

**INVESTIGATING HOW THE LEARNING NEEDS OF STUDENTS WITH VISION  
DISABILITY ARE UNDERSTOOD AND ACCOMMODATED WITHIN  
MAINSTREAM SECONDARY SCHOOLS IN CAMEROON: A CASE STUDY OF  
ONE SECONDARY SCHOOL**

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## DECLARATION

This thesis is my original work. I have received no assistance except as part of the normal guidance from my supervisor.

Bridget Ateh Longla Fobuzie

Signed:

Signed by candidate

Date: 15/03/2024

## ACKNOWLEDGEMENTS

“I can do all things through Christ who strengthens me”. Philippians 4:13

I started this journey barely two months after my beloved father who has always been my role model passed onto glory. Two years later, my loving mum also passed away and then my husband and friend of 34 years followed suit! I was later to bury my caring aunt, my amazing uncle and my adorable four-year-old granddaughter who died under very mysterious circumstances. In the midst of all these events, war broke out in the English-speaking regions of Cameroon. My other uncle and kid brother were abducted by separatist fighters on two separate occasions and badly tortured. My older brother was shot at and maimed and sadly he will live with the deformity for the rest of his life. Then my deceased uncle’s wife, was also abducted. This was followed by the abduction of my older sister who was in the separatists’ camp for five gruelling, days with guns pointing at her 24 hours a day. Just when I was rounding off my thesis, one of my most cherished kid brothers was killed by unknown gunmen in the restive North-West Region of Cameroon. Thanks to the Almighty God, I could bare all of these. I will sing unto the Lord, a joyful song. I will praise His name for the Lord is good!

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## **DEDICATION**

To my father, S.P. Longla, who believed that “education is the most permanent asset” any human being can have and so started the first lay private secondary school in the North-West Region of Cameroon, even before I was born.

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## ABSTRACT

Inclusive education, with a focus on the inclusion of learners from disadvantaged groups, such as those with disabilities, is of great concern for education systems around the world. Yet students with disabilities continue to be excluded from participation and achievement in education. Children with sensory impairments such as vision disability in low and middle countries are inadequately provided for. This means that these children either do not attend school or, when they do, the environment, including the curriculum and pedagogy, are inaccessible to them because education, in the main, is designed for those who can see. In the education of students with vision disabilities, it is crucial for role players to understand vision loss and its impact on access, participation and achievement for these students. Unfortunately, there is a paucity of literature in Cameroon on how role players such as teachers, parents, school administrators and sighted peers of students with vision disability understand and respond to the learning needs of students with vision disability.

To address this knowledge gap, a qualitative case study to understand how the learning needs of students with vision disability are understood and accommodated within mainstream secondary schools in Cameroon was conducted. The research question was: How are the learning needs of students with vision disability understood and accommodated within mainstream secondary schools in Cameroon? Disability Studies in Education, Bronfenbrenner's Ecological Systems Theory and Postcolonial Theory are the theoretical lenses which guided the conduct of the study. The main focus of disability studies in education is the social model of disability in an education context. Bronfenbrenner's ecological systems' theory, examines the impact of the environment on the education of a child while postcolonial theory looks at the colonial legacies in the sphere of education and how these shape education provision for different groups of learners.

Six students with profound vision disability, six mainstream secondary school teachers, five sighted peers of students with vision disability, four parents, three resource teachers, two focal point persons for inclusive education and two key informants provided the data for the study. The data was collected through individual interviews, one focus group discussion, document review, observation and the researcher's field notes. The data was analysed thematically resulting in two main themes as follows: 1. *It is not too easy to teach them and it is not too easy to learn here*, and 2. *Gate crashing?* It was established that the law in Cameroon which guides education provision for learners with disabilities is conceived within a medical model perspective, and this shapes role players' understanding of disability and thus influences how

they respond to the learning needs of students with vision disability. It was also evident that the environment in which teaching and learning take place, poses significant pedagogic barriers, making it challenging for the teachers to teach and for learners with vision disability to participate and achieve on a par with their sighted peers. It was concluded that several measures, including a review of the law on education provision for students with disabilities, need to be undertaken in order to ensure equity in education provision for students with disabilities in general and those with vision disability in particular. This study provides critical new knowledge on how the learning needs of students with vision disability are understood and accommodated within a specific school in Africa. The new knowledge does not only add to the limited body of knowledge on the education of students with vision disability in Cameroon but may assist role players in education, such as the ministries of education, teachers, parents and education authorities to develop measures which guarantee quality and equity in education for all learners as an issue of human rights and social justice.

## TABLE OF CONTENTS

ACKNOWLEDGEMENTS .....	iii
DEDICATION .....	vi
ABSTRACT.....	vii
LIST OF FIGURES AND TABLES.....	xiv
LIST OF ACRONYMS .....	xv
CHAPTER 1: LAYING THE FOUNDATION .....	1
1.1 Introduction .....	1
1.2 Study Context.....	4
1.3 Statement of the Problem .....	8
1.4 Purpose of the Study .....	8
1.5 Research Aims and Objectives.....	9
1.5.1 Research Aims .....	9
1.5.2 Research Objectives .....	9
1.6 Rationale and Significance of the Study .....	9
1.7 Research Question.....	9
1.8 Outline of Thesis Chapters .....	10
CHAPTER 2: APPRAISING THE REPORTS ON THE EDUCATION OF STUDENTS WITH VISION DISABILITY .....	13
2.1 Introduction .....	13
2.2 Collecting the reviewed literature. ....	14
2.3 Setting the Scene .....	14
2.4 Defining Disability .....	15
2.5 Defining Vision Disability .....	18
2.6 The Impact of Vision Disability on Learning .....	19
2.7 Defining Special Education.....	20
2.8 Defining Inclusive Education.....	21
2.9 Inclusive Education in Cameroon .....	22

2.10 Educating Students with vision disabilities – The Resource Room Model .....	25
2.11 Educating Students with vision disabilities in the African Context.....	30
2.12 Challenges in Teaching Students with vision disabilities .....	32
2.12.1 Inadequate Training of Mainstream Teachers .....	32
2.12.2 Large Class Sizes.....	34
2.13. Barriers to Learning .....	35
2.13.1 Rigid Curricula and Time Constraints.....	35
2.13.2 Inaccessible Teaching and Learning Practices .....	40
2.13.3 Lack of Learning and Teaching Support Materials .....	42
2.13.4 Negative Attitudes .....	43
2.13.5 Inaccessible Physical Spaces .....	44
2.14 Disability and Poverty.....	44
2.15 Conclusion.....	45
<b>CHAPTER 3: LOOKING THROUGH THE LENS.....</b>	<b>47</b>
3.1 Introduction .....	47
3.2 Section One: Philosophical Paradigm .....	47
3.2.1 The Interpretive Paradigm .....	48
3.3 Theoretical Frameworks.....	49
3.3.1 Disability Studies in Education .....	49
3.3.2 Bronfenbrenner’s Ecological Systems Theory .....	56
3.3.3 Postcolonial Theory .....	60
3.4 Conclusion.....	67
<b>CHAPTER 4: THE INS AND OUTS OF CONDUCTING A CASE STUDY RESEARCH.69</b>	
4.1 Introduction .....	69
4.2 Qualitative Research Methodology .....	69
4.2.1 Choosing a Case Study Design.....	70
4.2.2 The Case .....	72
4.2.3 The Research Setting .....	73

4.2.4 Population.....	74
4.3 Sampling.....	74
4.3.1 Sample Size .....	77
4.3.2 Piloting.....	77
4.4 Data Collection.....	78
4.4.1 Recruitment of Research Participants.....	79
4.4.2 Demographic Details of Research Participants .....	83
4.4.3 Data Collection Methods .....	85
4.5 Language .....	92
4.6 Data Management and Data Analysis .....	93
4.6.1 Data Management.....	93
4.6.2 Data Analysis.....	94
4.7 Scientific Rigour and Trustworthiness .....	97
4.7.1 Credibility.....	97
4.7.2 Transferability .....	98
4.7.3 Dependability.....	98
4.7.4 Confirmability .....	98
4.8 Ethical Considerations.....	99
4.8.1 Conducting Research with Minors .....	99
4.8.2 Autonomy and Informed Consent .....	99
4.8.3 Beneficence and Non-Maleficence.....	100
4.8.4 Justice .....	101
4.9 Reflexivity.....	102
4.10 Conclusion.....	106
CHAPTER 5: CHRONICLING THE EXPERIENCES -1 .....	107
5.1 Introduction .....	107
5.2 The Context of Mabingo Secondary School .....	108
5.3 Findings of Thematic Analysis .....	113

5.3.1 Challenges in Teaching Students with Vision Disability in a Mainstream School .....	113
5.3.2 Gaps in Pre-service Teacher Education .....	113
5.3.3 Insufficient Learning and Teaching Support Materials .....	121
5.3.4 Absence of Curriculum Differentiation and Adaptation .....	123
Inadequate Support to Teachers .....	125
5.4 Barriers to Learning .....	129
5.4.1 Barriers in Transmission Style Teaching/Learning Methods .....	129
5.4.2 Rigid Curriculum .....	134
5.4.3 Challenges with Evaluation .....	137
5.4.4 Barriers in the Learning Environment .....	142
5.4.5 Suggestions to Overcome Barriers .....	145
5.5 Conclusion.....	146
CHAPTER 6: CHRONICLING THE EXPERIENCES - 2.....	147
6.1 Findings of Thematic Analysis 2 .....	147
6.2 Introduction .....	147
6.3 Gate crashing?.....	150
6.3.1 Stereotypical Notions of Students with Vision Disability.....	150
6.3.2 Exclusion .....	156
6.3.3 Belonging to the Resource Room Only .....	158
6.3.4 Neglect of Students with Vision Disability .....	159
6.4 Conclusion.....	163
CHAPTER 7: PEERING BEHIND THE CURTAINS .....	164
7.1 Introduction .....	164
7.2 Key Finding 1 .....	164
7.3 Disability Studies in Education .....	165
7.3.1 The Social Model of Disability .....	165
7.3.2 The Critical Perspective.....	167

7.3.3 Disability Rights .....	167
7.3.4 Intersectionality .....	169
7.3.5 Inclusive Education .....	170
7.4 Key Finding Two .....	173
7.4.1 Introduction .....	173
7.4.2 The Micro-System .....	173
7.5 The Physical Learning Environment.....	182
7.5.1 Class Sizes .....	183
7.6 The Meso-System.....	184
7.6.1 Interactions between Students with Vision Disability and Teachers .....	184
7.6.2 Interactions between students with vision disability and sighted peers .....	185
7.7 The Exo-System .....	186
7.7.1 Teacher Education .....	186
7.7.2 School Meetings and School Action Plan .....	189
7.8 The Macro-System .....	190
7.9 Conclusion.....	193
CHAPTER 8: WRAPPING UP .....	195
8.1 Introduction .....	195
8.2. Policy and Practice Recommendations .....	195
8.2.1 Article 8 of the CRPD: Awareness Raising.....	195
8.2.2 Article 24: Education.....	196
8.3. Limitations of the Stud.....	201
8.4 Recommendations for Future Research .....	203
8.5. Conclusion.....	203
REFERENCES .....	205
LIST OF APPENDICES.....	218

## LIST OF FIGURES AND TABLES

### Figures

Figure 1: Interactions between the components of ICF (WHO 2001, p. 18).....	17
Figure 2: A juxtaposition of the medical and social models of disability (Jes Graham) .....	53
Figure 3: Bronfenbrenner's Ecological Systems Theory .....	56
Figure 4: Stages in the development of a semi-structured interview guide.....	86
Figure 5: Steps in data analysis.....	95
Figure 6: Summary of themes 1 &2.....	106
Figure 7: Summary of theme 3.....	107
Figure 8: A long flight stairs leading into some classrooms.....	108
Figure 9: The researcher in an "office" next to the resource room.....	111
Figure 10: Summary of theme three.....	146
Figure 11: Ensuring equity in education provision for students with vision disability.....	192
Figure 4: A long flight of stairs leading into some of the classrooms.....	109

### Tables

Table 1: International Support for inclusive education.....	27
Table 2: National Support for inclusive education.....	29
Table 3: Selection criteria for research participants .....	75
Table 4: Data collection activities.....	78
Table 5: Participant recruitment activities .....	80
Table 6: Demographic details of research participants.....	83

## LIST OF ACRONYMS

BEST:	Bronfenbrenner's Ecological Systems Theory
CBCHS:	Cameroon Baptist Convention Health Services
DRM:	Disability Rights Movement
DSE:	Disability Studies in Education
EDID:	Empowerment and Disability Inclusive Development
ESEDA:	Ecole Spécialisée pour les Enfants Auditif
FGD:	Focus Group Discussion
HREC:	Human Research Ethics Committee
ICF:	International Classification, Functioning and Health
IDA:	International Disability Alliance
ICT:	Information and Communications Technology
LMIC:	Low to Middle Income Countries
MMD:	Medical Model of Disability
O&M:	Orientation and Mobility
PCT:	Postcolonial Theory
PTA:	Parent/Teacher Association
PROMHANDICAM:	Promotion Des Personnes Handicapée du Cameroun
QEA:	Quality Education for All
RR:	Resource Room
RRTs:	Resource Room Teachers
SA:	South Africa
SEEPD:	Socio Economic Empowerment of Persons with Disability
SIAS:	Screening, Identification, Assessment and Support
SMD:	Social Model of Disability
UCT:	University of Cape Town
UDA:	Universal Design for Assessments
UDL:	Universal Design for Learning
UNCRC:	United Nations Convention on the Rights of the Child
UNCRPD:	United Nations Convention on the Rights of Persons with Disability
UNESCO:	United Nations Educational, Scientific and Cultural Organisation
UPIAS:	Union of Physically Impaired Against Segregation
WHO:	World Health Organisation

## **CHAPTER 1: LAYING THE FOUNDATION**

### **1.1 Introduction**

In this study, I sought to investigate how the learning needs of vision disabled students are understood and accommodated within mainstream secondary schools in Cameroon. The many definitions of vision impairment e.g. The World Health Organisation (2021); (See Chapter 2, for a detailed definition) Mason and McCall (2013); Morse (2017); Vashist et al. (2017) focus on visual acuity, i.e. measure of the ability of the eye to distinguish shapes and the details of objects at a given distance. This definition highlights the medical diagnosis of the individual. In this study, my focus is on the factors in the school and society which disable students with severe to profound vision disability and prevent them from meaningful access to and participation in the school curriculum. Thus, my use of the term vision disabled students in some instances and students with vision disability is deliberate. The aim is to draw attention to these disabling factors (Shakespeare, 2006).

Learners with severe to profound vision disability, present a distinctive challenge in educational spaces because teaching and learning are typically designed for those who can see (Cain & Fanshawe, 2019; Kapur, 2018b; Miyauchi, 2020; Sefotho et al., 2020). This makes it challenging for them to attend school and achieve like their sighted peers. (Burton et al., 2021) estimate that out of an approximate 1.025.260 persons living with vision disability in the world, 90% of them live in low to middle income countries (LMIC) (Shakespeare, 2006; Oliver and Barnes, 2010). Of this number, 350 674 are children in Sub-Saharan Africa within the 0-15 age range.

Wodon et al. (2018) note the gaps in educational opportunities for children with disabilities, including children with vision disabilities, in sub-Saharan Africa. For instance, chances of these children ever enrolling in school are slim. Few of those who enrol complete primary school and many of those who complete primary school do not transition to secondary school (Wodon et al., 2018). Those who make the transition to secondary school are confronted with education systems that were designed for sighted students and so the students with vision disability end up receiving an inferior quality of education (Wodon et al., 2018), which jeopardises their chances of employment in the job market.

Poverty also has a key role to play in determining both access to education and the quality of education that these students receive. The symbiotic relationship between disability and

poverty means that sometimes families have to choose which child attends school and in most cases children with disabilities, including those with vision disability, are denied the opportunity, especially as the cost of educating children with disabilities in general is usually more expensive than the education of non-disabled children (Karisa, 2020; McKenzie et al, 2018).

In the face of pandemics such as the recent COVID-19, when countries made efforts to support the education of children through virtual platforms such as the radio, television and on-line materials in LMIC countries, the specific needs of children such as those with vision disabilities were not considered resulting in the continued neglect of children with disabilities in conflict and emergency situations (Singal et al., 2021). “In Cameroon, educational content delivered through TV and radio was not specifically adapted to children with disabilities and the psychosocial support they need was lacking” (Valenza et al., 2021, p. 12)

It is therefore evident that, in the main, education systems in LMIC exclude children and young people with vision disability. The question arises as to why this is so. It is generally recognised that vision impairment, though considered a low incidence disability, has high support needs and presents unique challenges in teaching and learning (Miyauchi, 2020). These challenges include but are not limited to the inability to learn incidentally and to perceive the spatial qualities of objects, challenges in concept development, accessing the curriculum and navigating the spaces in which learners with vision disability find themselves, and managing social interactions (Opie Jill, 2018). These, coupled with persistently low expectations of students with vision disability, negative attitudes, repugnant cultural beliefs, lack of environmental modifications, and one-size-fits all education policies, pose significant barriers to education for them (Le Fanu et al, 2022). Interventions aimed at mitigating or eliminating these challenges, therefore, become essential and call for a comprehensive understanding of how severe to profound vision loss, be it adventitious or congenital, impact learning (Zulch-Knouwds, 2010).

