard themselves as having visual impairment. Although the impairment should not be ignored, it was not discussed because the focus was on education and it is not common to talk about the impairment in Sudan and Japan. As children can not identify the proper functionings (Saito, 2003), all the participants were adult and completed the tertiary education. The ex-supervisor was not interviewed as he lost his sight after completing his education. Out of nine interviewees (except for the ex-supervisor), six of them joined the group interview and two of them offered to share their views via email. One of the key participants provided his input in an individual interview from Japan. Out of nine interviewees, two of them studied only in regular schools, one studied only in special school in another country, and the rest of them studied in the blind school for primary and regular schools for secondary education. (Please see Appendix 1 for the detail background).

**Key Questions**

After the research questions and framework were approved to be relevant, the researcher proposed key questions. The questions were proposed based on the reports of the NGO where the researcher had worked, the personal experiences of the researcher and literature
on inclusive education in developing countries. The questions were reviewed by the participants prior to interview. An unstructured interview can get closer to the participants subjective ideas (Cohen, 2007), the order and wording of the questions were flexibly adjusted to the participants. In the group interview, the participants preferred an initial discussion of the topics amongst themselves in Arabic, then shared their opinions afterwards.

4.33 Analysis

A. Initial Analysis

The research took a systematic approach through coding of statements to identify the main concepts and topics. Microsoft Excel was used, as the researcher was unable to use specialized software such as Nvivo. Each statement was put into one cell. The statements were coded as follows.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Codes</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>type of statement</td>
<td>experience</td>
<td>Statements about participants' experience</td>
</tr>
<tr>
<td></td>
<td>opinion</td>
<td>Statements, showing participants' opinion</td>
</tr>
<tr>
<td></td>
<td>confirmation</td>
<td>Statements, confirming the information</td>
</tr>
<tr>
<td></td>
<td>flow</td>
<td>Statements to make the conversation flow</td>
</tr>
<tr>
<td>Level of education</td>
<td>primary</td>
<td>Statements about primary level</td>
</tr>
<tr>
<td></td>
<td>secondary</td>
<td>Statements about secondary level</td>
</tr>
<tr>
<td></td>
<td>tertiary</td>
<td>Statements about tertiary level</td>
</tr>
<tr>
<td></td>
<td>other</td>
<td>Statements about other topics</td>
</tr>
<tr>
<td>Type of school</td>
<td>blind</td>
<td>Statements about the blind school</td>
</tr>
<tr>
<td></td>
<td>sighted</td>
<td>Statements about the sighted school</td>
</tr>
</tbody>
</table>
### Theoretical frame 1

<table>
<thead>
<tr>
<th></th>
<th>intrinsic</th>
<th>Statements about issues within the education</th>
</tr>
</thead>
<tbody>
<tr>
<td>extrinsic</td>
<td>Statements about outside of education</td>
<td></td>
</tr>
<tr>
<td>na</td>
<td>Not available</td>
<td></td>
</tr>
</tbody>
</table>

### Theoretical frame 2

<table>
<thead>
<tr>
<th></th>
<th>inclusive</th>
<th>statements which indicate inclusive implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>exclusive</td>
<td>Statements which indicate exclusive implication</td>
<td></td>
</tr>
<tr>
<td>na</td>
<td>Not available</td>
<td></td>
</tr>
</tbody>
</table>

### Key words

<table>
<thead>
<tr>
<th></th>
<th>Key words</th>
<th>Key words were given in accordance with the main topic of the statement</th>
</tr>
</thead>
</table>

---

After coding, the statements were categorized into quadrants in accordance with the two theoretical frameworks: intrinsic/extrinsic and inclusive/exclusive. The filtering function of the software was useful to categorise statements. In each quadrant, the statements categorized the key words. Although systematic analysis can capture the overview of the issue, it can ignore individual context (Cohen et al, 2007), the researcher reviewed the comments of each participant to contextualize the issues in the experience of the individuals.

This process is crucial for focusing on individuals because the systematic approach can only capture the collective experience and ignores the individual experience of those with visual impairment. (Corker, 1999).

**B. Feedback from the Participants**

After the initial analysis, the summary was reviewed by the participants. Although The summary of initial analysis was supposed to be translated into Arabic by one of the key participants and passed to others, it was not possible due to the time constraints and the influence of the flood.

The main point of the feedback from the key participants was about the issue of families, which will be discussed in detail in later chapters. Based on the feedback, the researcher
finalized the analysis and sent the summary of the second analysis to the key participants.

4.34 Presentation
In this stage, one of the key participants read the whole draft and provided his feedback. As it was not possible to include other participants in the drafting stage, the summary of the whole paper will be presented to all participants after it is finalized.

4.4 Ethical Considerations
The social and cultural relevance of the research and the equity in power relations within the research were the biggest concern. Therefore, from the initial stage, the sociocultural relevance of the research and how to make the participants most comfortable was discussed with the key participants.

The key participant explained the outline of the research to the others and also its aims, discussed the research question, what was expected from the participants, including the rights of the participants not to participate or not to answer should they choose not to. The participants were encouraged to criticize the question when necessary. Also, the participants were explained that their names would be kept confidential and separated from the research data. Although the researcher suggested that each participant should choose his or her pseudonym, the participants preferred to have a number as it was less confusing.