A study conducted by Sightsavers (M. Opoku, 2020) in 13 Sub-Saharan countries revealed that the majority of children with vision disability were not transitioning to secondary school. For instance, statistics collected from Kenya, Liberia, Malawi and Uganda revealed that out of the total number of children with vision disability enrolled in education, only 5.2%, 13.8%, 8.5%, and 9.2 % respectively transitioned to secondary school. The report

further states that the quality of education received by the few who make this transition, is of lower quality than that received by their sighted peers. This disparity in the quality of education provision to vision disabled learners, was attributed to a number of factors such as the inadequate training of pre-service and in-service teachers, inadequate resources, large class sizes and a lack of motivation on the part of teachers. After reviewing literature on the education of students with vision disability in 14 Sub-Saharan countries (Le Fanu et al., 2022), add that rigid examination-oriented curricula, poor infrastructure, exclusion from Maths and Science and “poorly disseminated policy frameworks, sometimes lacking consistency, specificity and relevance exacerbate, the barriers to learning experienced by students with vision disability” (p.6).

While these findings cannot be used to make generalisations about what exists in other Sub-Saharan African countries, this trend in up to 27 countries is worrying and calls for immediate action by role players. There is an urgent need to improve the educational landscape, to ensure that the quality of education provided to learners with disabilities in general and vision disability in particular, is grounded in the prescriptions of General Comment 4 of the UNCRPD (CRPD, 2016). General Comment 4 is specific about inclusive education ensuring the full and effective presence, participation, and achievement of all students, “especially those who, for different reasons, are excluded or at risk of being marginalised” (CRPD, 2016, p. 1), such as students with vision disability.

From extant research, it is evident that the inclusion of students with vision disability in mainstream settings in Sub-Saharan Africa reveals the plethora of tangible needs these learners have, which are largely unattended to. Additionally, many of these studies have included students with differing levels of vision impairments, ranging from mild, to profound vision impairment as if they were a homogeneous group. Hence, the current study expands this research as it focuses on students with severe to profound vision disability who are print disabled. It makes an important contribution to understanding the education of children with vision disability in Sub-Saharan Africa by, investigating how the learning needs of students with vision disability are understood and how these understandings shape the ways in which their needs are accommodated in mainstream settings. Mik-Meyer (2016) and Nseibo (2021) posit that the way in which communities view disability influence their attitudes towards persons with disability. It is thus necessary to find out how role players in education conceptualise vision disability and how these

conceptualisations shape their understanding of and response to the learning needs of students with vision disability. In all of these, the voices of students with vision disability are pivotal because they wear the shoe and know where it pinches the most. This may provide insight as to why the quality of education for students with vision disability is of a lower standard in comparison to the education received by their sighted peers.

This study is undertaken in Cameroon, where there is a dearth of literature on the education of students with vision disability. It was born out of my experience of teaching and observing how students with vision disability in Cameroon, navigate schooling with virtually no teaching and learning resources and being taught by teachers who have not received adequate training on how to teach students with specific impairments such as vision disability. Thus, teachers had inadequate knowledge of the impact of vision loss on learning and little or no knowledge of even the rudiments of braille and its dynamics, which resulted in lower levels of achievement in comparison to their sighted peers. Additionally, as an inclusive education adviser working with the Cameroon Baptist Convention Health Services (CBCHS), I get to visit many schools and observe how children and young people with disabilities in general, including those with vision disability, are disabled by the rigidity of education provision for all students which limits access, participation and achievement for this group of learners. Also motivating this study, was the limited research in the education of students with specific disabilities such as vision disability in Cameroon. In this study, I sought to investigate how the learning needs of students with vision disability are understood and accommodated within mainstream classrooms in Cameroon.

The quality of education these learners receive as a result of lack of or limited accessible resources and limited capacity for the teachers who teach them in many Sub-Saharan African countries paints a bleak picture. In this study, I set out to contribute to this discourse with the intention of making recommendations for ensuring equity in education for students with vision disability and changing the educational landscape for this group of students, through a case study of a mainstream secondary school in Cameroon which admits students with severe to profound vision disability.

## **1.2 Study Context**

This study was conducted in Cameroon, a country in Central Africa, where primary education is 'free' (in all government-owned and run schools) even though parents still

have to shoulder the cost of books, uniforms, transportation and feeding (Kamga, 2019). All students, with the exception of those with disabilities, are also expected to pay Parent/Teacher Association (PTA) dues. Education is also supposed to be compulsory but there are no mechanisms in place to ensure the enforcement of this. Secondary education is also 'free' but not compulsory. According to General Comment 4 of the UNCRPD, state parties are enjoined to ensure that their education systems guarantee the right to education for all children and young people at risk of marginalisation, such as those with disabilities, including vision disability, by ensuring that:

- There is transformation in culture, policy and practice in all formal and informal educational environments to accommodate the differing requirements and identities of individual students, together with a commitment to removing the barriers that impede that possibility.
- The capacity of each educational system is strengthened to address the learning needs of all learners.
- The focus is on the full and effective accessibility, participation and achievement of all learners especially those who, for different reasons, are excluded or at risk of being marginalized.
- Inclusion measures involve access to and progress in high-quality formal and informal education without discrimination.
- Inclusion seeks to enable communities, systems and structures to combat discrimination, including harmful stereotypes, recognise diversity, promote participation and overcome barriers to learning and participation for all by focusing on the well-being and success of students with disabilities.
- For all these things to happen, there is need for an in-depth transformation of education systems in legislation, policy and the mechanisms for financing, administering, designing, delivering and monitoring education (CRPD, 2016) .

In Cameroon, however, the education system has not been transformed to cater to the needs of all learners. Classrooms are usually overcrowded (Nkemleke, n.d.), ranging from 60 to 100+ students per class. While there are textbooks for sighted students, these are not

available in braille or other accessible formats for print disabled students (Nyugap, n.d.). Most of the time, learners need far more than school supplies, e.g., food and transportation to school. From my experience and observation, teachers have not been trained for inclusion, do not have adequate learning and teaching support materials (LTSM) and have very limited opportunities for continuous professional development (Focho, 2018; Nsolly & Charlotte, 2016). Thus access, participation and achievement for students with disabilities including those with vision disability cannot be guaranteed. The new knowledge constructed by this study will not only add to the current limited evidence but, more significantly, lead to a better understanding of these issues and will thereby inform education stakeholders, on future directions on the accommodation of the learning needs of vision disabled learners in mainstream secondary settings.

In Cameroon, currently, the education of children with vision disability is largely in the hands of non-governmental and faith-based (Cockburn et al., 2017; (Nyugap, n.d.). At primary level, these children attend special schools where they learn braille (which is yet to be standardised in the country) and then move into the mainstream at secondary school level. Although more students with vision disability are transitioning to secondary schools, the terrain still remains unwelcoming as the curriculum is mainly designed for people who can see (Nyugap, n.d.) . The onus seems to be on vision disabled students to fit in, rather than on schools striving to change in order to include vision disabled students. This results in lower participation and achievement levels for these students. Thus, children and young people from poor families are likely not to attend school.

As I already stated, most schools in the country are government-owned and run. The government thus recruits, trains and assigns teachers to these schools and pays their salaries. In addition to bearing the cost of scholastic needs, parents are obliged to pay PTA levies which are imposed by the schools according to the law. The PTA levies are intended to fill the financial gap between what the government provides as running credits to each school and the needs of the school. The school needs usually range from paying remuneration for some teachers engaged by the school where there is a shortage in particular disciplines, to building additional classrooms, and to equipping computer and science laboratories as articulated in circular No.G.370/477/MINEDUC/SAAF/BEP of 17 November, 1987 (Mekolle, 2018) . Individuals and organisations, especially religious organisations, are allowed to operate private schools and these are usually are fee-paying.

Law No. 98/4 of 14 April 1998 lays down processes and guidelines of education (Republic of Cameroon, 2020/2021) but there is no fully-fledged policy on the education of learners with disabilities in general and vision disability in particular in Cameroon. However, the 2010 Law on the Protection and Promotion of Persons with Disabilities, DECREE No. 2010/0243/PM OF 26 FEB 2010, (Republic of Cameroon, 2010) makes provision for the education of children and young people with disabilities. The nature of this provision is outlined in Article 3, subsections one and two of its Text of Application, Decree No. 2018/6233 of 18<sup>th</sup> July 2018 (Republic of Cameroon, 2018) and states that:

1. Education and vocational training of persons with disabilities are provided either in traditional training institutions and centres or in specialized training centres created or subsidized by the State, depending on the nature or degree of disability.
2. Disability is not, in any case, a reason for refusing the admission or registration of a student in a conventional institution or training centre.

Within the Text of Application, education provision focuses on the provision of material resources, training of specialist teachers in braille and sign language and the institution of a fee and age waiver among other concessions. The 2010 Law neither mentions the revision of the curriculum for initial teacher education nor does it mention training of in-service teachers in inclusive pedagogy, except that they will be trained on how to design adapted tests. Five years down the line, these trainings are yet to be rolled out. In relation to pedagogy, the Text of Application states that pedagogical support will be provided through “the appointment, if necessary, of a tutor or specialized supervisor responsible for the follow-up of one or more indigent disabled pupils”. Additionally, the Text of Application of the 2010 Law states that, “the State promotes inclusive education and vocational training for people with disabilities through” *inter alia*, “the development of standards in school, university and vocational training programs for teachers to learn sign language and braille.”(Republic of Cameroon, 2018, p. 2). Again, thirteen years on, these promises of the law are yet to be realised.

In order to make sense of the phenomenon of understanding and responding to the learning needs of students with vision disabilities, I recognised the need to adopt lenses which will guide data collection and analysis. I thus used Disability Studies in Education (DSE) in order to understand disability and education, Bronfenbrenner’s Ecological Systems Theory (BEST) to appreciate the context of the study and Postcolonial Theory (PCT) to appreciate

the influence of colonialism on education provision for students with disabilities, including those with vision disability. To address the issue, I equally adopted a qualitative case study methodology in order gain insight into the phenomenon and provide a “thick” (Ritchie et al., 2013, p. 21 description of it.

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

Learners with severe to profound vision impairment present a distinctive challenge in educational spaces because teaching and learning practices are typically designed for learners who can see. Furthermore, learners with vision disability are a diverse group with a varied nature of difficulties that require attention in curriculum design and implementation in order for them to achieve academically (Cockburn et al., 2017; Odedra et al., 2008; Morelle & Tabane, 2019 ; Tcheimegni, 2018). Literature and global legislation related to disabled learners and education, suggests that such education should be of good quality where the needs of every learner, including vision disabled learners, are met (Cockburn et al., 2017; Lukong et al. 2018; Tcheimegni, 2018). Nonetheless, literature on the education of vision disabled learners, in Cameroon in particular and the African context in general, reports that their learning needs are rarely met when designing and implementing educational interventions. The consequences of this are low academic achievement levels and school dropout (Agesa. 2014; Dakwa, 2014; Habulezi, 2008; Habulezi et al., 2017a; Habulezie &Phasha, 2012; Kapur, 2018a; Tanyi, 2016a; Thomas; 2012 & Tukov, 2008). It is anticipated that, investigating how the learning needs of vision disabled students are understood and accommodated within mainstream secondary schools, will explain why their academic learning needs are rarely met and why they generally underachieve. This will hopefully point to future directions for effectively including them in teaching and learning practices in Cameroon and similar contexts.

### **1.4 Purpose of the Study**

The purpose of this study was to investigate how the learning needs of students with vision disability are understood and accommodated within mainstream schools in Cameroon.

## **1.5 Research Aims and Objectives**

### ***1.5.1 Research Aims***

The research aims for this study were:

1. To identify the learning needs of students with vision disability in mainstream secondary schools in Cameroon.
2. To investigate teachers' understanding of the learning needs of students with vision disability and what strategies they use in including students with vision disability in their teaching and learning practices.

### ***1.5.2 Research Objectives***

The research objectives of this study were as follows:

1. To describe how students with vision disability experience learning in mainstream secondary schools in Cameroon.
2. To explore the teaching and learning approaches employed in mainstream secondary schools in Cameroon.
3. To investigate teachers' understanding of disability inclusion in mainstream secondary schools.
4. To examine the role of parents and peers in the education of learners with vision disabilities.
5. To explore and describe the context in which learning takes place.

## **1.6 Rationale and Significance of the Study**

It was expected that this study would provide critical new knowledge on how the learning needs of students with vision disability are understood and accommodated in mainstream secondary schools within a poorly resourced context.

## **1.7 Research Question**

This study's over-arching question was: How are the learning needs of students with vision disability understood and accommodated within mainstream schools in Cameroon?

## **1.8 Outline of Thesis Chapters**

Chapter 1, Presenting the Scenario, gives an introduction and background to the phenomenon of understanding and responding to the needs of students with vision disability in mainstream schools. Also, in this chapter I present the study context by describing the policy/law relating to the education of children and young people with disabilities. In the problem statement, I present the knowledge gap, in relation to the education of students with vision disability. I additionally state the rationale and significance of the study before outlining the study's aims, objectives and over-arching question.

Chapter 2, Gleaning the Reports on the Education of Students with Vision Disability, presents the literature review. I define terminology related to the study and present the international and national legal instruments which support the education of children and young people with disabilities in general. I describe how inclusive education is implemented in Cameroon and also describe the educational trajectories of children with vision disability from primary to secondary school levels. I then examine literature pertaining to the education of students with vision disability in other African contexts from 2010 to 2023, which led to my research question. I delimited the literature within this period in order to gain an understanding of current happenings rather than on practices that may be obsolete. However, because of the paucity of literature on students with disabilities in Cameroon, I reviewed any literature I could find, irrespective of the dates. In this section I identify the research gap which shows that while research has been conducted in other African countries on the education of students with vision disability, there has been minimal focus on those who are print-disabled, how role players understand the learning needs of this group of students and how these perceptions influence the type of education that is served to them. The review also reveals that, within the context of Cameroon, research on the education of students with vision disability is scarce.

Chapter 3, Looking through the Lens, is a discussion of my philosophical stance and also the theoretical frameworks which steer how I answer my research question. These are disability studies in education, (DSE), which applies the social model of disability in the educational context; Bronfenbrenner's Ecological Systems Theory, which describes how the environment influences the education of the child, and Postcolonial Theory which explains the colonial legacy that was bequeathed to Cameroon vis-à-vis education.

Chapter 4, *The Ins and Outs*, is the methodology chapter. Here, I explain what a research approach is and justify why I chose a qualitative and case study approach. I then outline the different steps that I followed to gain access to the study site, recruit the research participants, and collect the data using different data collection methods. I also explain why I selected the data collection methods that I used. I then explain how I managed and analysed the data and then I present the ethical considerations that guided the study.

After outlining these steps, I then present the findings in two separate chapters because the findings reveal both pedagogical barriers which are directly linked to teaching and learning and psychosocial barriers which, though not concerned with teaching and learning, have a strong influence in relation to access, participation and achievement for students with vision disability.

Chapter 5, *Chronicling the Experiences 1*, presents two of the three themes which emanate from the data, i.e.

- challenges in teaching students with vision disability in a mainstream classroom
- barriers to learning faced by students with vision disability.

Chapter 6, *Chronicling the Experiences 2*, presents the third theme: *Gate-crashing?* in which I discuss the non-pedagogical barriers which negatively affect the schooling experiences of students with vision disability.

I then proceed to explore the meanings of the findings in the next chapter. I begin these chapters by describing the study site, Mabingo Secondary School (pseudonym).

Chapter 7, *Peering behind the Curtains*, is my discussion of the two key findings which emanated from the study. The first key finding is that policy on the education of children and young people with disabilities is located within a medical model perspective and this influences how role players, such as teachers and parents conceptualise and respond to the learning needs of students with vision disability. The second key finding is that, although students with vision disability are present in Mabingo Secondary School, the learning environment poses significant barriers to access, participation and achievement. These findings are discussed in relation to the theoretical frameworks and the literature review in order to give insight into the phenomenon under study. I then conclude the chapter.

Following this, I present a framework for the meaningful inclusion of students with vision disability in mainstream settings.

Chapter 8, Wrapping up, concludes the study and presents the recommendations of this study in relation to policy and practice, after which I present the limitations of the study and the recommendations for future research before presenting my final conclusion.

## **CHAPTER 2: APPRAISING THE REPORTS ON THE EDUCATION OF STUDENTS WITH VISION DISABILITY**

### **2.1 Introduction**

After introducing the research and outlining how it will be conducted, it is essential to appraise the reports on the education of students with vision disability in order to give insight into the status quo and get a frame of reference for the study. In this chapter, I present a review of the literature on the education of students with vision disabilities.