4.5 Limitations
The research is limited in capturing the diversity of the people with visual impairment in Sudan. First of all, considering that only around 10% of people with visual impairment have qualifications above secondary level, the participants, all of whom are university graduates, do not represent the diversity of the population. Secondly, the urban/rural difference is not covered in this research. As 35% of the people with visual impairment who have any educational qualifications were educated in Khalwa (Census, 2008), the experience of those who studied in Khalwas should be covered in future research. Thirdly, ethnic and linguistic diversity is not covered in this research. In terms of the quality of the data, the research is limited in the scope and depth of the areas covered, as the topics and frameworks are proposed by the researcher. Also, it should be noted that many of the participants work at
the blind school. Therefore, the situation of the blind school can be stated positively. Lastly, although the research sought to achieve a participatory approach, it could not be participatory for following reasons. Firstly, the research agenda was set by the researcher though its relevance was consulted with the participants. Secondly, the research process was directed by the researcher and the key participants. Thirdly, only the key participants joined the analysis stage. Lastly, the study was not oriented to the action and empowerment of the participants. Next chapter presents the analysis and discussion.
5 Analysis and Discussion

This chapter presents the main findings from the analysis. Although the data was analysed in the framework of intrinsic/extrinsic and included/excluded quadrant, it is presented in an intrinsic inclusion/exclusion and extrinsic inclusion/exclusion, as the issues identified were common in both inclusion and exclusion. It is worth noting that the participants who had graduated from the blind school called the regular schools “schools for the sighted,” declining the notion that one is normal and the other is abnormal. However, the word “regular school” is used for consistency to align with previous discussions about inclusion. In addition, the order of the topics discussed does not indicate their importance, as all are interrelated.

5.1 Intrinsic Inclusion/Exclusion

The analysis identified that freedom to read, to move (to come to school or to move inside school), access to learning, reciprocal relationships and respect, confidence, social awareness, and family support are important issues in education. These issues are interrelated as discussed below.

Reading

The first issue was the freedom to read. All participants mentioned difficulties in reading books or blackboards. Those who studied in the blind school stated that the school was accessible due to the availability of Braille books. The limitation in reading books and blackboards was a significant problem in regular schools. All participants pointed out that access to relevant materials was the most challenging aspect, especially in tertiary education. One participant said:

In terms of the moment I feel education is closed for me, I think it many times, in any time in my life, I felt I want to read something but I discovered I need somebody to read for me. This is very bad moment. You are free to read at the time when others offer you to help
reading. In university, it was very hard. We had to read a lot. The library was not accessible. And the amount of reading was too much for my friends to read.

Different actors realize and limit their freedom of reading. Support from friends and family are the most common ways of reading books. However, support is not always available. A participant noted: “My friends read books for me but they could not before an exam. They had to study for themselves.” Another participant commented: “My mother and sister read books for me but just before exam because they had work.” The limited freedom of reading and dependence on friends and families forced visually impaired students to prioritise the materials and subjects to study, and narrowed their freedom to learn in other areas. One participant stated:

I had to give up all subjects not required for the entrance exams because I have to use all support to study for the subjects. I wish I could have read novels and newspapers, which is broader learning.

Another suggested that was an extra difficulty to read books, especially when they contain graphics such as graphs, tables, or maps.

Another point regarding support in reading is that it requires social skills to establish good relationships with friends to get support in a reciprocal way. The stories of the participants illustrate the dynamic interaction in support. For example, one participant commented:

Those who get lower marks in exam often read for me because I could explain the contents for them when they read but those make similar achievement as I do did not want to read for me because it would benefit their rival in academic competition.

Another participant explained:

Because it is a real social interaction, you have to offer something. You have to have high academic achievement, skills to entertain others like playing guitar or telling jokes. I call call it as social intelligence.
Technologies also support reading. Two participants mentioned that computers with screen-reading software helped them to access e-books and internet resources. In a much simpler way, the tape recorder was used to record the class or some recorded materials were provided. One participant said: “When I read an E-book on my laptop with the screen reading software, I felt everything was in my hands.”

In terms of reading blackboards, teacher’s support was essential. All participants mentioned that they faced difficulties when their teachers wrote on the blackboard silently and did not read out what he or she had written. It is worth noting that difficulty in reading differs across subjects. Subjects using graphics and equations, such as mathematics, geography, and science were reported as inaccessible, as it is much harder to explain some concepts orally. One commonly mentioned difficulty was in the mathematics class. One participant said: “Mathematic class was totally inaccessible. When teachers said, “If you divide this by that, you can get this.”, it didn’t make any sense to me.”

Mobility
The second point on inclusion/exclusion was freedom of mobility. To understand the context, it is necessary to explain the conditions of roads and traffic in Khartoum based on the experience of the researcher. Road surfaces are not quite even, and there were holes in sidewalks. Also, what makes it hard for a blind person to walk is that the roads and sidewalks are not clearly delineated. It was quite difficult to cross the streets due to the chaotic traffic. Indeed, the researcher did not dare walk alone during his eight-month stay.

Given this environment, it is quite understandable that mobility is a big issue in inclusion/exclusion. Blind schools provided bus services to pick up students in the three main areas of Khartoum. This is one of the reasons that the blind school is regarded as accessible. However, the freedom of mobility is limited, because the buses are frequently out of use and the bus route does not cover the entire city. One participant mentioned:

My brothers and sisters had to take me to the point where the bus picked up me. It was very far. Sometimes, I had to come to the blind school in a lorry, a big car people use to
The issue of mobility was also pointed out in accessing regular schools. In all cases, participants had to depend on their friends or families to come to school. At the tertiary level, the mobility issue became a larger concern, as visually impaired students were faced with difficulties moving on campus as well.

Several factors determine the degree of difficulty. Two participants mentioned that mobility was not a big issue, as their homes were close to all schools. Interestingly, weather also influenced the freedom of mobility. One participant said: “I could go to the secondary school alone but when it rained, I had to ask for help.” Another participant said: “Sometimes, it rains very heavily. The roads get muddy and do not get dry for long time.”

Support from friends and family as well as orientation and mobility training mitigate the difficulty. One participant mentioned: “Skills to walk alone is one of the valuable things I learned in the blind school.”

**Teachers**

The third factor of inclusion/exclusion is for students to feel included in the classroom setting, this depends on awareness among teachers. All participants stated that one of their difficulties in regular school was that their teachers did not know how to teach children with visual impairment. The most common point was that classes are exclusive when the teachers do not read out the text on the blackboard or use non-verbal communication, such as pointing at certain letters or figures. Sometimes, teachers were not even aware of the existence of children with visual impairment in their classroom. One participant shared a story:

*In a French class in the secondary school, my teacher asked me what did I see in a photo. I didn’t know what it was but I answered it was a girl. But it was a boy. The teacher became angry. But, after she knew that I did not see well, she supported me.*

Effective support from teachers made a difference. One participant said:
I was very bad at mathematics in the first of the secondary school. In the that his mathematics teacher in the second year, I had a very good teacher. He explained to the class first, and after that, he wrote the samething with the very think line and let me read them near the blackboard and explained it to me. I was the top of the class that year.

The limited awareness of teachers can lead to exclusion. One participant shared her story:

When I entered the secondary school, the head teacher refused my entry and said that I should study in a Khalwa (traditional Quran school). He said he had no experience with blind children. But my family and the state government supported me to study in the school.

Conversely, in another case, the teachers in the blind school convinced the family of one participant to let her access education. In tertiary education, the inflexible treatment of faculty was pointed out as one of the biggest excluding factors. One participant explained:

I had to find some to scribe my exam but someone from the same department or who is elder than I, was not eligible. And it always took very long time for faculties to confirm the eligibility of my scribe.

Teachers’ awareness of their student’s academic and other needs influences the feeling of inclusion/exclusion among people with visual impairment. Equal treatment from teachers enhances the feeling of inclusion. In the blind school, equal treatment by teachers was commonly raised as the inclusive point of the school. In regular schools also, two participants pointed out that they felt included when their teachers treated them equally, providing them with support. On the other hand, unequal treatment increases the sense of exclusion. One participant mentioned: “Everybody had to do assignment but I didn’t have to. This was when I felt education is closed for me.” Another participant felt isolated when she was exempted from the duties of cleaning the classroom.
Reciprocal Relationships and Respect amongst Friends

The fourth factor of inclusion/exclusion was the participants relationships with their friends. As discussed above, good relationships with friends is viewed as significant in getting support in reading books or going to school for children with visual impairment. One participant explained:

I think it is obvious that I have overcome such a level by creating network of friends and communication with colleagues.
If he (a blind child) fails to create such relationship, he wouldn't be able to pass this level because, unless he receives support from his colleagues, he could not graduate the secondary level.

It should be emphasized that the relationship should be a reciprocal one to be inclusive. Some suggested that it is essential for a child with visual impairments to assist his or her colleagues. Contributions can be academic support as discussed above, or by being entertaining, etc. A participant articulated that it is crucial to offer something to friends to ensure real social interaction. Another participant said:

I was quite strategic. I often think how I could make my friends satisfied to motivate them to read for me. One expected mere gratitude. Another wanted to be with a high achiever. Some friends expected to have some food at my home.

Another said: “My friends and teachers supported me but it was “negative kindness” (kindness based on pity). This made me helpless and disabled.”

All of the participants mentioned relationships with their friends as a good aspect of regular schools. Therefore, the reciprocal relationship is indispensable to getting support and to being socially respected among the friends. Various factors influence the relationship as well. Self-confidence, family values, social attitudes, and teacher supports are examples. One participant mentioned that the teachers in the blind school used to accompany the children with visual impairment to classes in regular schools so that they could get used to creating
relationships with sighted friends.

Self-Confidence
The fifth factor of inclusion/exclusion is self-confidence. Self-confidence can be understood as the confidence about the potential of those with visual impairment. Firstly, it is significant on its own to feel included in education and society. All participants mentioned “self-confidence” as important for people with visual impairment in Sudan. Secondly, it enables a child with visual impairment to create good and reciprocal relationship with friends.

Several actors contribute to the self-confidence. High academic achievements, such as high scores on exams or admission to higher education are common factors mentioned by the participants. In their narratives, they illustrate those moments in detail, as the achievement or the moment at which they felt education was inclusive. Indeed, all participants mentioned getting the top seat in the examination or getting admitted to tertiary education. One participant said: “I felt education was open for me when I got the highest mark in the exam.” Another participant explained: “Generally, making high academic achievement makes blind feel included.” As such, students can contribute high academic performance to the reciprocal relationship with their friends in getting support in reading or in mobility.