This chapter has two sections. The first begins with how I collected the related literature and then deals with disability related literature such as, key definitions of disability, vision disability and its impact on learning, as well as the education of students with disabilities in general and those with vision disability in particular, in Cameroon and the African context. There is a dearth of literature on the education of students with disabilities in general and those with vision disability in Cameroon. Some of the statements I make here, are therefore based on my personal experiences as a teacher for over 30 years and an inclusive education advocate. In such instances, I have provided anecdotal evidence to substantiate my claims.

In the second section I discuss the challenges teachers face in teaching these students in mainstream settings and the barriers to education for vision disabled students, as revealed by the relevant literature. The themes I discuss include negative attitudes, rigidity of the curriculum and time constraints, inaccessible teaching and learning methods, the lack of learning and teaching support materials (LTSM), and inadequate teacher education for disability inclusion. I also discuss the Expanded Core Curriculum (ECC) as an essential curriculum for students with vision disabilities before concluding the chapter. Regarding literature relating to the education of students with vision disabilities in the African context, I reviewed only literature published in the English Language, from 2010 to January 2023 in order to focus on current trends.

The pivot of this review is on students with disabilities in general and those with vision disability in particular and how their learning needs are understood and responded to, within mainstream classrooms in Cameroon. This will enable me to gain an understanding of the current education of students with vision disabilities and also reveal the gaps that need to be addressed in order to ensure meaningful participation and achievement for vision disabled students in Cameroon.

## **2.2 Collecting the reviewed literature.**

I reviewed related literature published in the English language in order to highlight the current issues on the topic and get a frame of reference. I stuck to literature published in the English language despite Cameroon having two official languages, French and English, and two educational systems, the Anglophone Sub-system and the Francophone Sub-system (Ngalim, 2014; Ngwa & Mekolle, 2020), for the following reasons. I am not sufficiently proficient in French and so would have needed to have whatever literature I found to be translated. This would not only have been very expensive and unaffordable for me but would have also been very time-consuming. Not reviewing literature published in French, might present a lop-sided view of the current situation and this is acknowledged in the limitations of the research. The search for relevant literature consisted of electronic searches on Africa Wide, Eric, PsychoInfo, Web of Science, Pubmed and Google Scholar using the Boolean search method. I used combinations of the following key words: (Secondary school OR high school OR mainstream OR inclusive education) AND (Vision disability OR visual disability OR blind OR visual impairment OR visually impaired) AND (Learning needs OR education needs OR educational needs) AND (understanding OR knowledge OR awareness OR accommodate)

I additionally conducted a general search on the University of Cape Town's (UCT) Google Scholar and carried out hand searches at the University of Cape Town Library for relevant literature. The literature search exercise ranged from January 2017 to January 2019 but was updated at various points, e.g. during data collection and analysis, discussion of the findings and writing up of the thesis.

## **2.3 Setting the Scene**

The government of Cameroon, like those of many other countries is concerned with the education of its youth with disabilities, including those with vision disabilities. This is signalled by its promulgation of some laws such as the 2010 Law (Republic of Cameroon, 2010) and its 2018 Text of Application (Republic of Cameroon, 2018), on the promotion and protection of the rights of persons with disabilities, including the right to education. However, these laws are yet to be fully implemented by the government as most inclusive education initiatives are implemented by local and international Non-Governmental Organisations, (NGOs) and faith-based organisations (Cockburn et al., 2017). From observation and experience in the field, these initiatives are not always informed by research and so it will be crucial to conduct research in inclusive education, focusing on

specific disabilities such as vision disability because different disabilities pose unique challenges for education and these therefore need specific interventions which may not be applicable to other types of disabilities. Also, focusing on specific disabilities will enrich the on-going practices and enable role players to develop inclusive education models that meet the learning needs of all students with vision disability and ameliorate their schooling experiences in mainstream settings.

In Cameroon, while there are a few studies on inclusive education in general, there is a paucity of literature on the education of students with specific disabilities, including vision disability, despite an increase in the enrolment of vision disabled students in mainstream education (Nyugap, n.d.) Each disability calls for specific interventions which will ensure that the curriculum and its manner of delivery are accessible to the students who have that particular disability. For instance, vision disability presents peculiar challenges in education circles given that most learning occurs through vision and that school curricula are generally designed for sighted learners (Cain & Fanshawe, 2019; Morris & Sharma, 2011; Palan, 2021; Phethoka, 2020). To illustrate this, Cain and Fanshawe (2019), point out that school curricula are replete with visual images and representation which need to be adapted to make them accessible to vision disabled students. This makes the case of vision disabled students, pertinent. Not focusing on specific disabilities may lead to the exclusion of some students in the course of service provision as the current study revealed.

## **2.4 Defining Disability**

Disability is one aspect of human diversity like gender, race, ethnicity, etc. and persons with disabilities abound the world over (Couser, 2005). WHO's 2011 World Report on Disability estimates that 15% of the world's over 1 billion population live with a disability (World Health Organization The World, 2011). In spite of its widespread nature, McEwan and Butler (2007) and Riddle (2013), opine that disability is a complex phenomenon to define, given that it is broad-based, socially and culturally constructed and varies in different cultures and contexts. Considering that there isn't a single internationally accepted definition of disability, this study will adopt the definition of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) which states that:

*Persons with disabilities include those who have long term physical, mental, intellectual or sensory impairments which in interaction with various barriers*

*may hinder their full and effective participation in society on an equal basis with others* (United Nations 2006, p. 3).

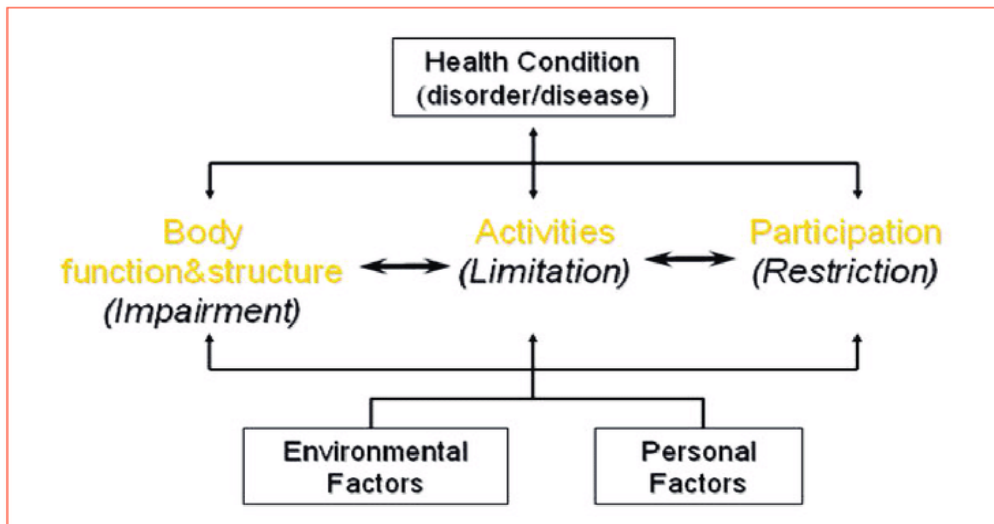
For purposes of this study, I will use the World Health Organisation's (WHO) definition of disability to elucidate what is articulated in the UNCRPD. WHO also uses the International Classification, Functioning and Health (ICF) Model, commonly referred to as, the bio-psycho social model to exemplify how disability comes about. WHO defines disability by distinguishing between impairment, activity limitation and participation restriction.

**Impairment** refers to any loss or deformity in body structure or function. Impairment could be physical, such as, the loss of or significant difference in the upper and/or lower limbs, sensory such as, hearing or vision loss and any sensory processing disorder or mental disorder such as, anxiety disorders, depression, eating disorders, phobias, etc. An impairment could be mild, moderate, severe or profound, thus presenting different needs and requiring differing interventions.

**Activity limitation** refers to the difficulty in performing tasks such as activities of daily living, seeing, walking, hearing, socialising, problem solving, etc.

**Participation restriction** refers to the barriers in taking part in everyday activities such as attending school, being employed, socialising, communicating thoughts, feelings and ideas, obtaining health care services and so on.

WHO then concludes that disability is a difficulty in any one of these areas. The ICF model focuses on the interconnections between health conditions, personal and environmental factors and the extent to which these factors facilitate or hinder functioning and participation in activities in one's community. The ICF highlights the role of the environment in creating or dismantling barriers to participation. The figure below best illustrates the model.



**Figure 1: Interactions between the components of ICF (WHO 2001, p. 18)**

According to the ICF, which is based on the integration of the medical and social models of disability, peoples' levels of functioning are determined by the interaction of their health condition, personal factors and factors within their environment. This study views disability as a complex interaction of the human body in relation to education provision for students with vision disabilities and the context in which such education is provided, as being a barrier or facilitator.

The focus of this study is on vision disability as a type of disability. In some contexts, people with disabilities are often treated as a homogeneous group (Luo et al, 2020), especially if they have the same impairment such as vision, but the reality is that two people with the same severity, of the same impairment, will be different in many ways (Cain & Fanshawe, 2019; Kapur, 2018b). For example, one person could have acquired blindness while another person could have congenital blindness. Also, two persons who both have either congenital or acquired blindness may have two different lived experiences. These variants speak to different needs and call for different interventions in different contexts (Brydges & Mkandawire, 2017; Lugome, 2018; Zulch-Knouwds, 2010). According to the social model of disability and Bronfenbrenner's Ecological Systems Theory (BEST), disability is a consequence of the negative interactions between individuals and the environment (Tudge et al., 2016; World Health Organisation, 2011).

## **2.5 Defining Vision Disability**

The existence of multiple definitions of vision disability also known as visual/vision impairment or vision loss has been acknowledged e.g., (Gray, 2005) . However, the World Health Organization's (2021) International Statistical Classification of Diseases and Related Health Problems (11th ed.; ICD-11), presents two main categories of vision impairment. These are: low vision and blindness where the blindness is considered the inability to tell light from dark, or the total inability to see or having a visual acuity of less than 3/60 or corresponding visual field loss in the better eye, with best possible correction. On the other hand, low vision is a severe reduction in vision that cannot be corrected with standard glasses or contact lenses and reduces a person's ability to function at certain or all tasks or corresponds to a visual acuity of less than 6/8 but equal to or better than 3/60 in the better eye, with best possible correction.

WHO proceeds to state that there are different levels of severity of visual impairment. Totally blind means the individual receives no useful information through the sense of vision and must use tactile and auditory senses for learning. Functionally blind means learners learn mostly through other senses but may be able to use vision to supplement information received from the other senses. Both of these groups would need to use braille to learn to read and write. Low vision learners primarily use vision as a means of learning, with the aid of magnifying devices. They may learn to use print. Visual efficiency refers to how well a person uses whatever vision is present. This includes, the ability to control eye movements to discriminate objects from their background, and to pay attention to details (Beatrice & Janet, 2003).

In this study, I explore disability in relation to education and the context in which students with disabilities, especially vision disabilities, attend school. Vision impairment, though considered a low incidence disability, is ranked as the third leading cause of disability globally (Forrest et al., 2023). The focus of this study is on vision disability, particularly blindness as a sensory impairment which is also considered a “high” needs disability and “triggers unique challenges pertaining to inclusion” (Miyauchi, 2020, p. 1), in the education space. While no national survey of persons who are blind has been carried out in Cameroon (Oye et al. 2006), Oye and Kuper (2007) and the Hellen Keller Foundation estimate that the overall prevalence of blindness in this country is 1%, with 3% of the population having vision impairments. This means that approximately two hundred and

seventy thousand persons of the approximately 27 million Cameroonians (World Bank, 2021) are blind while about eight hundred and ten others have vision impairments.

## **2.6 The Impact of Vision Disability on Learning**

iCare Vision (n.d.), an organization in the United States of America, estimates that 80% of learning takes place through the visual medium and any damage or disease in the visual pathway affects a student's educational performance. This brings about challenges in learning such as, accessing the curriculum, concept and language development, reasoning skills, problem solving skills and abstract thinking (Kapur, 2018a; L. Lohmeier, 2005a; Sefotho et al., 2020; Zulch-Knouwds, 2010).

According to Miller (1996), it is through vision that information about movement, form, depth, distance, space, colour, texture and shape is acquired. This is then used to imitate actions, construct visual memories, develop spatial awareness and recognise objects. By implication, any interference in the visual medium will affect the extent and efficiency with which a person can carry out these functions (Suubi, 2013).

If students with vision disabilities must access the curriculum in ways that promote meaningful participation and progress, teachers need to be very intentional in deriving methods which will address the learning needs of students with vision disabilities (Phutane et al., 2022). For instance, to perceive the spatial qualities of objects, learners with vision disability need to be provided with tactual models of such objects to touch and manipulate (Sefotho et al., 2020). However, this can be challenging in instances where only the real object would suffice as some of these are either too small or large, fragile or dangerous (Nyugap, n.d.). Learning and teaching support materials (LTSM), thus need to be carefully considered, to ensure access to the curriculum. Also, students would benefit from an expanded core curriculum that specifically addresses the learning needs arising from the impairment (L. Lohmeier, 2005b; Sapp & Hatlen, 2010) which will be explained later in this chapter.

Teachers therefore need to understand how vision impacts learning in order to look for ways by which students can use experiential learning, their tactile/kinaesthetic and auditory senses, including their ability to smell and taste and the use of technology to access the curriculum (Habulezi et al., 2017b) . Research, such as the ones conducted by Bamu et al. (2016); Mwakyeja (2013); Negash (2017), reveal that teachers are not trained to teach students with vision disabilities, meaning that they lack knowledge in a vision impairment

specific curriculum (McKenzie et al., 2018), and so find it challenging to include these students in their teaching and learning practices.

Students with vision disabilities are a heterogeneous group (Blatch et al., 1998), with unique learning needs which require tailor-made interventions for each one of them (Nyugap, n.d.; Sefotho et al., 2020). However, teachers often treat students with vision disability as if they were a homogenous group (Ralejoe, 2019). It is crucial for teachers to understand that there are varied causes of vision disability and that, while some learners have congenital blindness, others have adventitious blindness, both of which present different learning needs and, consequently, different intervention strategies (Miller, 1996). Such knowledge is crucial for the design of approaches which will ensure the practical and meaningful inclusion of these learners in education spaces.

## **2.7 Defining Special Education**

Special Education means different things to different people and contexts. According to Cockburn et al. (2017) special needs education precedes inclusive education and lays emphasis on the provision of separate educational settings and schools for children with disabilities including those with vision disability. Such children require special facilities, equipment and teaching methodologies, delivered by special teachers with the prerequisite knowledge to meet their unique needs arising from their disability (Elemukan, 2012). The belief is that special education cannot be successfully implemented without the setting up of a multidisciplinary team of persons, including health care providers (Elemukan, 2012). It is this view that situates special education within the medical model of disability where disability is seen as inherent in the individual, requiring remediation (Shakespeare, 2006). Thus, in the education space, learners with disabilities are believed to have quite different needs from their non-disabled peers (Baglieri et al., 2011). Slee (2018), notes that special education, although widely criticised by advocates of the social model of disability, e.g. (Baglieri et al., 2011; Connor et al 2008; Ferri & Connor, 2014), has positively changed the educational landscape for children with disabilities who were formally considered uneducable. However, it has also alienated students with disabilities from the mainstream (Connor & Ferri, 2007). It is for this reason and more, that UNESCO through the Salamanca Statement, views inclusive education as a strategy for “combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all...”(UNESCO, 1994a, p. 3)

## 2.8 Defining Inclusive Education

Inclusive education (IE) is neither a clearly defined nor universally understood concept. This is because IE means different things to different people and countries (Krischler et al, 2019). The concept of inclusion first entered the limelight in 1994 at Salamanca in Spain, at the world conference on Special Needs Education (UNESCO, 1994). On the heels of that came the “Education for All” movement which advocated for the education of all children in regular schools, seeing this approach as a cost-effective way of educating all children while combating discrimination within societies (Unesco, 1994b). IE became widely discussed in education circles world-wide in 2006, with the advent of the UNCRPD which was signed and ratified by more than 175 countries (Krischler et al., 2019), mandating all state parties to adopt the practice of inclusive education as an issue of human rights and social justice. In this study, I adopt UNESCO’s definition of inclusive education which states that it is:

*... a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion within and from education. It involves changes and modifications in content, approaches, structures and strategies, with a common vision which covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all children. (Unesco, 2005).*

This means that the right to presence, access, participation and achievement by all students, regardless of their disability status, should be upheld (Ainscow & Miles, 2009). Access in this definition is key to participation and is reiterated and elucidated in General Comment 4 of UNCRPD (CRPD, 2016), which mandates that all education spaces, including the built and unbuilt environment, all infrastructure, educational materials, the curriculum, teaching and assessment methods and support services, should be accessible. It also calls for the indiscriminate access to education programmes for all learners in order to promote inclusionary practices (Unesco, 2016a). It advises educational establishments to immediately adopt the principles of universal design for learning (UDL) and the provision of reasonable accommodation as the needs arise. I highlight access here because this is a prerequisite for participation and achievement. Where learners do not have access to LTSM, to teaching and learning methods that speak to their individual needs, to a curriculum that addresses their individual needs, learning in ways that lead to meaningful participation and achievement would be an arduous task (Sefotho et al., 2020). There is the need for the word “identify” to precede the words, “address and respond” in UNESCO’s

definition. This is particularly important for this study because if role players are unable to identify learner needs, it will be challenging to address and respond to them. Matthews (2009) highlights the necessity for using a social model approach to identifying such needs as this will lead to better educational provision for learners with disabilities. This is because the social model of disability, focuses on the environmental barriers that impede learning for students with disabilities (Hammel et al., 2015), whereas the medical model views students with disabilities as the problem within education spaces (Shakespeare, 2006). In the school environment, such perceptions will ultimately lead to an academic cul de sac, as it is impossible for a person with vision disability, for instance, to strive to fit into an educational provision which is largely designed for sighted persons. It should be noted that UNESCO asserts that “...it is the responsibility of the regular systems to educate all children” (Unesco, 2005).