The self-confidence of people with visual impairment is closely associated with the positive perspective or the confidence of people around them. One participant mentioned:

My father did not want to send me to school. I was very disappointed because all of my brothers and sisters studied in school. But the teachers of the blind school convinced my father. When I got high mark in the blind school, the situation was totally changed. My family was happy and I felt I had something to offer for my family.

Finally, the success stories of other people with visual impairment are also important for the confidence of each individual. Two participants mentioned that one of the good things about the blind school was knowing that people with visual impairment can learn from their role
models. A participant said: “Before I entered the blind school, I thought I was the only blind in Sudan. I was very happy to know that blind people can succeed.” Another participant who studied in regular schools said: “When my blind brother passed the entrance exam for the top university, I felt the education is open for me.”

It is crucial that self-confidence and confidence in the success of the people with visual impairment be included in education, and that other elements, such as reciprocal relationships, respect, and support in reading and mobility be enhanced. All of these are necessary for high academic achievement, which in turn enhances self-confidence.

**Support from Families**

In the feedback for the initial analysis, the key participants pointed out the importance of family support. It is crucial in terms of the opportunity for education, confidence, and social relationships of people with visual impairment.

One participant said: “My father did not want to send me to school until teachers from the blind school convinced hem.”

Another said:

> When I lost my sight at the fifth grade, I was so disappointed and decided not to go to school. But my further bought a tape recorder for me and encouraged me to continue studying.

This story also illustrates that the experience of losing vision has a strong emotional effect. Another participant said that his mother said that he would not be able to survive without education, because he would not be able to work as a taxi driver as a sighted person would.

Family support is also crucial in developing social skills and self-confidence. One participant clearly analysed:

> Children with visual impairment feel pressure from their family as they feel that their
parents are somehow sad about the disability and they set low expectations for them. Also, negative responses from the community affect the family. The families are expected to keep the children inside home. Those pressures affect the child psychologically in self-confidence and social skills. The children exposed to low expectations of the family cannot prepare themselves to interact with society while society is not ready to interact with them.

Four of the participants pointed out the importance of letting children with visual impairment interact with the community—even with those who expect these children should be kept at home due to the danger of getting injured.

Summary
The analysis found that the freedom of reading, mobility, access to learning, reciprocal relationships, respect and confidence are important for education to be inclusive for people with disabilities. In these respects, the differences between the blind school and the regular school were insignificant; however, whether the freedom to exercise these valuable functionings is realized is the more fundamental concern. Also, these functionings are interrelated and can be a cause and an effect of others. Another finding is that the support of the family is a foundation upon which to achieve these functionings, as it is an essential source to achieve reading or school attendance, developing self-confidence and social skills, and to develop reciprocal relationships and gain respect. The next section focuses on how the education can lead to social inclusion/exclusion.

5.2 Extrinsic Inclusion/Exclusion
This section presents the findings on how education can be inclusive/extrinsic extrinsically or how education can lead to social inclusion/exclusion, operationalised as how participants regard education can realise their functionings which they value. Relationships and respect in society, self-confidence, employment, and marriage are identified as important functionings. Lack of social awareness and poor transportation infrastructure that limit freedom of mobility were the most commonly raised excluding factors. To live in society by changing awareness, the confidence, patience, and understanding of social contexts and strong will are crucial for people with visual impairment to acquire.
Relationships and respect in Society
The first thing needed for social inclusion is relationships and respect in society. All participants indicated their importance in the lives of people with visual impairment. Education can contribute to its realisation in different ways. Firstly, experiences in regular schools develop the skills to create good relationships in society. All of the participants raised this point, recognising the difficulties in reading and mobility. The blind school also contributes to realising relationships in society. One participant said: "When I entered in regular school at the secondary level, I did not feel excluded because I learned that I was equal to them."

Secondly, the knowledge gained in education helps the visually impaired to create good relationships. Two of the participants mentioned that they can participate in chatting with friends and families thanks to knowledge gained in education. In the Sudanese context, chatting with friends and family is a major part of social life. One participant said: "Because I gained knowledge through education, my friends respected me. They said that I had good political perspective, knowledge about economy etc." Therefore, to participate in this activity is decisive in forming social relationships. Thirdly, the academic achievement of tertiary education is an important source of respect within society. All of these points lead to confidence, which is also a crucial element for social inclusion.

Employment and Marriage
Other significant issues for social inclusion/exclusion are about employment and marriage, which are essential for absolute social respect. All of the participants pointed out that the effort to get a job is crucial for people with visual impairment. One participant explained:

*I think the most important thing is not the education but it is the ability to obtain opportunity for job and work. As I observe, for example, my small family, yes, we get very good education but the respect from the society doesn't come until we got opportunity for job. My blind brother is an example (he is a lawyer).*

He further explained:
Because the social stigma about the disability comes from historical context. As 80% of the population live with agriculture, the physical ability is very important. If you have source of income, you can have your family. Then, you will be respected in the society.

In this sense, the extrinsic role of education can be judged by whether it facilitates the successful transition to employment. One participant jokingly mentioned: “I felt education was valuable when I got the first salary.”