This means therefore, that schools must critically examine the needs of the learners they have and remodel their learning environments accordingly. Teachers need capacity development in impairment-specific pedagogic needs (McKenzie et al., 2018), in designing and delivering instruction following the principles of UDL (McKenzie, 2019). They also need to be able to design appropriate interventions and accommodations in order to meet the learning needs of all students in their classrooms (Sefotho et al., 2020). These strategies are intended to attract students with disabilities, including those with vision disability, to enrol, remain in education, participate in teaching and learning, on a par with their sighted peers and achieve their full academic potential. For students with vision disabilities, it means schools need to be aware of how vision and the lack of it impacts learning and seek ways of closing the gaps that are created by the lack of incidental learning through a specifically tailored curriculum such as the ECC (Opie, 2018), as earlier mentioned. Following this definition, I bring the reader’s attention to how inclusive education is practised in Cameroon.

## **2.9 Inclusive Education in Cameroon**

In Cameroon, the education of persons with disabilities was initiated by missionaries who taught persons with disabilities skills in art and craft (Lukong et al., n.d.) . The government then stepped in, in 1975 with the creation of the Ministry of Social Affairs which was and is still responsible for the promotion and protection of the rights of persons with disabilities. In the late 1980s church-owned schools started admitting persons with

disabilities in secondary schools who were supported by itinerant teachers (Nyugap, p. n.d.). In Cameroon, article one of decree no 90/1516 of 26 1990 regarding the protection of persons with disabilities specifies that the education of children will be taken care of by the state (Biya, 1990). The rate of implementation has, however, been slow (Mngo, 2017). The Ministry of Social Affairs, whose mandate it is to implement this law, has made some tokenistic gestures of issuing disability cards to some learners with disabilities to enable them get a fee waiver, if they attend state-run schools. Others with mobility impairments have also received tricycles and wheelchairs from the same ministry (Tukov, 2008). In 2008, the Ministries of Secondary Education and Social Affairs signed a joint decree intended to facilitate the enrolment of students with disabilities in mainstream government schools as a way of increasing the participation of learners with disability in the mainstream (Kamga, 2011). Nonetheless, it is unclear as to who should bear the financial cost.

In spite of the government passing some decrees in favour of the education of children and youth with disabilities such as the 2010 law and its 2018 Text of Application, and in 2021 ratified the CRPD as I already stated, the education of children with disabilities is still mainly in the hands of religious and private organisations, through special schools (Mbibeh, 2013). Some of these organisations, e.g. CBM, Sightsavers International and Liliane Fonds in the Netherlands, working through partner organisations like the Cameroon Baptist Convention Health Services (CBCHS), the Presbyterian Church in Cameroon (PCC) and the Catholic Arch Diocese, have however, partnered with some government schools where disability inclusive education is being practically implemented in the North-West, the West, the Centre, the South-West and the Northern regions of Cameroon (Bamu et al., 2017). Out of the 19 special schools in the country only three are government owned (Endeley, 2015).

Spurred by the work of these organisations and working closely with Sightsavers in 2016, the government of Cameroon “created” 68 “inclusive” primary schools in the ten regions of the country to “pilot” inclusive education (Quinlivan, 2019) . My observation is that these are schools that were already in existence and their status just changed to “inclusive” schools. Not much has been documented about the 68 schools but there is anecdotal evidence that the majority of these schools are far from being inclusive. For instance, in September of 2023, I visited one of the so-called inclusive schools in the Far North Region of Cameroon and found out that the learner/teacher ratio was averagely 200:1. In one of

the classrooms, there were up to 300 children sitting in sand, in a make-shift space. The teachers complained that the training they had received from the government was minimal. This is in addition to the random equipment of these schools with resources that are not informed by needs assessments. From my experience as a teacher with a passion for inclusive education, I have observed that some of the schools are yet to enrol a learner with a disability. Eight years down the line, these schools are still being referred to as pilot schools and no other schools have been upgraded to this status. These are clear indications that the government is just box ticking. With no fully fledged policy in place and the tokenistic practices of 'inclusive education' by the government, it can be said that inclusive education within the context of Cameroon's national policy on education is far from attainment.

Although the Text of Application of the 2010 Law on the Promotion and Protection of the Rights of Persons with Disabilities stipulates that, no student should be refused admission into a secondary school on account of their disability (Republic of Cameroon, 2010), the number of students with disabilities accessing secondary education remains low (Cockburn et al, 2017; Ritchie & Skead;2017; Opoku et al., 2015). Additionally, the school system still poses significant challenges in relation to disability inclusion (Faizefu & Lukong, 2018). For instance, Tukov (2008), in a study conducted in the South-West Region of Cameroon noted that, although teachers revealed a positive attitude towards the education of students with disabilities, they expressed challenges which hampered the inclusion of these students in their teaching and learning practices. These challenges include the lack of training in special education, inadequate funding, scarce financial resources, and inadequate didactic materials and infrastructure for inclusion, within regular schools. They also expressed the need to adapt the curriculum to make it accessible to students with disabilities. While these challenges relate to the education of all learners with disabilities in Cameroon, the education of students with vision disabilities has received very little attention from the government. The complete absence of, inter alia, teaching and learning materials in braille or in alternative accessible formats, is a poignant illustration of the government's indifference.

In Ghana, Opoku et al, (2017), reported a similar situation where the government, UNESCO and UNICEF, piloted inclusive education in two regions which failed because the efforts were uncoordinated, and the schools were poorly resourced. Although there are

pockets of initiatives of inclusive education in many regions of Cameroon, it will be challenging to say exactly who started the idea of IE.

### **2.10 Educating Students with vision disabilities – The Resource Room Model**

The current model of inclusive education for children with vision disabilities in Cameroon lays more emphasis on social inclusion than academic inclusion (Awa et al., unpublished 2017). Generally, in Cameroon, after spending between two to four years in a resource room (RR) learning braille, through a curriculum which has not been accredited, learners move into the mainstream. The assumption is that braille skills are all they need to access education. In Cameroon, textbooks are the main teaching and learning resources, yet, these are not available in braille, audio or any other accessible format (Nyugap, n.d.), as has been mentioned. Teachers have neither been trained in vision-disability specific skills and knowledge and nor have schools been remodelled to respond to the mobility needs of vision disabled students. Thus, although these students are physically present, they are not fully included, resulting in their “poor” academic performances, with many dropping out of school at secondary level (Bamu et al, 2016; Ngwokabuenui, 2013; Opoku et al., 2017). The resource room model of educating learners with disabilities in mainstream settings originated from the United States of America as a response to self-contained classrooms where students with disabilities spent their full instructional day (McNamara, 1989). A resource room within the context of the USA is a space or classroom where students with mild to moderate disabilities, especially learning disabilities, go for at most half of their instructional day to receive remedial instruction from special education teachers (Yin et a., 2023). further states that the resource room is also a concept used for the inclusion of learners with disabilities in regular settings. It is this concept that most mainstream schools in sub-Saharan Africa have adopted as a strategy for including learners with vision disability in mainstream settings as I describe next.

Although there is a paucity of literature on the RR model in the African context, this concept is gradually gaining grounds in educational spaces in Africa (Mboshi, 2014), albeit with some significant differences in service provision and appellations such as the special education department in a school in Botswana as reported by Habulezi & Phasha, Based on my experience and observations on the field within the context of Cameroon, resource rooms are the spaces where children with sensory disabilities like vision and hearing impairments attend to gain the rudiments of braille and Sign Language, respectively and

to enable them to access and participate in education in either special or regular schools. In addition, the resource rooms are repositories for resources for both students with disabilities and their teachers, intended for use to facilitate the teaching and learning of students with disabilities. Unfortunately, I observed that the RR in the current study, like the ones in most schools within the African context, is poorly resourced. It has a few computers, a braille embosser, a few digital recorders, a printer and a few other resources. While resource rooms are set up in different ways in different contexts, the purpose is the same – to enable the effective inclusion of learners with disabilities in mainstream settings through the provision of resources, including assistive technology and specialist services. It is here that mainstream teachers are expected to go for support in differentiating their lessons and providing reasonable accommodation for students with disabilities including those with vision disability. In Cameroon, in addition, these services include but are not limited to providing one-on-one support to students such as remediation lessons for students with intellectual and specific learning disabilities, sign language lessons for those with hearing impairments, braille lessons for those with vision disabilities, adaptation and modification of learning and teaching support materials (LTSM), provision of reasonable accommodation, braille and transcription services, scribe services, etc.

Most resource rooms in the African context like the one in this study and the ones in Zimbabwe have a religious background and are usually set up by religious organisations (Dakwa, 2014), and NGOs with funding from international organisations who have their own agendas. In contexts like Cameroon, the education of learners with disabilities will not be possible without resource rooms and resource or itinerant teachers (Bamu et al., 2016), who are usually perceived to possess the specialist skills needed by the learners with impairments, such as braille services, as revealed by this study. Sadly, this study revealed that the presence of a RR in Mabingo Secondary School intended to support both students with vision disabilities and their teachers to a large extent, instead, helped to alienate the students. This will be further explained in the findings section.

In the absence of a fully fledged policy on inclusive education, the education of children with disabilities has largely been influenced by international policies and national laws as I describe next. On the international scene, the right to education for all children is enshrined in the United Nations' 1948 Universal Declaration of Human Rights and has

been advocated through a number of UN conventions and declarations such as illustrated in the table below.

**Table 1: International support for inclusive education**

Date	Instrument	What it Supports
1948	Universal Declaration of Human Rights.	Ensures the right to free and compulsory elementary education for all children.
1989	The Convention on the Rights of the Child.	Ensures the right for all children to receive education without discrimination on the grounds of disability.
1990	The Jomtien Agreement World Declaration on Education for All	Requests state parties to expand early childhood education and provide free and compulsory primary education for all, where all means all, irrespective of disability status.
	Rule 6 of the United Nations Standard Rules on the Equalisation of Opportunities for Persons with Disabilities	Affirms the equal rights of all children, youth and adults with disabilities to education and also states that education should be provided in ‘integrated school settings’ and in ‘general’ school settings.
1994	The Salamanca Statement	Affirms that the right to education of every individual, regardless of individual differences within the regular education system and the right of children with special educational needs to receive whatever extra support they may require to ensure their effective

Date	Instrument	What it Supports
		education. Governments and the international community are urged to adopt the principle of inclusive education among several other actions.
2000	The Dakar Framework for Action	This is the frame of reference for the Education for All (EFA) initiative, the United Nation's primary commitment to provide quality basic education for all children, youth and adults.
2002	The GEM Report	Synthesises, analyses and clearly presents the best available data, evidence and research to explain progress and differences in education, and to make recommendations that stimulate reflection and dialogue and thereby improve policymaking.
2006	Convention on the Rights of Persons with Disabilities	Article 24 of the CRPD protects the right to education of persons with disabilities. It proclaims the right to inclusive education and prescribes the steps that have to be taken to this end.
2015	Sustainable Development Goal 4	Quality Education: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
2016	General Comment 4	Equity in Education: Ensures the full and effective participation, accessibility, attendance and

Date	Instrument	What it Supports
		achievement of all learners, especially those who, for different reasons, are excluded or at risk of being marginalized.

**Table 2: National support for inclusive education**

Date	Instrument	What it Supports
1983	Law on the Protection of Persons with Disabilities.	Defines the rights of persons with disabilities and institutes disability cards as a way of curbing fraudulent claims of disability and ensuring entitlement to social benefits by those in possession of it.
1990	Decree No.90/1516	Outlined the modalities for the practical implementation of the 1983 law, making provisions for additional rights to persons with disabilities, such as the right to education, professional training, preferential treatment in public transport, exemption to taxes and access to public buildings. Article 1 ascribes the responsibility of the education of children with disabilities to the government of Cameroon (Tukov, 2008)
	Preamble 2: Constitution of Cameroon	Makes primary education mandatory, guaranteeing the right to education for all children including those with disabilities, with the state taking responsibility for the organisation and supervision of education at all levels.
1996	Prime Ministerial Decree N° 96/39.199	Creation of the National Committee for the Rehabilitation and Reintegration of Persons with disabilities.
1998	Education Framework Act, N°. 98/004	Guarantees equal access to education without discrimination.

Date	Instrument	What it Supports
2000	Presidential Decree	Primary education compulsory with non-payment of tuition although other expenditure such as books, uniforms, transport and feeding are borne by parents.
2004	Law N°. 004/022	Regulates private education provision.
2010	Law N°. 2010/002	Law on the Promotion and Protection of the Rights of Persons with Disabilities.
2018	Decree N°. 2018/6233	Lays down the modalities for the implementation of the 2010 Law.

These international and national legislative instruments serve as a policy framework, guiding Cameroon’s Ministries of Basic Education, Secondary Education, Higher Education and Social Affairs, which are charged with the education of all children and young people, including those with disabilities and particularly vision disability (Cockburn et al., 2017). For instance, Articles 3 – 12 of Decree No. 2018/6233 of July 2018 (Republic of Cameroon, 2018) stipulate in detail how education should be provided to persons with disabilities which inter alia includes, strengthening the capacity of teachers and pedagogical inspectors to design adapted tests for learners with disabilities. Also, computers in multimedia rooms of special examination centres for all students with disabilities including those with vision disability are expected to have screen readers to enable accessibility to test items. Unfortunately, the ministries of education are yet to adequately implement these articles. Consequently, students with vision disabilities still face numerous challenges in participating in education in mainstream schools in Cameroon. I now turn to the education of students with vision disabilities in the African context.

### **2.11 Educating Students with vision disabilities in the African Context**

In this section, I discuss the education of students with vision disabilities in Cameroon and the African context. Literature on the education of students with vision disabilities in the African context in general reveals that students’ learning needs are rarely met resulting in low academic achievement and school dropout (Habulezi, 2017; Morelle & Tabane, 2019). These poor outcomes are attributed mainly to large class sizes, inadequate resources (Bamu et al., 2016) inadequate training of teachers and in some cases, the negative attitudes of

teachers towards learners with disabilities (Habulezi & Phasha, 2012; Morelle, 2016; Negash, 2017). However, while these studies highlight some of the barriers to education confronting students with vision disabilities in mainstream settings, they do not examine how their learning needs are understood and accommodated in these settings. The current study is out to breach this gap by seeking to investigate how the learning needs of students with vision disabilities are understood from a Disability Studies in Education (DSE) perspective and Bronfenbrenner's Ecological Systems Theory (BEST), perspective and how such understandings influence the way their needs are responded to. This is crucial given that Babik and Gardner (2021) argue that "perception of disability is an important construct affecting not only the well-being of individuals with disabilities, but also, the moral compass of society" (p. 1). At a time that disability inclusive education is beginning to take root, the need for such initiatives to be informed by research is dire. Such research, should be that which looks at impairment specific needs of students and how these can be accommodated within mainstream educational spaces, so as to inform both policy and practice.

There is a paucity of literature on the education of students with vision disabilities in Cameroon; consequently, I turn to literature from other African countries as they are likely to present similar circumstances in education. My search of relevant literature published in the English Language returned one study carried out by (Bamu et al., 2016) on the vitality of braille in enabling the effective inclusion of learners with vision impairment in regular secondary schools in the North-West Region of Cameroon. They reported that although braille is vital for the education of students with vision disabilities, its provision was fraught with gaps. These included mainstream teachers not being literate in braille, thereby leaving the learners solely at the mercy of one itinerant teacher of braille, who visited the schools only once a week. Poorly transcribed and brailled test and examination items are said to lead to 'low' academic achievement. The study does not examine other forms of support needs for vision disabled learners in the mainstream school, thus giving the impression that braille is all the students need for effective inclusion. This is in contrast with studies conducted in other African countries which point to many other reasons for low achievement levels and high attrition rates among students with vision disabilities. These include the challenges which teachers faced in teaching the learners and the barriers to learning which these learners face.

## **2.12 Challenges in Teaching Students with vision disabilities**

### *2.12.1 Inadequate Training of Mainstream Teachers*

Many mainstream teachers who teach students with vision disabilities lack the basic understanding of how vision disability impacts learning (McKenzie et al., 2018). This means that teachers cannot tailor their teaching methodologies to suit the learning needs of students with vision disabilities. Teachers ought to be trained on how the loss of vision impacts learning and assess learners' needs prior to teaching them, in order to take the necessary measures to guarantee their full inclusion in the teaching and learning process (Sefotho et al., 2020; Sikanku, 2018). Additionally, they need to ensure that learners have access to instructional materials (Johnson-Jones, 2017). This means that such materials have to be in accessible formats such as braille, audio, tactile graphics, etc. They also need to ensure that their teaching methodologies are inclusive of learners with vision disability. There is a clarion call for teachers to adopt the principles of UDL, so that instruction should be designed from the outset to reduce barriers to learning e.g. (Craig et al., 2022b; Hartmann, 2015; Unluol et al., 2022). This is because, UDL offers “flexible options and scaffolds to ensure access for all learners” (Cook and Rao, 2018, p.1). Yet, almost all of the literature I reviewed point to the inadequate training of teachers for disability inclusive education in general and the teaching of learners with vision disability in particular. For instance, in the studies conducted by Zulch-Knouwds (2010) in Namibia and Habulezie et al., (2017), in Botswana, they reported that neither pre-service nor in-service teacher education adequately prepared teachers for teaching students with disabilities in general and vision disability in particular. This resulted in them not being able to adapt their lessons and teaching methods to ensure the meaningful participation of these students. Johnson-Jones (2017) asserts, however, that in order to compensate for lack of vision, students with vision disabilities need to be provided with opportunities to receive information in a multiplicity of ways, such as, through touch, hearing, taste and feeling. Not receiving adequate training meant that teachers could not provide such opportunities. This could mean that the students with vision disabilities were receiving a lower quality of education when compared with their sighted peers. This is confirmed by (Le Fanu et al., 2022) who reviewed 16 published and unpublished case studies of education provision for students with vision disabilities, in ten countries in Sub-Saharan Africa. They reported that 14 of the studies raised concerns about the quality of education provided to these learners.

Also, inadequate training could result in teachers being indifferent towards the education of students with vision disabilities as reported by Mwakyeja (2013), who conducted a study on the teaching of students with vision disabilities in inclusive classes in Tanzania. Findings reveal that, general education teachers have little knowledge about educating learners with vision impairment and so are not committed to teaching them. This study is similar to one conducted by Dakwa (2014), to examine the inclusion of students with vision disabilities within regular school settings from a Zimbabwean perspective. Inclusion was largely unsuccessful because teachers were also found wanting in knowledge related to the teaching of students with vision disabilities in mainstream settings and so became lackadaisical about including them in the teaching and learning process.

When teachers are not trained, their teaching pedagogies are bound to be deficient as was the case in Botswana where Habulezi et al. (2017), conducted a study to determine factors that influence the poor academic performance of learners with vision impairment in science subjects at a senior secondary school. They found that, among other things, deficient pedagogical practices are to blame for the low academic achievement of students with vision disabilities.

The findings in this study are contrary to a previous study conducted by Habulezi & Phasha (2012), in which they investigated the provision of learning support to students with vision disabilities in a secondary school in Botswana. The study revealed that teachers were generally very supportive and modified teaching and learning materials provided by the Department of Special Education, making them accessible for students with vision disabilities. This is an unusual finding because the other studies are unanimous in stating that the inadequacies in teacher education resulted in learners' academic needs being rarely met.

Inadequate training of teachers may result in them becoming unconcerned and shifting their responsibilities to sighted peers of the vision disabled students. In Nigeria, Brydges and Mkandawire (2017) investigated the perceptions and concerns about inclusive education among students with visual impairments, and discovered that teachers tended to shift their responsibilities to sighted peers of vision disabled students by asking the former to explain difficult concepts to the latter, dictate notes to them and assist in enabling the former navigate the school campus. This sometimes met with repudiation from sighted students and the students with vision disabilities subsequently shied away from making

such requests. This attitude was attributed to the fact that the teachers had not been trained to teach students with vision disabilities. The onus seemed to be on the students to strive to fit in rather than the teachers, changing their teaching strategies to include learners with vision disability, as espoused by UNESCO. This finding is similar to what Negash and Gasa (2022), reported when they explored the academic barriers that prevent the inclusion of learners with visual impairments in mainstream secondary education in Ethiopia. Although the head teachers of the schools in the study had done courses on inclusive education during their undergraduate degrees, the training they received was not focused on the inclusion of students with specific impairments. Besides, they had forgotten all they learned as they did not receive in-service training to build on their capacities. This points to the need for continuous professional development.

These insufficiencies in teacher education resulted in teachers adopting one-size-fits-all teacher-centred approaches which did not work for all students, especially those with vision disability. This is indicative of the fact that, apart from not having the requisite knowledge in a disability specific curriculum in relation to vision disability, they did not also understand the heterogeneity of vision disabilities, the uniqueness of each student and that these call for tailor-made strategies intended to meet the array of needs the different learners have. Thus, there is also the need for class sizes to be such that teachers know individual learners, in order to adequately respond to their needs. However, class sizes proved to be another stumbling block.

### *2.12.2 Large Class Sizes*

One of the challenges in teaching students with disabilities including those with vision disability in mainstream settings is the issue of large class sizes. Cockburn et al (2017), argue that when the student/teacher ratio is high, chances are that students with disabilities will rarely receive personalised attention. In Ethiopia, Negash and Gasa (2022), reported that class sizes were generally large, with the student teacher ratio of 70:1. This led to a lot of noise, challenges in attending to individual needs and in classroom management problems. As a result, teachers constantly shifted their responsibilities of supporting students with vision disabilities to their sighted peers. Unfortunately, the peers sometimes disinclined to offer the much-needed assistance as they felt that their own learning would suffer a setback. Although the student/teacher ratio in another school in Ethiopia was much lower - 42:1 – as reported by Habulezi et al. (2017b), this still appeared to be problematic

to the teachers because they did not possess the skills needed to include students with vision disabilities in subjects requiring experiments. Without the support of a specialist teacher during Biology experiments, vision disabled students were requested to go to the special education department and so did not participate in the experiments. The implication is that these students only received part of the curriculum in Biology which certainly put them in a disadvantageous position when it came to evaluations. Apart from the challenges teachers faced in teaching students with vision disabilities, there were also barriers to learning which hindered the full participation and hence achievement of students with vision disabilities.

### **2.13. Barriers to Learning**

It has been widely acknowledged that the learning environment can pose significant barriers to access, participation and achievement for students with vision disabilities such as the curriculum, its mode of delivery and assessment methods which are generally designed for sighted students. (Cain & Fanshawe, 2019; Johnson-Jones, 2017; Miyauchi, 2020; Morris & Sharma, 2011). Students with vision disabilities, particularly those whose impairments are severe or profound, face a multiplicity of challenges in accessing and participating in teaching and learning, which result in low achievement levels as has been previously discussed. These challenges result partly from the consequence of vision impairments, especially blindness, which prevent the learner from experiencing and doing things which their sighted peers experience and do, through incidental learning (Opie, 2018; Zulch-Knouwds, 2010), but more so from the learning environment. These barriers include the curriculum content, access to it and the manner in which it is taught (Simui et al., 2018).

#### *2.13.1 Rigid Curricula and Time Constraints*

In very basic terms, UNESCO (2016b, p. 8) defines curriculum as “ a description of the what, why, how and when students should learn”. She further states that

*It is the curriculum that determines to a large extent whether education is inclusive, thus playing a significant role in ensuring that provision is equitable. It is the curriculum that provides the structure for the provision of quality learning, especially where teachers might be under-qualified and inexperienced, their classrooms under-resourced.*

Furthermore, curriculum content and the way it is delivered according to Nseibo (2021), can pose barriers to learning and participation, if the learning needs of all students are not

considered. Inflexible curricula which are mainly designed for sighted learners characterise schools today and these present barriers to learning for most students, especially those with disability in general and vision disability in particular. Hitchcock et al. (2002), call on curriculum designers to recognise the diversity in student populations and build in options to support student differences. Failure to do so, creates barriers to students who do not fall within the so called core group, such as students with vision disabilities (Dudley-Marling & Burns, 2014).

In spite of the call for flexibility in school curricula, schools continue to deliver curricula that speak to sighted students, which are not only inflexible but are also generally examination oriented and inaccessible, thus falling far short of meeting the learning needs of students with vision disabilities. For instance, in Ethiopia, Negash and Gasa (2022), observed that the schools in their study had the same curricula for all students and teachers did not differentiate instruction for students with vision disabilities, thus leaving the learners feeling left out (Watermeyer et al., 2022). The lack of differentiation was further compounded by time constraints. Teachers argued that they had heavy workloads and some said they additionally had to do alternative work in order to make ends meet. This implied that their pay packages were not such on which they could survive so they engaged themselves in other income generating activities to the detriment of the education of vision disabled students. Similarly in Lesotho, Ralejoe (2019), reported about the rigidity of the curriculum and its inability to address the learning needs of students with vision disabilities. On the same note, Zulch-Knouwds (2010), found out in Namibia that not only was the curriculum inflexible and examination oriented but it also failed to address the learning needs arising from the impairments of the students with vision disabilities.

There is growing acknowledgement that the core curriculum is not sufficient to meet the learning needs of students with vision disabilities and so they need extra support and instruction so that they can learn skills to cope with the challenges which arise from vision loss. These skills are in the areas of orientation and mobility, daily living, socializing, recreation and leisure, career education, compensatory access, sensory efficiency and skills in the use of technology. Lohmeier et al. (2009), refer to these as the expanded core curriculum (ECC), which are the unique specific functional and educational needs resulting from vision disability (Opie (2018) as I describe next.

The ECC as it is known in the US and elsewhere and in other contexts as the Curriculum Framework for Children and Young People with Vision Impairment as known in the United Kingdom (McLinden et al, 2016), refer to the generally accepted nine areas of instruction that children who are visually impaired (i.e., those who are blind or have low vision) must learn through explicit instruction, to equip them for independent living in adulthood. The ECC has nine core skill areas which offer the opportunity for experiential learning. In the absence of these, students with vision disability will have a limited understanding of concepts and so will face challenges in academic settings and later on in life (Hatlen, 1996; Sapp & Hatlen, 2010). I discuss the nine areas in the ensuing paragraphs.

### **Compensatory Skills**

Compensatory skills are the skills which students with vision disability need in order to access the school curriculum and participate in teaching and learning on a par with their sighted peers. These include skills in the usage of braille and other technology, accessing tactile maps or diagrams, good listening skills, organisational skills, the use of models in place of real objects etc. to make up for the lost opportunities to learn incidentally. Teachers are called upon to be creative in order to ensure students with vision disability have access to and participate in the teaching/learning process (Opie, 2018).

### **Social Interaction Skills**

Social interaction skills begin in infancy, with children learning to keep eye contact, make gestures and smile at their parents or caregivers and these ultimately lead to social development including the building of self-esteem and the ability to socialise with peers. For sighted children, these skills are learned casually and incidentally but children with vision disabilities especially blindness are unaware of these visual non-verbal means of communication. Therefore, instruction in these areas need to be well thought out, conscious and precise. (Lohmeier, Keri Lee 2005; Opie, 2017).

### **Independent Living Skills**

Skills such as personal hygiene, food preparation, household chores and money management are essential daily living skills for independent living. While most sighted persons learn these skills through observation and imitation, those with vision disability need to be intentionally and systematically taught these skills both at home and in the

classroom or better still, in real life situations and in ways that will enhance their independent skills and concept development (Lohmeier, 2005a) .

### **Recreation and Leisure**

In the main, students with vision disability scarcely participate in recreational and leisure activities. The reasons advanced for this status quo, include the claim that students with vision disability are “unable” or unwilling to participate. Recreational activities include physical education and often times, teachers of this discipline argue that they were not taught how to teach sporting activities to students with vision disability. L. Lohmeier (2005a) however notes that recreational activities promote physical fitness, build self-esteem, socialisation skills and promote independent living among students with vision disability. She argues that with modifications made on the environment and proper orientation, students with vision disability can meaningfully participate in recreation and leisure activities (Ntim et al, 2021).

### **Career Education**

Literature on life after schooling for young vision disabled people reveal that they hardly find employment. This in itself, can be a disincentive to schooling. While there may be numerous reasons advanced for this status quo, career education for them is often times not available. Considering that hands-on and activity based or experiential learning have been found to be the most beneficial to learners with vision disability, it is vital that they are exposed to different places of work, where they can talk to the staff and perform related tasks in order to understand the concepts and specific skills involved so as to make informed career choices (Ntim et al, 2021).

### **Assistive Technology**

Assistive technology (AT) has opened the world to persons with disabilities by enabling persons with vision disability to access information that was previously inaccessible. AT has the ability to empower people with vision disability to surmount some barriers to learning, independence and employment. Screen readers, braille displays and note takers have enabled persons with disabilities to access information previously available only to sighted persons. These should be made available to students with vision disability who should be taught how to use them (Lieberman et al, 2014).

## **Sensory Efficiency Skills**

Research has revealed that many people with vision disability have some amount of functional vision. This, in addition to the use of visual memory in the case of adventitious blindness and other senses such as hearing, touch, smell and taste, can aid students with vision disability in acquiring literacy skills and skills in concept development. There is an urgent need for students to be taught how to use what remains of their functional vision, combined with the other senses to make sense of the world around them (Opie, 2018).

## **Self-Determination**

Becoming an effective advocate for themselves is critical for students with visual impairments and complex disabilities. Self-determination skills are developed based on an individual student's own needs and goals (Lohmeier et al., 2009).

## **Orientation and Mobility Skills**

Orientation and mobility (O&M) skills enable the person with vision disability, to use their senses to know their position in space and be able to move and travel safely from point A to point B. This is a skill that sighted persons use as a matter of course but need to be taught to persons who are blind by professionals or teachers trained to do so. The use of mobility canes, guide dogs and sighted guides, aid persons with vision disability to navigate their environment. In fact, O&M is considered a critical aspect of the ECC because it does not only enable the student with vision disability to move safely and efficiently in the environment but acquiring the skills, provides some level of independence and also instils confidence in the learner. This is especially important in schools with classes located in story buildings and outdoor spaces which are rugged, typical of most schools in the African context as literature revealed (Opie, 2018).

The ECC, according to Hatlen (1996); Lohmeier (2005b); McKenzie et al. (2018) & Opie (2018), are central to the needs of students with vision disabilities and if taught alongside the core curriculum, can significantly increase the chances of students with vision disabilities having appropriate educational opportunities. In teaching both the ECC and the core curriculum, teaching practices should be informed by the learners' needs. Sadly, the reviewed literature revealed that access and participation were far from the reach of

students with vision disabilities because teachers' teaching practices were inaccessible to this group of learners.

### *2.13.2 Inaccessible Teaching and Learning Practices*

Extant literature, e.g. Miyauchi (2020); Cain and Fashawe (2019); McKenzie et al. (2020; Watermeyer et al. (2022), reveals that students with vision disabilities often find themselves in learning spaces where the mode of learning is through vision, with few teachers who have the skills to teach them. For instance, in the study carried out by Habulezi (2017), as previously mentioned, some teachers did not speak loud enough and neither explained nor read what was illegibly written on the board, so that students with vision disabilities could benefit. Where teachers had teaching aids for sighted students, there was no equivalence of these in accessible formats for those with vision disability. Similarly, in Zimbabwe, Agesa (2014), found that teaching was mainly teacher-centred where teachers adopted textbook pedagogies and lectured most of the time. Also, in Namibia Zulch-Knouwds (2010), found out that teachers had very little information about the students with vision disabilities and so did not consider their learning needs when preparing and delivering lessons. These findings reveal that the teachers in the studies were oblivious to the fact that students with vision disabilities, especially those who are blind, benefit from experiential learning and need to use their other senses to experience the world around them. Without opportunities for tactual and experiential learning, it becomes challenging for students who are vision disabled, particularly those who are blind, to understand concepts (Cain & Fanshawe, 2019; Negash, 2017). For students with vision disabilities to effectively participate in education, the need for appropriate and accessible resources is critical. Without these, teaching and learning could become herculean tasks.