Others mentioned that high academic achievement, such as the qualifications of tertiary education, is valuable, as it increases opportunities for employment.

Along with the issue of employment, the issue of marriage is another element to acquire social respect, as pointed by the key participant to the researcher. At the same time, he pointed out that none of the participants talk about marriage directly, because it is the hardest issue to think about, especially for females. Another of the key participants agreed on this point. He pointed out that the high pressure to get married in Sudan sometimes pushes sighted females to marry men with visual impairment, but females with visual impairment face harder difficulties due to the prejudice of the society that people with visual impairment are incapable of doing home chores. The participant explained the level of the prejudice by sharing his story that one of his wife’s friends was surprised that he could eat alone. Education can be inclusive/exclusive in this regard as well. One participant said: “One of the important thing I learned in education (in the blind school) was the skill for the home activities like cooking.”

Excluding Factors
The commonly mentioned excluding factors are the limitations in mobility and lack of social awareness. All participants mentioned that bad roads and traffic conditions limit freedom of mobility, and excludes the visually impaired from society. An extrinsic contribution that education made was skills of orientation and mobility training at the blind school. As the issue of mobility was discussed in the previous section, the focus here is on social awareness. The lack of social awareness can be understood as low expectations of those
with visual impairment due to a lack of information, paternalistic views that require keeping
the visually impaired at home, and scarce experiences interacting with people with visual
impairment. Several comments indicated that the teachers do not know that reading out the
text from the blackboard is a great help for students with visual impairment. As for
employment, one participant said:

*It is impossible for the private sector to employ people with disabilities, simply because
they know his disability and they don't know tools or programs to help him freely to
interact or do like a normal person. So it is very important to raise public awareness not
about rights of people with disabilities but about the tools which make people with
disabilities able.*

Another aspect of social awareness is the paternalistic view that people with visual
impairment should be protected at home. This view limits their opportunities to interact with
society and develop social skills. As discussed in the section about the support of families,
families were sometimes pressured by society to keep children at home. One participant
mentioned that families get criticised if they let their child play outside of the house, as he or
she could interrupt traffic or the child might be injured. However, paternalistic protection
demolishes the opportunity to develop the social skills, which are indispensable for social
inclusion. Paternalistic protection limits the experience of society to interact with people with
visual impairment as well. The participants mentioned that their teachers and friends at the
regular schools did not how to interact with them, because it was the first experience for
them. The lack of social awareness derived from these factors along with the physical
barriers in mobility limit the freedom of people with visual impairment.

**Agency to achieve freedom**

The research found that the agency of people with visual impairment is regarded as one of
the most crucial factors of social inclusion. Participants pointed out that people with visual
impairment need to have a strong will and inspiration to change society; to be confident,
patient, and relaxed to face the series of challenges they need to meet; and to understand
that society lacks awareness and not to be too offended by or aggressive against the
attitudes of society. As achieving the functionings they value requires an immense effort, this advice is crucial for people with visual impairment to realise their freedom by challenging excluding factors.

While continually challenging to change the environment, it is also important for a person with visual impairment to be confident, patient, and relaxed; otherwise, it will be a very frustrating life. To be patient and relaxed while keeping a strong will, the participants suggest that people with visual impairment should understand that the difficulties they face are caused by the lack of social awareness so that they do not have to overreact to the personal unfavourable treatment.

In this regard, participants pointed out the importance of education. Firstly, it can develop the confidence of people with visual impairment, as discussed above. Secondly, throughout the experience in education, people with visual impairment can learn how to face the challenges. Thirdly, education can help them to understand their world and society. Lastly, education can give them hope and inspire them to change their environment. One participant said:

*If a blind person is by default assumed to be disappointed by his disability, education can give the blind people confidence needed to overcome such feeling. So, you are educated, that means you are equal position with others. That means, you are to some extent changing gradually the notion of the society about people with disabilities: they are abled, not disabled.*

**Summary**

It was found that relationship and respect, employment and marriage, strong will with the patient are the important things to achieve to be included in the society. The limitation in mobility and the lack of the social awareness limit the freedom of achieving these elements. The education can contribute to realise these things in raising self-confidence, developing the social skills, leading the social respect and connecting to the employment.

**5.3 Discussion**

Throughout the research it was found that the freedom to achieve the following functionings
should be realised in an education system to make it inclusive: the freedom of reading books and the blackboard, mobility to and inside the school, reciprocal relationships, and respect and confidence. Teacher awareness, relationships with friends, and support from families are crucial to achieving these functionings, while the lack of materials, bad transportation and road safety, the lack of awareness among teachers, and the low expectations of families and society are the main factors limiting their freedom. In addition, in order for an education system to be inclusive to achieve social inclusion for people with visual impairment, it should contribute to realise their freedom of having a relationship and respect among society, employment and marriage by developing the skills to establish good relationships in society, self-confidence, the strong will to change society, and understanding of society.

The difference between special or regular school is not very important if the freedom to achieve these functionings is not guaranteed as Terzi (2004) suggests. Also, it should be recognised that achieving one functioning can limit another, and achieving one can result in the realisation of another (Sayed, 2002). For example, having teachers who can read Braille in the blind school for students to develop social skills in the regular school. On the other hand, the special school can foster self-confidence with teachers who are aware of the needs of children with visual impairment. Rather, both special schools and regular school have a role in achieving these functionings. The blind school made some participants confident about their future by showing success stories of people with visual impairment and letting them know that they are not alone in Sudan. Conversely, experience of having reciprocal relationships with sighted friends develops their confidence in another way.