#### *2.13.2.1 Teacher Centred Pedagogy*

According to IGI Global, an international academic publisher, teacher-centred pedagogy refers to instructional strategies that position the learner as a listener and the teacher as the expert. This approach is characterised by lectures, direct instruction, demonstrations, drills, practice and rote learning (Otukile-Mongwaketse, 2018). Such an approach is characteristic of classrooms in resource limited contexts (Altinyelken, 2010; Saber, 2018), such as Cameroon. My review of the literature confirmed this assertion because teacher-centred pedagogy was found to be the predominant approach which teachers used. This often leads to a one-size-fits all pedagogy (Altun, 2023) and so is counter-productive to

vision disabled students who mostly rely on hands-on activities and benefit from experiential learning in order to access the curriculum and meaningfully participate during lessons, (Sefotho et al., 2020). Saber (2018, p. 1) further links teacher-centred pedagogy to “behaviourist approaches which rely heavily on the teacher as the content expert who is supposed to teach and test learners as a process for learning the course materials”. In this dispensation, the learner is a passive listener who relies on memorising facts and regurgitating them when the need arises such as during evaluations, whereas she is supposed to co-construct knowledge with the teacher (Otukile-Mongwaketse, 2018). As such, McCabe and O'Connor (2014), argue for a student-centred pedagogy which encourages students to have more responsibility for their learning and provides teachers with the opportunity to relinquish traditional teaching methods which come with a heavy responsibility on them. According to Altinyelken (2020) & Vavrus et al., (2010), there has been an unprecedented move towards student-centred pedagogy in Africa, which is sometimes hailed as a panacea for traditional methods of teaching and learning (Sriprakash, 2010). Yet Schweisfurth (2013, p. 1), argues that “despite the rich promises it offers and its proliferation as a global phenomenon and national policy, there is evidence that implementation and changes to classroom practice have proved to be problematic”. This is especially so in LMIC countries with overcrowded classrooms, very few resources and teachers who are not adequately trained (Otukile-Mongwaketse, 2018). According to Altun (2023), both teacher-centred and student-centred pedagogies have their merits and demerits and so teachers should combine the two by using a variety of teaching methodologies to better meet the needs of students. Otukile-Mongwaketse (2018), posits that such methodologies should be hinged on the cultures and contexts of the students and consider their learning needs. Florian and Linklater (2010), take this further by arguing for inclusive pedagogies which focus on extending what is ordinarily available as part of the routine of classroom life, as a way of responding to differences between learners, rather than specifically individualising for some. Inclusive pedagogy represents a shift in thinking about teaching and learning from that which works for most learners along with some adaptation and modifications for those not considered to fit the norm, to an approach to teaching and learning that involves the “creation of a rich learning environment characterised by lessons and learning opportunities that are sufficiently made available to everyone so that all are able to participate in classroom life” (Florian & Linklater, 2010, p. 3).

### *2.13.3 Lack of Learning and Teaching Support Materials*

One of the major barriers to education for students with vision disabilities is the lack of LTSM. The Department of Education of the Republic of South Africa defines learning and teaching support materials (LTSM) as “all material that facilitates learning, including electronic material and all learning material that aid learning and teaching for learners with special educational needs. Such materials include textbooks, library books, charts, models, computer hardware and software, television, video recorders, video tapes, home economics equipment, science laboratory equipment, musical instruments, learners’ desks and chairs”(Republic of South Africa, 2011, p. 9).

For learners with vision disability, all print material should have the braille equivalent and computers should have text to speech software to enable access to e-books and other learning materials. Models and charts also need to be in tactile format to ease accessibility. Yet, literature reveals that not only do schools in low-and-middle income countries rarely have these resources in accessible formats but that the few schools that have some of the resources do not put them into use because the teachers are not trained on how to use them (Lynch et al., 2012). For instance, in Lesotho, Ralejoe (2019), noted that students with vision disabilities did not have brailled textbooks in all the subjects and relied on their sighted peers to dictate notes to them from print material. The situation was worse in Ethiopia where a study by Negash and Gasa (2022) revealed that sighted peers and teachers of students with vision disabilities had to read and write for them because there wasn’t a single resource or braille services for vision disabled students and this resulted in a failure to include these students in teaching and learning processes. These findings are contrary to what Habulezi and Pasha (2012), found in Botswana where they conducted a study to investigate the nature of learning support provided to learners with visual impairment. They reported that the school was equipped with lots of assistive technology, including audio and brailled books, which enabled students with vision disabilities to access the curriculum and participate in teaching and learning. Similarly, in Ghana, Opoku et al (2022), sought, to understand the perspectives of students with visual and hearing impairments on resource availability in regular schools and reported that those with visual impairments were more likely to report resource availability in regular schools to promote their learning than those with hearing impairments. Apart from the limited availability of LTSM, negative attitudes constitute a major barrier for students with vision disabilities in the education space (Johnson-Jones, 2017; Nseibo, 2021).

#### *2.13.4 Negative Attitudes*

Hellen Keller is often quoted for saying, “The chief handicap of the blind is not blindness but the attitude of seeing people towards them” (Rappaport, 2016). Worthy of note is the attitude of role players such as sighted students and teachers towards students with vision disabilities. For instance, Zulch-Knouwds (2010, p. 103), conducted a study on including students with vision disabilities in a mainstream school in Namibia and reports that the attitude of teachers and sighted peers of students with vision disabilities was generally negative because the former considered the latter not to fit the perceived norm, which led to an “us and them tendency”. Additionally, vision disability is often equated with low cognitive abilities (Nyugap, n.d.). Such a belief finds its roots in misunderstandings and stereotypical notions of disability. Mik-Meyer (2016) and Nseibo (2021), underscore the importance of understanding how communities view disability as this influences their attitudes towards persons with disability.

In Botswana, Habulezi et al. (2017), found that teachers did not consider it their responsibility to teach students with vision disabilities, seeing it as the task of special education teachers and so failed to record marks after evaluation exercises. While this form of negative attitude seems to be subtle, the experience in Nigeria, as reported by Brydges and Mkandawire (2017), was quite overt. Students with vision disabilities were subjected to mockery and were harassed by their sighted peers, thus poking holes in their sense of self-esteem. Similarly in Ghana, Asamoah et al (2018), investigated the attitudes of students with vision disabilities, their teachers and sighted peers towards inclusive education. They reported that, while teachers held students with vision disabilities responsible for the mess in the dormitories, their sighted peers served them less food, refused to support them in class and made a mockery of them. Seeing learners with vision disability as different could result in sighted persons “othering” those with disabilities which leads to discrimination and stigma. Canales (2000), validates this by referring to “exclusionary othering” (p. 1) which uses power within relationships for dominion and subordination, resulting in alienation, marginalisation, decreased opportunities, internalised oppression and exclusion. Borrero et al (2012), argue that schools are the places where this form of othering prevents the students who are perceived to be different, such as vision disabled students, from “creating meaningful academic identities” (p. 1), where such identities enable the students to perceive themselves as intellectually capable

with the potential to achieve at high levels. Inaccessible physical spaces exacerbate the alienation of students with vision disabilities as portrayed in the literature.

### *2.13.5 Inaccessible Physical Spaces*

Donohue and Bornman (2014) postulate that unconducive classrooms and school environments pose barriers to learning for students with disabilities including those with vision disability. Yet, in a study in Ethiopia on the academic barriers that prevent the inclusion of learners with vision impairment in Ethiopian mainstream schools, Negash and Gasu (2022), discovered that the two schools in which they conducted their study were not strategically located and this posed significant barriers to learning for students with vision disabilities. Not only did the classrooms face the main road but the noise from passing trucks reverberated in their classrooms, thus interfering with the teaching/learning process. In addition, infrastructural facilities such as toilets, water, playgrounds, lights, laboratory rooms, and ICT rooms were either inaccessible, defective or inferior. The situation in Lesotho was dire. The study carried out by Ralejoe (2019), revealed that the physical environment was an accident waiting to happen. The teachers of the school described the infrastructure as “hostile” (p. 1), with high chances of vision disabled students falling into furrows or bumping into trees that were haphazardly planted on the school campus. Long and steep flights of stairs were also potential hazards for the learners. The absence of skills in O&M for students with vision disabilities in both schools made the situation worrisome for the learners and prevented them from freely navigating their campuses like their sighted peers.

## **2.14 Disability and Poverty**

Another malaise in the education space which makes it harder for most children, including those with vision disability, to receive quality education that is tailored to their needs in Sub-Saharan African countries like Cameroon ,is poverty (Sukati, 2020). Karisa (2020), asserts that the cost of schooling for children with disabilities is generally far more expensive than for their non-disabled peers. Literature (Braithwaite & Mont, 2009; Groce et al., 2011; Palmer, 2011), has underscored the symbiotic relationship between poverty and disability. In other words, disability can lead to poverty and poverty can also lead to disability. Statistics reveal that globally, approximately one billion people live with disabilities (Jolley et al., 2018), of which 80% are in Africa and Asia (Opoku et al., 2017).

Studies have also revealed that most people with disabilities are economically and socially marginalised and deprived (Filmer, 2008), although they often require more resources and support to attain the same outcomes as non-disabled persons. Thus, they are more likely to face tougher economic conditions leading to limited opportunities to access education and other basic needs in life. As a result of the economic disadvantage, persons with disabilities are likely to incur additional costs because of their disability. These may include the need for assistive devices and personal support, cost of medical care and transportation and, in some instances, costs associated with having to attend school away from their home base (Mitra et al., 2013).

For children with vision disability in Cameroon, their basic scholastic needs are usually more expensive e.g. writing frames, styluses and paper when compared to exercise books and pens for their sighted peers. Vision disabled students may need additional resources such as assistive devices. They may need a means of transport to school, for safety reasons, especially if the school is located far from home, whereas their sighted peers would usually attend their neighbourhood school. In most cases in Africa, including Cameroon, vision disabled children attend residential schools which are costly (McKenzie et al., 2018). Families with low incomes or no incomes, often have to make the choice between sending their children to school and providing for other crucial basic necessities such as food and health care (Mitra et al., 2013). Even where children do not pay tuition, schooling comes with additional costs such as books, uniforms and transportation (Kamga, 2011). This may explain why not all children with disabilities, including those with vision disability, attend primary school even though primary education is (Kamga, 2013) compulsory. The main reason is that of unequal access to resources as a result of poverty.

## **2.15 Conclusion**

In this chapter, I discussed the relevant literature to the current study, in order to give a context to the research. I began by defining key terminology, inclusive education in Cameroon, the international and national instruments which support the education of students with disabilities in general and those with vision disability in particular within the context of Cameroon. I also discussed the education of students with vision disabilities within the African context, with a focus on the challenges teachers face in teaching students with vision disabilities and the barriers to learning that these students face in mainstream settings. Additionally, I discussed the ECC as an essential curriculum for vision disabled

learners to enable them to experience schooling more holistically and to prepare them for the world of work and for life in society in general. I ended the chapter with a discussion on the interdependent relationship between disability and poverty and how this negatively impacts schooling for children and young people with disabilities, including those with vision disability. Having discussed the current and relevant literature associated with the phenomenon under study, I now turn to the philosophical stance and the theoretical frameworks which illuminate the phenomenon.

## **CHAPTER 3: LOOKING THROUGH THE LENS**

### **3.1 Introduction**

The philosophical thought processes which guide the conduct of a study including the choice of research strategy, formulation of the research problem and questions, data collection, processing, analysis and interpretation are known as the research paradigm (Kuyini et al., 2016). The lens or lenses which a researcher decides to use to steer the research is determined by their philosophical standpoint. This study makes use of three lenses to understand the phenomenon under study. These are Disability Studies in Education (DSE), Bronfenbrenner's Ecological Systems Theory (BEST) and Postcolonial Theory (PCT). Reeves et al. (2008), posit that researchers can use multiple theories to examine social issues and complex problems with each one focusing on different aspects of the problem or social issue. It is on the basis of this that this study used DSE, BEST and PCT to examine the phenomenon under study. In order to understand how the learning needs of students with vision disability are understood and accommodated in mainstream secondary schools, DSE, as a lens will illuminate what happens in the classroom, BEST will throw light on the environment in which teaching and learning take place while PCT will highlight the colonial educational legacy in Cameroon and how it influences education provision for students with disabilities in general and vision disability in particular. This chapter has two sections; In the first, I will discuss my philosophical paradigm while in the second, I will elucidate my theoretical frameworks.

### **3.2 Section One: Philosophical Paradigm**

A research paradigm is a philosophical way of thinking which has its origins in Greek, meaning, "pattern" (Kuyini et al., 2016). Thus, a paradigm is a pattern for conducting research. According to Mackenzie and Knipe (2006), a paradigm in research, is the researcher's view of the world around him or her. Lincoln and Guba (1985a) highlight ontology, epistemology, and methodology as the essential elements of a paradigm. These elements comprise the basic, assumptions, beliefs, norms and values of a chosen paradigm (Kuyini et al., 2016). Ontology is a philosophical belief system about the nature of social reality. In other words, what can be known and how can it be known. It is concerned with the nature of social reality and whether it is out there to be discovered or it is socially constructed. As an example, social phenomena found among students with vision disability are being restricted by preconceived ideas that learning can only take place through visual

pathways, the reason they are thus viewed as intruders in a space for sighted learners. Epistemology, coined from the Greek work, *episteme*, meaning “knowledge”, seeks to discover how reality is known and to determine what counts as knowledge (Kuyini et al., 2016). It seeks to understand how knowledge can be acquired and how it can be communicated to humanity. It seeks insight into what constitutes knowledge and the relationship between the ‘knower and would be known’. (Kuyini et al., 2016, p. 17) These insights are critical because they enable researchers to position themselves in the context of the research, through interactions with the research participants, so that they can discover the new knowledge, considering what is known. For instance, in this study, my approach to knowing how the learning needs of students with vision disability are understood and accommodated within mainstream schools, was through interactions with the various role players in a given context. Methodology refers to how the researcher is going to use their way of thinking to know what is there to be known (Wilson, 2001), or it can be seen as the approach to systematic enquiry (Merriam & Grenier, 2019). It involves the various actions which the researcher will take in studying the research problem (Kothari, 2004). It is for these reasons that I adopt the interpretivist stance in this research because interpretivism holds that the researcher and reality are inseparable.

### **3.2.1 The Interpretive Paradigm**

Nickerson (2022) posits that interpretivism is a sociological approach which states that understanding the beliefs and actions of individuals is crucial to understanding social phenomena. In this study, this approach enabled the researcher to appreciate what research participants believe to be the learning needs of students with vision disability and how these beliefs influence their actions of accommodating the students’ learning needs in mainstream classrooms. Thanh and Thanh (2015), posit that, with the interpretive paradigm, the researcher gains insight into the world through the perceptions and experiences of the study participants. It is through these perceptions and experiences that the researcher generates data which respond to the research questions and enable her to construct and understand reality. The interpretive paradigm aims at delving into the minds of the research participants to derive meaning from their thoughts or the interpretations that they are giving to the context and the happenings therein (Kuyini et al., 2016).

The interpretive paradigm seeks for an in-depth understanding of the complexities which surround social phenomena and understand how humans experience the world in which

they live (Guba & Lincoln, 1989). In the interpretive paradigm, the researcher is intrinsically linked to the data collection because it is through interacting with the research participants that they can meaningfully understand the phenomenon under study. This means that the researcher's values and beliefs will inform the way data is collected and analysed.

Thus, based on my research question, I located the study's ontology and epistemology in the interpretive paradigm. Interpretive ontology is relativist, meaning that truth is manifold and its epistemology is subjective, meaning that reality is constructed by the meanings and interpretations that we accord to our experiences of the world (Yilmaz, 2013). To construct such reality, the researcher has to interact with the study participants through engagements among the participants themselves and between the participants and the researcher because the researcher is an integral part of the study subject and its methodology (Kuyini et al., 2016). Yilmaz (2013), describes the methodology of an interpretive paradigm as naturalistic where the research is conducted in natural settings, yielding rich qualitative data. My choice of the interpretive paradigm for this study was influenced by the fact that I was not out to seek particular answers to a phenomenon but to understand a social process and how it unfolds with the passage of time. The interpretive paradigm enabled me to investigate in real time how the learning needs of students with vision disability were understood and accommodated in a mainstream setting, through the collection of in-depth data from information-rich participants, in their natural setting, thereby giving me the opportunity to undertake deep reflections on the data and give meaning to it. The interpretive paradigm enables the researcher to explore hidden reasons behind social processes such as the education of students with vision disability. With this stance, I now present the lenses which guided my examination of the phenomenon under study.

### **3.3 Theoretical Frameworks**

Kivunja (2018), postulates that, a theoretical framework consists of the lens or lenses which researchers use to examine and analyse their data, interpret the findings, discuss them and make recommendations. In this section, I discuss the theoretical frameworks which guided the data collection and analysis processes of this study.

#### **3.3.1 Disability Studies in Education**

Disability studies in education (DSE) is a fairly new concept in the field of education and practice related to disability research. DSE is an offshoot of disability studies (DS) which

focuses on how disability is defined and represented in society. DS supporters hammer on the fact that disability is not a characteristic that resides within a person but that cultures and societies construct deviants by labelling certain persons as aliens (Stiker, 2019; Thomson, 2017). Espoused by Susan Gabel in the year 2000 (Connor & Gabel, 2013), the origins of DSE are rooted in the social model of disability. Gabel (2005), defines DSE as “the use and application of disability studies assumptions and methods to educational issues and problems” (p. 10). DSE scholars and practitioners set out to debunk the myths surrounding disability and to challenge the medical model of disability which views disability as innate within an individual, preventing that person from participating in community life. DSE scholars and practitioners promote the social model of disability which is set on the premise that persons with impairments are disabled by the societies in which they find themselves. It also critiques special education which is based on the deficit medical model. At this point, it will be necessary to define the medical and social models of disability and how these views shape peoples’ understanding of disability, thereby influencing how society treats persons with disability.

### *3.3.1.1 The Medical Model of Disability*

Proponents of the medical model of disability (MMD), otherwise known as the individual model of disability (Shakespeare, 2006), believe that disability is fixed within an individual and prevents that person from participating in the life of his or her community. The MMD objectifies persons with disabilities, viewing them as dependent, sick and pathetic, needing help and care (Retief & Letšosa, 2018). It engenders low expectations of persons with disabilities and focuses on their inabilities rather than the things in society that disable them. The MMD perpetuates inequalities in society, seeing persons with disabilities as abnormal and those without disabilities as normal. This binary view implies that those with “abnormalities” need to be treated, cured or rehabilitated in order for them to participate in their communities. These narrow perspectives of persons with disabilities have found their way into educational spaces, giving rise to special or segregated education provision for learners with disabilities. These learners are then placed in the tutelage of “special teachers” who seemingly have all the solutions to normalise the learners (Brisenden, 1986). These “solutions”, involve diagnosis and the design of interventions for these learners considered to be different, even though the teachers may not understand the impairment and what the real needs are, from the learners’ perspectives. Faced with a rigid curriculum designed for sighted learners and absolutely no learning materials in accessible formats,

education for these learners is a struggle. There is an implicit message that the education of vision disabled students in particular is very difficult and not important. This is affirmed by Watermeyer (2014) who, in relation to the provision of resources in educational spaces, says:

*When others are provided for and we are not, somewhere inside the question emerges: 'what is it about me which means that I must be left out?' The question plays with the idea that I must be less deserving (pg. 3).*

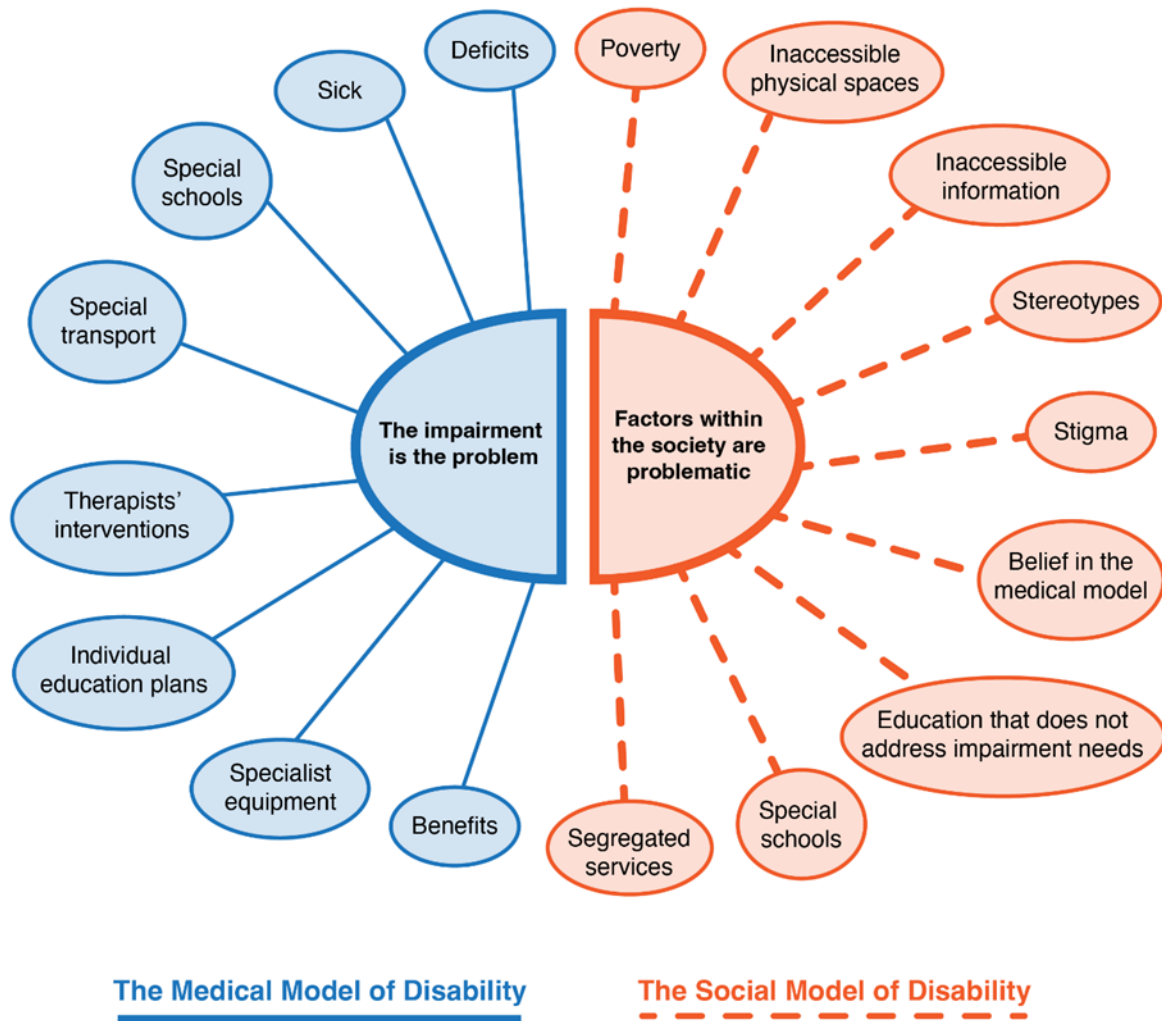
Lack of access to learning material can be equated to Watermeyer's "book famine" which, he says, promotes the status quo of disability and deprivation (Watermeyer, 2014). He adds that not being able to read because one is deprived of access to reading material means that one cannot participate in activities of the world. Thus, persons with disabilities are made to feel that they are deprived because of what is "wrong" with them. The social model of disability, however, refutes this assertion by foregrounding the one-track minded organisation of society as the impediment to participation and not the impairment within the individual as I describe next.

### *3.3.1.2 The Social Model of Disability*

On the flip side of the coin, proponents of the social model of disability (SMD), a term coined by Mike Oliver in 1983 (Shakespeare, 2006), assert that people are disabled by the barriers that society erects for persons with impairments and not the deficits within them (Gallagher, Connor, & Ferri, 2014; Oliver, 1984). It follows therefore that it is not the inability to read print material that prevents a student with vision disability from accessing reading resources but the failure to produce such resources in braille or alternative accessible formats, that prevents the student from reading. The social model of disability originated as a response to the MMD discussed above (Barnes, 2012; Finkelstein, 2001; Shakespeare, 2006) which laid emphasis on treatment and rehabilitation by "competent" authorities with the aim of fixing or rehabilitating the individual thus, rendering them fit for participation in society. The SMD focuses on identifying and removing barriers which oppress and exclude persons with disabilities (Shakespeare, 2006), within their communities. The social model makes a distinction between impairments and disability. The SMD proposes that a disability is a result of the interaction of the impairment with environmental factors which are often exclusionary, leading to participation restrictions. It then places the responsibility of eliminating these barriers which include but are not limited

to physical, communication, attitudinal, cultural, on society as an issue of social justice (Shakespeare, 2006) which should be addressed in order to enable persons with impairments to participate on an equal footing with their non-disabled peers. According to the SMD, environmental barriers, discriminatory and exclusionary practices constitute oppression. Thus, the SMD aims at identifying and removing the barriers to participation. Therefore, for students with vision disability, role players in education need to identify the barriers to participation in teaching and learning and the school curriculum in general which deprive vision disabled students from their right to quality inclusive education which should be upheld as sacrosanct. The SMD has significantly impacted educational spaces (Anastasiou & Kauffman, 2013; Baglieri et al., 2011; Shakespeare, 2006), by shifting perception and attitudes from seeing the learner with a disability as the problem to problematizing the way schools are set up, organised and run, as “the impediments that bring about disparities, and inequalities in access, participation and achievement and learning processes and outcomes” (Ainscow, 2020b, p. 3), for students with disabilities including those with vision disability. Suffice it to say that the social model has shaped education provision in schools the world over, including Cameroon.

A juxtaposition of the two models reveals that the proponents of the MMD see the disadvantaged and discriminatory positions of persons with disabilities as inevitable outcomes of their conditions. However, advocates of the social model such as Barnes (2012), challenge this view by seeking to highlight the plethora of barriers which incapacitate persons with disabilities in society as a form of oppression (Shakespeare, 2006; Swartz et al., 2018; Watermeyer, 2014). This diagram best illustrates these differences:



**Figure 2: A juxtaposition of the medical and social models of disability (Jes Graham)**

In line with DSE, I argue that all human beings are born equal and no one should be deprived of the rights to quality education. Therefore, education provision for vision disabled students, like for all other students should be aimed at developing their full potential. The focus of this study, is on the education of students with vision disability in mainstream secondary schools in relation to the barriers that prevent them from accessing the curriculum, participating and achieving on an equal basis like their sighted peers. DSE enabled me to deviate from a medicalised, psychological and legalised notion of disability to a social, cultural and historical one. It enabled me to examine how the shift towards inclusive education in Cameroon has impacted on the educational experiences of students with vision disability. For instance, were educational practices reviewed in order to identify, address and respond to the individual needs of students with vision disability? DSE advocates place disability within a social and political context and focus on the

effective inclusion of learners with vision disability as an issue of human rights and social justice (Baglieri et al., 2011; Connor et al., 2008; Taylor, 2006). DSE is based on a social conception of disability that identifies and addresses barriers in attitudes, environmental design, actions and practices that exclude persons with disabilities. In this study DSE will enable me to examine the attitudes of role players towards vision disabled students, the environment in which learning takes place and the extent to which the actions and practices of the school are inclusive of these students.

A hallmark of DSE is to reconfigure the way in which persons with disability and disability itself is perceived within education and to change focus from the inabilities of persons with disabilities to the barriers in the learning environment which render people disabled. For instance, DSE supporters advocate for the provision of accessible education to students with vision disability by challenging role players to identify the barriers in the school system which disable learners, thereby preventing them from participating and achieving on an equal footing with their non-disabled peers. Connor and Gabel (2013), summarise this by saying that instead of schools working desperately to locate deficits within learners, “more can be gained by holding a mirror to the institution of schooling and its commonplace practice” (P. 4). DSE scholars argue that the disability-as-deficit notion cannot be used as the basis for understanding the lived experiences of persons with disabilities because it has the tendency to “pathologise difference and rely upon expert knowledge from physicians, special educators and rehabilitation counsellors to remediate difference”(Gabel, 2005, p. 1). In relation to this study therefore, disability-as-deficit cannot be used to justify why students with vision disability receive an inferior quality of education. Rather, role players ought to overhaul the school system to ensure that the needs of all learners are addressed in equitable and meaningful ways (Ainscow et.al., 2013; Smith et al., 2017).

DSE scholars also highlight access as crucial to the societal inclusion of persons with disabilities, including those with who are vision disabled. Literally, access describes the ability to enter into, move about and within, and operate the facilities of a site and is often associated with architectural features such as ramps, lever-shaped door handles, etc. In education spaces, access will go beyond architecture to access to the curriculum, teaching and learning practices, including evaluation methods and LTSM. Within the DSE stance, focusing on access is a shift away from attempts to fix or cure disability towards an

emphasis on social and legal interventions. Access focuses on institutional and material change and not on correcting the disabled body (Johnstone, 2012).

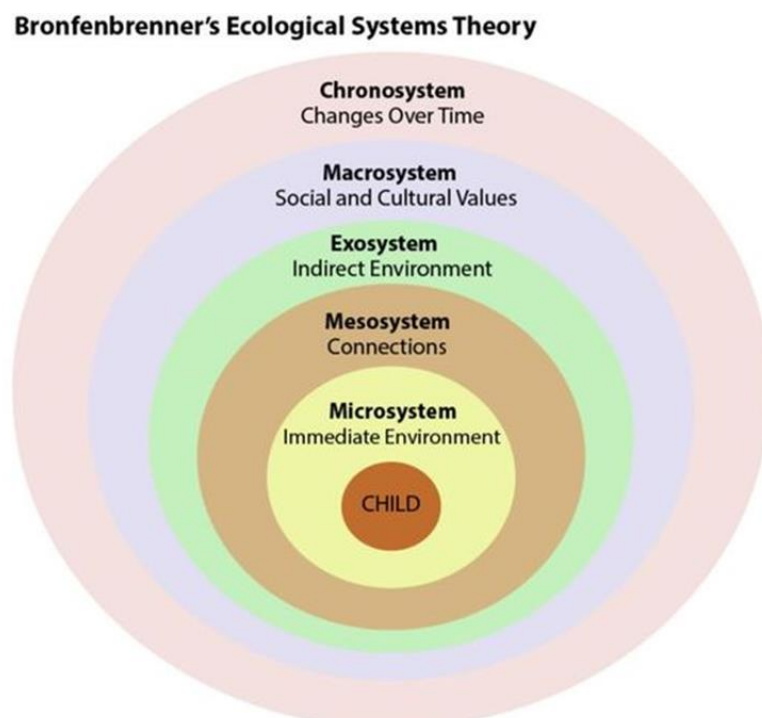
DSE hinges on the tenets of the social model of disability which looks at disability as a form of oppression (Tremain, 2005), as earlier stated. Baynton (2013), corroborates this by asserting that disability has been a prevalent justification of inequality in society. In the light of this study, students with vision disability receive an inferior quality of education on the basis of their impairments. Within the medical model, the view is to fix or normalise persons with disabilities but Skrtic (2005), argues that if a school system focuses on “normalising” the students, then the students are seen as problems in the first place. Rather than focusing on changing the students, the school system needs to change to include all learners in meaningful ways as a prerequisite for equity and social justice (Shaeffer, 2019) In doing so, DSE supports the principle of “nothing about us, without us” (Charlton, 1998), and considers disabled students as experts of their experiences who wear the shoes and know where they pinch. Consequently, their voices in the type and quality of education provided to them are crucial. The medical model of disability, which generally informs special education provision, creates power imbalances which lead to the objectional treatment of testing and measurement with a view of fixing them (Watermeyer, 2006). The DSE approach offers an “empowering response”(Karisa, 2020, p. 12), aimed at disrupting such imbalances.

Using DSE as a lens to this study enabled me to shift focus from what is “wrong” with the students with vision disability to what it is within their learning environment that impedes their full and active participation and achievement. This, in the sphere of education and in resonance with advocates for the social model of disability, focuses on changing the school system rather the learner. As previously mentioned, the heterogeneity of vision impairment implies that learners’ needs are multifaceted, hence require attention in curriculum design and implementation in order for them to achieve optimally in academic circles (Cain & Fanshawe, 2019). Therefore, DSE as a theory was fit for purpose because my interest was in how the learning needs of students with vision disability are understood, and addressed within the curriculum and pedagogical practices in mainstream classrooms by acknowledging that vision impairment in itself is not the determinant of low academic achievement but rather that, the interaction of the impairment with the environment has a major role to play in student participation and achievement levels. Thus, I also considered

the interaction between the learners with vision disability and their immediate environments such as the home, the school and the community in which learning occurs. In the analysis of the research data, I therefore used Bronfenbrenner's Ecological System's Theory to describe the complex interactions that take place in the educational trajectories of the learners with vision disability as I describe next.

### 3.3.2 Bronfenbrenner's Ecological Systems Theory

I begin this section by defining BEST and what it focuses on. Then I present the different systems in BEST. Propounded by Urie Bronfenbrenner, the ecological systems theory proponents (Bronfenbrenner, 1994; Bronfenbrenner & Crouter, 1983; Härkönen, 2001; Ryan, 2001) also known as the bio-ecological model, argue that a child's development is influenced by their biology and other factors such as, processes and interactions operating within the layers of relationships which surround them. These layers of relationships which influence the development of the learner are the micro-system, the mesosystem, the exo-system, the macro-system and the chrono-system.



**Figure 3: Bronfenbrenner's Ecological Systems Theory**

**Source:** <https://www.psychologynoteshq.com/bronfenbrenner-ecological-theory/>

The micro-system is the closest layer to the child (Bronfenbrenner, 2005; Ryan, 2001), and consists of the learner's immediate environment such as the home, the teachers and non-teaching staff, peers, physical learning spaces, classroom cultures and routines, resources

and the playground. Here, the child's development is influenced by the roles, processes and activities and interpersonal relationships which occur in these environments. Ryan (2001), describes the relationships and interactions in the child's microsystem as bi-directional, i.e. away from and towards the child and the most influential. So, while a child may be influenced by the interactions and processes of others, they also influence the actions of the people with whom they interact. In this study, vision disabled students are at the centre of the ecological system, as the focus of study, where their initial interactions are with their parents, peers and teachers. Thus, the study will examine how parents, teachers and peers, interact with students with vision disability and how vision disability influences the attitudes of these persons in the students' microsystem. It will also examine how the school and classroom culture and processes, impact on the learners with vision disability and how the presence of students with vision disability influences these cultures and processes.

Mesosystems comprise the relationships and interactions that arise in the microsystem which the learner is an integral part of, e.g. relationships between school, home, peers and neighbourhood. These relationships are continuously occurring, changing and evolving, and influencing the learner who is at the centre of the framework. As these systems are within the child's immediate environment, the resulting interactions influence the child's development. For instance, Le Fanu et al. (2022), posit that in teaching students with vision disability, teachers are expected to provide reasonable accommodation, adapt tasks and make learning materials accessible to the learner, among other things. The provision of accessible learning materials within the context of Cameroon, will often demand strong collaboration between the teachers and the parents of the students. If the parents value the education of their vision disabled children, they will make conscious effort to provide for them. This is confirmed by Bandura et al. (1996), who argue that "parents' sense of academic efficacy and aspirations for their children are linked to their child's scholastic achievement, through perceived academic capabilities and aspirations" (p. 2). This study will examine the relationship between the parents of students with vision disability and the teachers of the school and how the interactions between these two microsystems influence the understanding of and response to vision disabled students' learning needs within a mainstream setting.