Therefore, it is important to recognise the role of both types of schools as proposed by organisations for people with visual impairment (ICEVI and WBU, 2003). Moreover, achieving these functionings should be a matter of freedom. Therefore, it is important for people with visual impairments to have freedom to choose different functionings to achieve different things at different life stages. More concretely, a student might hope to study in a blind school for the first few years and then transfer to a regular school. One participant said that studying in regular schools is beneficial if children have academic and social skills; otherwise, special schools are an important option. To enhance freedom in this regard, flexibility in the education system is crucial while enhancing the capacity of the system itself.
in teacher training, offering different modes of support for children with visual impairment, and so on.

The Cost of Freedom
Another issue identified through the analysis is that while participants achieved the functionings they value, such as reading books, coming to school or gaining respect within society, the cost of those achievements is higher than for their sighted peers. The cost, in this context, refers not only to financial cost, but also about all values exchanged in the social relationship, such as admiration, time, or favour (Heath, 1976).

Firstly, families of children with visual impairment have to support them in reading and going to school by paying for effort and time. Secondly, children with visual impairment need value, such as academic ability and entertaining characteristics, to exchange for support in reading and mobility. Offering value is important, because they would otherwise be subjected to unequal power relationships or the chance that transactions could be reduced when the expected exchange of values does not happen (Heath, 1976). One participant describe the support she gets in unequal power relationship as ‘negative kindness,’ which made her feel disabled and helpless.

Furthermore, the cost of achieving the freedom to read and be mobile can limit their capabilities—the possibility of a combination or freedom of choice in learning. Giving up other subjects other than those needed for entrance exams and reading no other books than textbooks are examples raised by participants. This is exactly the deprivation of capabilities. The World Blind Union (2011) describes the limitations on freedom of reading as “book famine.”

As 99% of books in developing countries are in an inaccessible format (WorldBlind union, 2013), it is important to reduce the cost of achieving the most crucial functionings: reading books and the blackboard, mobility, and access to lessons. Braille books, audio books, or technologies such as screen reading software to read digital books can reduce the cost of reading. The problems of road safety and transportation should be addressed, as they are amongst the biggest barriers to participation in society. In this sense, it should be noted that
education cannot be inclusive unless the social environment are taken into account. Teacher education might be among the most recognised issues in inclusive education (Croft, 2010). The awareness of the potential of people with visual impairment and the experience of interacting with them are crucial for the teachers. If the cost of achieving the most crucial functionings can be reduced, children with visual impairment can use their social skills to achieve many other functionings, such as studying other subjects that require more support than reading, or reading newspapers to have a broader understanding of society, which are crucial for social inclusion.

In addition, as students become more independent of the support provided by their friends, the cost for exchange is reduced, which enables them to establish a reciprocal relationship much more easily. Therefore, reducing the cost of crucial functionings can enhance the freedom to pursue other important functionings, such as reciprocal relationships, understanding of the world, and self-confidence.

Thirdly, it is indispensable to address the issue of social awareness as the literature suggests (UNICEF, 2013; Rieser, 2012). In particular, awareness for families requires particular attention, as it is the foundation of self-confidence, development of social skills, and support for access to education. As one participant pointed out, awareness among families is situated in the broader social awareness. Therefore, it is essential to address broader social awareness on one hand and to approach the awareness of families on the other hand. As discussed above, demonstrating the potential of people with visual impairment, and promoting the opportunities where people with visual impairment and sighted people can interact and exchange views on paternalistic protection are required. For families in particular, sharing the success stories of people with visual impairment and demonstrating the importance of letting their children interact with society outside the home are the most significant approaches. This is changing the discourse about disability in the idealistic-social model (Priestley, 1998). aspect of With the robust support of the family, children with visual impairment can develop self-confidence and social skills, which are essential to achieving other functionings.

In addition, promoting the employment of people with visual impairment is essential, given
that employment is one of the highest barriers to social participation as well as the reason for low expectations. For this purpose, disseminating information about the potential of people with visual impairment along with concrete resources, such as screen reading software, which enable them to work will make a difference. This changes the economic status of people with disabilities, thus addressing disability in the materialist-social model (Priestley, 1998).

Therefore, addressing social awareness will not only realise the valuable functionings of people with visual impairment but also will change the low expectations of society, one of the most prominent excluding actors.

Agency
Lastly, the agency of people with visual impairment to achieve freedom should be recognised. Although it is essential to adjust the environment, not the child, to realise inclusive education (UNESCO, 2009), the agency of people with visual impairment is crucial at two levels: determining the important functionings to be achieved in education, and their agency to mobilise the resources to achieve the functionings in education and society. This is the point which ICF does not conceptualise (Reindal, 2008).

Summary
This section presented the main findings from the research and discussed how education can be inclusive. The freedom of reading, mobility, access to lessons, reciprocal relationships and respect, and self-confidence are the functionings required within the education if it should be inclusive. Also, the education system should develop social skills to create good relationships and achieve respect in society, self-confidence, and understanding of society to enable people with visual impairment to be included. It is expected that the education system will connect to employment, though it is a global challenge for the education system (UNESCO, 2012). In order to realise these functionings in education, reducing the cost of significant functionings is essential, as the capability or range of freedom of people with visual impairment is limited by this high cost. Provision of books in an accessible format, use of technology, teacher training, and promoting road
safety with development of a new transportation system are the important approaches to reduce costs. In addition, social awareness should be addressed, especially for the families who have children with visual impairment; thus, the information about the success stories of people with visual impairment, the importance of interacting with society, and the value of education is indispensable, as the support of family is the foundation for social participation.

The research with the participants showed that education should be inclusive if it can be realised with equal capabilities of people with visual impairment. As such, the education system as a whole (including special schools) needs to be improved. The flexibility of the system needs attention, as the freedom to choose different schools that realise and limit the functionings is important. Also, the broader social environment should be taken into account, as the freedom of mobility, social awareness, and families are crucial but have not received adequate attention. Lastly, the agency of people with visual impairment should be recognised in identifying the important functionings and in enabling them to mobilise their resources to make education and society inclusive.

6 Conclusion

Reflection

This research explored how people with visual impairment in Sudan regard education as inclusive or exclusive. Recognising the unequal power relationship between the global north and the global south, and between researchers and those researched in knowledge production, this research sought to reduce the inequal power relationship between the researcher and the researched to create knowledge with the participants, even with practical limitations. The capability approach was employed as an analytical framework. Therefore, inclusiveness and exclusiveness were operationalised based on whether the freedom to achieve functionings is realized or limited in education. In addition, intrinsic and extrinsic aspects of education were operationalised as realization of the freedom in education and realization of the freedom in society.

The study found that the freedom of reading, mobility, access to classes, reciprocal
relationships and being respected by friends, and being confident should be realised in education if it is to be inclusive in intrinsic terms. Achieving one functioning can lead to another, as all are interrelated. To be inclusive in extrinsic terms, education is expected to develop self-confidence, the necessary social skills to establish good relationships and respect in society, patience, a strong will to change society, and an understanding of society. Moreover, inclusivity should connect to the employment and marriage of people with visual impairment to result in genuine social respect. The lack of road safety and transportation and also social awareness, especially among the families, are the main excluding actors. At the same time, enhancing the agency of people with visual impairment is expected to result from education.

Policy Implications

In recognising the weakness of the capability approach to propose concrete policies, the research raised four important areas, which should be considered in policies for inclusive education: the flexibility of the system; reduction of the cost to achieve fundamental functionings, approaching the broader social environment rather than the education system; raising awareness in society, especially for families; and recognizing the agency of people with visual impairment.

The flexibility in the system is required to realize the freedom to choose to realize different functionings in accordance with the choices of different individuals. Resource constraints should be considered, as the capacity of the blind school is quite limited. The special support unit in regular schools might be worth considering as the World Blind Union (2004) suggests.

The second area is reducing the cost of reading, mobility, and access to learning, as people with visual impairment pay a lot to achieve functionings within the exchange of values with their friends. Provision of books in an accessible format, improving road safety and transport and teacher education are thus significant. The broad social environment should be considered, because road safety and social awareness might not be prioritised if the intervention is only within the education system.

The third area is social awareness, and is related to the previous area. Approaching families
is particularly important, as it is the foundation upon which to develop self-confidence and social skills while providing primary support to access education. This can include disseminating information about the success stories of people with visual impairment and the concrete resource supports that people with visual impairment require.

Lastly, the agency of people with visual impairment is crucial to identifying the important functioning that should be realized in education and to achieve the functioning by changing the environment.

Limitations
Although this research developed further knowledge about how education can be inclusive and exclusive in different areas for people with visual impairment, its several limitations should be noted. Firstly, it does not address the diversity of people with impairment in Sudan, such as their degree of vision, gender, linguistic background, and urban/rural difference. It should be noted that the participants are among the most privileged, given the marginalisation of people with visual impairment from education.

Secondly, the diversity of forms of education was not covered. As Khalwa is one of the main providers of education, further research is needed to understand how they are regarded by people with visual impairment in Sudan. Thirdly, the research learned from the participatory approach, aiming at reducing the power inequality in research but it was not fully participatory. The control of the research, from agenda setting to presentation, was still in the hands of the researcher even with the consultation of the key participants. Also, the research was not oriented to the action or empowerment of the participants. Finally, issues such as difficulties in families or marriage are not deeply discussed, despite their significance, as pointed out by the two key participants. More research is needed to further understand these points.

Concluding Remarks
As 61 million children are still out of school and 250 million children do not learn the basics in primary school (UNESCO, 2012), greater commitment is required to tackle the situation. As marginalisation and equity are great concerns, inclusion is one of the most important agenda
items. Despite its increasing importance, however, the concept of inclusion requires vivid
discussion, about the discourses around it (Dyson, 1999) and about the dilemma of
difference, which is the nature of the concept (Nowrich, 2008). Moreover, power relations
shaping the international discourse should be considered when inclusion is discussed on the
global agenda. In the southern context, inclusion and exclusion are not a simple dichotomy;
rather they are complex phenomena that require the questioning of who is included and
excluded, and from what (Sayed, 2002).

This research explored how people with visual impairment in Sudan regard education as
inclusive and exclusive. The capability approach provided a framework to answer the
question of who is included/excluded, based on what Terzi (2005) suggests. It was useful to
explore the freedoms that people with visual impairment in Sudan value and how they can
be realized or limited. As inclusive education is understood in international documents as the
process of meeting the needs and expectations of all (UNESCO IBE, 2008), it is necessary
to continue examining who is included and excluded and from what, in each context and for
each different group, while seeking an approach to meet the needs of all. This can be
understood as a twin track approach (DFID, 2000). The twin track approach seeks for the
education system to accommodate all, while maximising the valuable freedoms for each
group and individual; it is essential to move forward on the process toward inclusive
education. As the democratic public discussion is essential in identifying the important
capabilities (Sen, 1999), the participation of marginalized individuals in the discussion on
inclusive education is indispensable. Therefore, the process of identifying the important
capabilities for different groups in each context, while seeking an environment that
maximizes the capabilities of all through vivid discussion on the discourses of inclusive
education, is the driving forces moving towards inclusive education where the capabilities of
each individual are equally realised in education and society.
7 Bibliography


Foucault, M. 1976, The will to knowledge the history of sexuality. 1 Penguin books


Theory and Research in Education, 4:1, pp. 69-84.
The Committee for Assisting and Promoting Education of the Disabled in Sudan, (2010). Deaiga Tsunagu Nihonto Sudan (Bridging Japan and Sudan), the Mission Report 2010 Field Visit), Tsukuba: CAPEDS.
Tenwo Tsunaide Egaku Yume Jisshi Hokokusho (Draw Your Dream with DOts, A Report of the Braille Literacy Project), Tsukuba: CAPEDS.
Available at: http://www.globalpartnership.org/sudan (accessed 4 August, 2013)
The World B Blind Union, (2011). Right to Read Campaign – fall 2011 update: Will the EU and USA join the rest of the world and finally agree a binding book treaty for blind people this November? Toronto: WBU.
Available at: http://www.worldblindunion.org/English/resources/Documents/Right%20to%20Read%20Campaign%20Fall%202011%20Update.doc (Accessed on 25 August, 2013)


## 8 Appendices

### Appendix 1: Profile of the Participants

<table>
<thead>
<tr>
<th>Number</th>
<th>Sex</th>
<th>Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Male</td>
<td>He studied in the blind school at primary level and studied in a regular school at the secondary level. After he graduated university, he is working at the blind school</td>
</tr>
<tr>
<td>2</td>
<td>Male</td>
<td>He studied in the blind school at primary level and studied in a regular school at the secondary level. After he graduated university, he is working at the blind school</td>
</tr>
<tr>
<td>3</td>
<td>Male</td>
<td>He studied in the blind school at primary level and studied in a regular school at the secondary level. After he graduated university, he is working at the blind school</td>
</tr>
<tr>
<td>4</td>
<td>Male</td>
<td>He lost his sight at after completing education. He has served as a teacher at the blind school for more than 30 years.</td>
</tr>
<tr>
<td>5</td>
<td>Male</td>
<td>He has studied in regular schools throughout his experience. He finished his master and he is one of the key participant.</td>
</tr>
<tr>
<td>6</td>
<td>Male</td>
<td>He has studied in regular schools through his experience. He came to Japan when he was the first year of a university in Sudan. He is the other key participant.</td>
</tr>
<tr>
<td>7</td>
<td>Female</td>
<td>She was sighted until the fifth grade. She studied in the blind school for two years and re-entered to the regular</td>
</tr>
<tr>
<td>No.</td>
<td>Gender</td>
<td>Education and Employment History</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>8</td>
<td>Female</td>
<td>Studied in the blind school at the primary level and studied in a regular school at the secondary level. Graduated university and is employed.</td>
</tr>
<tr>
<td>9</td>
<td>Female</td>
<td>Studied in the blind school in another Arabic speaking country. Came back to Sudan at the university level. Working in the blind school.</td>
</tr>
<tr>
<td>10</td>
<td>Female</td>
<td>Studied in the blind school at the primary level and in a regular school at the secondary level. Graduated university and is working at the blind school.</td>
</tr>
</tbody>
</table>
Appendix 2: Guiding Questions for Discussion:

- What kind of education have you had so far?
- What did you like in your primary education?
- What did you like in your secondary education?
- What did you like in tertiary education?
- Please tell us your story about your favorite memory of education.
- What didn’t you like in primary education?
- What didn’t you like in secondary education?
- What didn’t you like in tertiary education?
- Please tell us your story about what you did not like in your education.
- When did you feel education is open for you?
- Please tell us your story when you felt the education is open for you.
- When did you feel education is closed for you?
- Please tell us about your story where you felt there were difficulties in education.
- What made it difficult for your education?
- What are the helpful things in your life which you obtained from education?
- Please tell us about the moments when you feel that the education was worth it for you.
- What was not useful in education?
- What are the important things to do, to be or to have to live in Sudan as a person with a visual impairment?
- Please tell us what makes your life valuable?
- Please tell us anything make the lives of people with visual impairment in Sudan difficult.
- Please tell us any example.
- What do you recommend for blind children to obtain in education?

*1 The relevance of the topics will be consulted with the participants before the main discussion.
*2 In this regard, the topics might be changed.