The exo-system is the third system in the ecological systems model (Bronfenbrenner, 2005), which refers to any one or more settings of which the learner is not a member, e.g. school leadership structures, including the parent/teacher association, school policies NGOs supporting the school, etc. However, what happens or does not happen in such a setting can affect the setting in which the learner is an active participant e.g. decisions or actions taken by an NGO which supports the school in education provision for learners with vision disability, will affect the schooling experiences of the student even though he or she is not a member of that organisation. In this study exo-systems will comprise state policies, school policies, interactions between the school and the community such as via PTAs and NGOs and teacher education.

According to Berk (2003), the macro-system is the fourth of the systems of BEST and four times removed from the developing child but affects the other systems and focuses on how pre-existing cultural elements affect a child's development. These include factors such as, political systems, values, traditions, policies, and the socio-economic and socio-cultural attributes of the wider community, such as a country. For instance, Cameroon is a developing country with low resources. This economic status of the country is bound to influence education provision for all learners but particularly for students with vision disabilities whose educational needs are influenced by the impairment within them. Again, if Cameroon's educational policy prescribes inclusive education, then all schools are bound to implement it. The macro-system may also include a change in the status quo of a country, for example, political upheavals which may even lead to war. These changes will directly impact education provision for students with vision disability.

The chronosystem is the last and furthest system in Bronfenbrenner's EST (Ryan, 2001). It is based on the environmental changes over time and major events in the course of a child's life, which may affect them by altering behaviour and decision-making processes. For instance, the COVID-19 pandemic caused schools globally, including in Cameroon, to shut down for months. While all learners in Cameroon experienced a setback in their education, those from poor backgrounds in remote communities and learners with vision disability were completely left out in the intermittent lessons that were delivered via the television and radio, as I previously mentioned. While the former did not have access to television and radio sets, the mode of lesson delivery was inaccessible for the latter, resulting in some learners repeating a grade or dropping out of school completely.

Interconnected like “a set of nested Russian dolls” (Bronfenbrenner, 1979, p. 3), factors in these systems influence one another and either reinforce inclusionary or exclusionary practices (Anderson et al., 2014; Leonard, 2011; Singal, 2006). At the centre of the framework is the learner for whose benefit all actions should be made and decisions taken. Inclusive education practices demand that all learners should be valued and should participate and achieve (Ainscow, 2005). To participate, the curriculum should consciously include all learners and engage them in school life – academics and co-curricular activities - working collaboratively with their peers. The curriculum needs to be accessible and relevant to the learning goals of each learner (Anderson et al., 2014). Thus BEST, otherwise referred to as a person-process-context-time model, (Bronfenbrenner and Crouter, 1983; Yok-Fong Paat, 2013), focuses on the quality and context of a child’s surroundings (Harkonen, 2001; DPJ Ryan, 2001), and has layers of relationships which influence the development of the learner. These are often presented as a set of concentric circles closely linked to one another as illustrated in figure 3 above. Bronfenbrenner (2005), argues that the relationships and interactions between and within the circles have a bearing on the growth of the individual. As a framework, this theory permits an understanding of the processes and interactions or lack of them, between the developing child and his immediate and remote surroundings, which influence his growth or development (Johnson, 2008). This theory can be used to understand the context of the education of vision disabled students in a particular secondary school in Cameroon. At the centre of the school are the students with vision disability as described in BEST and illustrated above, which are representative of the likely interactions to occur within their ecosystems.

Elements within the various systems such as the family, school, hostel, immediate community, and political and social structures can potentially influence how the learners’ needs are understood and responded to. BEST allows for an investigation of the education of students with vision disability in secondary schools in Cameroon in relation to the barriers to access and participation such as the attitudes of teachers, sighted peers, resource teachers, school management and community members. Other barriers could emanate from the LTSM and the curriculum and how it is delivered.

BEST is fit for purpose because as Johnson (2018), posits, it enables an “understanding of the processes and interactions involved in student achievement” (p.2). Also, Ryan (2001),

argues that it is challenging to understand development processes in isolation. Thus, in this study, I used BEST to identify the different processes and interactions that operate between and within the ecosystems, leading to a better understanding of how the learning needs of students with vision disability are understood and accommodated within a mainstream setting. Identifying the factors operating within and between these systems, facilitated a better understanding of how the learning needs of students with vision disability are understood and accommodated within mainstream settings as constructed or constrained by the factors operating at different levels.

### *3.3.3 Postcolonial Theory*

Postcolonial Theory (PCT) focuses on historical, political, economic and social legacies of the colonialists on the colonised countries between the 18<sup>th</sup> to the 20<sup>th</sup> centuries (Elam, 2019). This theory problematizes the continuous exploitation and marginalisation of the people who were colonised and calls for the unveiling of the damaging effects of colonisation, critiquing them and taking action to erode these effects (Enslin, 2017). For this study, this means, for example, analysing the effects of the eradication of indigenous ways of educating children with disabilities, including those with vision disability, in pre-colonial times, in favour of Western models and the effects of these foreign models on the education of students with vision disabilities in Cameroon. Postcolonial theory is useful as a lens to explore the influence of Western philosophies and forms of knowledge in Cameroon's educational arena from the pre-colonial epoch to the start of formal education by the colonial governments and how this has impacted students with disabilities in general and vision disability in particular. Postcolonial theory can also be used to understand Cameroon's educational space after independence in 1960 for Francophone Cameroon and 1961 for Anglophone Cameroon.

Education in Africa, including Cameroon has been shaped by the supremacy of Western philosophies, forms of knowledge and discourses and imposed on the countries that were colonised (Basung, 2002; Nwanosike et al., 2011; Walton, 2018). For instance, European colonial rule in Cameroon lasted 77 years, leaving long lasting impacts in its wake, including in the education space. Education provision in Cameroon today is shaped by the educational legacies of France, Germany and Britain (Tamanji, 2011). Jing (2019), posits that the curriculum content that was inherited from the colonial masters (Britain and France) is a glaring example of Western hegemony. It was designed to serve foreign

interests. Western philosophies and forms of knowledge were characteristic of education provision for Cameroon as well as other colonies (Ndille, 2021). A case in point is the curriculum for education in Cameroon which targeted a selected few who would work in the civil service and provide cheap labour for the colonial masters (Gwei, 1975; Tamanji, 2011). It did not encourage critical thinking and the acquisition of skills which were needed the most (Gwanfogbe, 1995). In such curricula, young Cameroonians were intentionally shielded from their own cultures and environments as texts books for Anglophone Cameroon schools were produced by the Oxford University Press and Macmillan Publishers and were replete with content that was purely British (Diang, 2013; Jing, 2019). Jing (2019), posits that Children recited British poems, studied English literature and read British history. The same obtained in French colonised Cameroon and knowledge of the Western canon was tested in examinations, whereas students were ignorant about their own history and literature (Jing, 2019). As a result, pre-colonial educational curricula which prepared young people for personal development and the development of their communities, the colonial curriculum was alien and conjured feelings and attitudes of, on the one hand, superiority among the chosen few over the masses who did not attend these schools, including children with disabilities and, on the other hand, inferiority amongst those who did not attend elite schools. Jing (2019) notes that “the transmission (in a foreign language) of content unrelated to the crucial needs of the Cameroon student has developed into an amazing form of assimilation” (p.3).

This means that careful thought should be given to the indiscriminate importation of Western philosophies of education as these could contradict African values. For instance, the education of children with disabilities such as those with vision disability in mainstream settings, commonly referred to, as inclusive education, is rapidly gaining currency in the Global South. However, it has been critiqued for being steeped in coloniality with an “unwelcome imposition on countries of the Global South” (Walton, 2018, p. 1). In this study, precolonial power is evident in Euro-American prescribed guidelines for inclusive education from agencies such as UNESCO, USAID, UNICEFF and others (Walton, 2018). Although not much is documented about education policies in Cameroon prior to colonialism, Jing (2019), notes that because indigenous education was based on oral tradition, Western society typically presented African societies, including Cameroon, as illiterate. Interestingly, indigenous education in Cameroon and elsewhere on the continent was well organised, pragmatic and tailored to the environment and human needs, with the

objective of helping the individual fit well into the society and be of service to their communities (Diang, 2013). Jing (2019), authenticates this by adding that education was intended to address the needs of the whole person: physical, moral, emotional and spiritual. A few examples are worth noting. MacOjong (2008), recalls that education in precolonial times was both oral and practical. For instance, in relation to geography, children were taught the boundaries of their clan, tribe, village or neighbourhood, which clouds could result in rain, which hills were fertile and which weren't. In relation to history, children were taught about the origin of their tribe, its evolution and its ancestors, while in relation to literature, children learned riddles, folklore, proverbs, poetry, etc. On the contrary, the colonial curriculum taught Cameroonians British or French history, British or French literature, and discussed seasons in Europe, all of which had no relevance to the Cameroon child (Ashu, 2020) and were far removed from the realities of Cameroon and Cameroonians. Such exclusion of culturally relevant and indigenous knowledge, social histories and contextual realities from countries' curricula such as that of Cameroon, was an outright display of power over the colonised by the colonialists (Muthukrishna & Engelbrecht, 2018). Using a PCT lens is key to identifying, untangling and disrupting the power, privileges and superiority which took central stage in the enactment of education in Cameroon in colonial times. Using a PCT lens will help in laying bare the influence of Western culture in Cameroon's educational curricula and may lead to a discussion of whether to review the curricula which still smack of colonialism (Basung, 2002).

Worthy of note is the complete absence of literature on the education of children with disabilities by the colonial masters in Cameroon, meaning therefore that disability issues did not feature in the colonial curriculum. The fact that there weren't formal schools set up for children with disabilities like the 'Castle Schools' in Ghana (Nseibo, 2021), could signal that the education of such children did not matter. In fact Lukong and Jaja (n.d.) postulate that even after independence, disabilities were seen as diseases which in most cases could not be treated and so it was inconceivable that such children could attend school. The invisibility of children with disabilities in the educational space is what Swartz et al. (2018, p. 2), describe as "a potent form of symbolic violence", leading to a deprivation of that which is their fundamental right – the right to education. This view of disability was a legacy from the West. Ashu, (2020); Nkemnji (1989) and Jing (2019), reiterate that indigenous education in Cameroon, like elsewhere, e.g. Ghana (Sefa Dei, 2005) and Nigeria (Eskay et al., 2012), though oral in nature, focused on educating its

youth for self-development and also for the benefit of their communities. Such education was guided by the Ubuntu philosophy (Ashu, 2020) meaning that all children, regardless of ability or status were educated together. Furthermore, Eskay, (2002), restates that children with disabilities were educated alongside their non-disabled peers and that the concept of disability was a Western idea. Although children with disabilities were treated with disdain in some parts of Nigeria, the cultural belief that it was the role of communities to raise their children, overrode any negative feelings and attitudes (Eskay et al., 2012). Using a PCT lens may enable us to retrace our roots and examine our histories and culture in order to reclaim our traditions of knowledge production, dissemination and use (Phasha et al., 2017) use for the good of all, including disabled students.

Nsamenang (1996), posits that in colonial times in Cameroon, the education and care of children with disabilities occurred in informal spaces and was offered by community members, charitable organisations and the church, with the intention of teaching them life skills and protecting them because mainstream education spaces were unable to deliver the services that these children needed. For instance, children with profound vision disability were taught how to wash their hands and walk around the home (Lukong & Jaja, p. n.d.), which translate into self-care and orientation and mobility skills, part of the ECC , which interestingly is not offered to students with vision disability in today's educational settings in Cameroon. This may explain why, till date, the education of children with disabilities including those with vision disability is more the concern of non-governmental and mostly church-based organisations (Cockburn et al., 2017), than that of the Cameroon government. The nonchalance on the part of the government could be blamed on the educational legacy that colonial governments bequeathed her; that the education of children with disabilities does not matter. In fact, the invisibility of persons with disabilities in public spaces has been normalised and their exclusion maintained and this feeds back into the “the notion that disabled children are not meant to be in school in the first place” (Hughes, 2012, p. 2) . Using a postcolonial lens will throw more light on the influence the colonial curriculum has had in shaping Cameroon's educational curriculum and space in which children with disabilities, including vision disability, are made to feel invisible and unwelcome (Swartz et al., 2018).

The imposition of French and English in Cameroon by France and Britain respectively, is another example of Western supremacy in Cameroon. I remind the reader of how these

languages came into being in present day Cameroon. Before colonisation, the Baptist Mission Society of London, led by Joseph Merrick, arrived in Cameroon in 1843, and set up the first mission station in Douala and two mission schools in Bimbia and Douala in 1884, where Duala and English were the media of instruction in schools (Echu, 1999). Thus the missionaries made use of indigenous languages until 1887 when the colonial administration banned the use of these languages, imposing German as the sole medium of instruction in schools, although indigenous languages such as Duala, Mugaka, Bulu, Ewondo, Basa'a and Fulfulde continued to be used for evangelism (Mbuagbaw, 2000). In 1916, during World War 1, Germany was defeated in Cameroon by France and Britain who subsequently shared the booty between them. While Britain administered 20% of Cameroon, France administered 80% (Echu, 1999; Gwanfogbe, 1995).

Britain practised indirect rule through the local authorities such as chiefs and developed some selected local languages to be used in schools while France adopted a policy of assimilation, striving to turn Cameroonians into French men and women. They imposed French as the only language to be used in schools and closed down schools that failed to use French as the medium of instruction (Echu, 1999). Later on, the British were to insist on the necessity to use only English as the medium of instruction in their administered part of Cameroon, under the pretext that there were too many indigenous languages and so it was not possible to use anyone of them for schooling purposes (Ndille, 2016). This was contrary to previous pronouncements that “the free development of the minds of Cameroonian infants must not be hampered by making the assimilation of ideas unnecessarily difficult, by presenting them in a language not readily understood” and that “the use of the vernacular as a means of instruction must continue” (United Kingdom, 1947, p. 97; 1948, p. 134). Through various sanctions meted out to schools and other entities using indigenous languages for communication, French became the sole recognised official language in French Cameroon. Following the unification of Cameroon in 1961, French and English were declared the official languages in Cameroon (Ndille, 2016) and remain so till date.

Ndille (2016) argues that language represents “the most powerful tool for colonial subjugation” (p.1). This is further echoed by Fanon (2008) who argues that to reject your own language and adopt that of another person, amounts to assuming their culture at the expense of yours. Such subjugation has alienated Cameroonians from their history and

culture, thus creating an inferiority complex in comparison to the inherent superiority of the colonisers. Cameroonians were made to abandon their indigenous languages in favour of the languages of the colonisers in order to be “educated” (Diang, 2013; Ndille, 2016), and hence to abandon their culture of being one another’s keeper in the spirit of Ubuntu. The culture of the colonisers was that of seeing Africans as inferior because they were considered different. Fanon (2008), has stated that, a man who possesses a language possesses as an indirect consequence, the world expressed and implied by this language. The world expressed and implied by the colonial masters did not include children with disabilities and that may explain why they are inconspicuous in Cameroon’s educational space. To further elaborate on the imposition of Western culture on education in Cameroon, I remind the reader of how formal schooling for children with disabilities in Cameroon began and is being enacted.

Lukong and Jaja (n.d.), posit that the formal education of children with disabilities in many African countries has always been considered a favour to the children and their families. This may explain why the first formal school for children with disabilities in Cameroon started only as recently as 1972. As previously stated in Chapter 2, the formal education of children with disabilities in Cameroon, was provided by missionaries in special provision.

This model of educating children with disabilities in separate spaces in poorly resourced contexts like Cameroon, was an offshoot of special education as practised in highly resourced, funded and established special education systems of the Global North (Muthukrishna & Engelbrecht, 2018). In recent years, the education of children with disabilities in mainstream schools has been gaining momentum in many LMIC, including Cameroon, through what is commonly referred to as inclusive education as aforementioned, albeit with largely not so successful practices. This is signalled by the challenges faced in the inclusion of students with vision disability in some African countries as reported by Asamoah et al., (2018); Negash, (2017); Ralejoe, (2019), and others (see Chapter 2). These failed attempts at inclusive education can be linked to the unquestioned importation of the inclusive education ideologies from countries of the West to those of the South (Muthukrishna & Engelbrecht, 2018; Walton, 2018). It is interesting to note that while inclusive education preaches against a one-size-fits-all model of education, the views of international aid agencies like UNESCO are underpinned by assumptions that inclusive education should be implemented in the same way in all

countries (Muthukrishna & Engelbrecht, 2018). Whereas, Elder (2020), cautions against the uncritical importation of inclusive education strategies from the Global North, which often do not consider the realities of other contexts. He further states that “significant financial, social, and educational barriers, as well as colonial legacies perpetuate inequities around the world, posing serious challenges to educational stakeholders who intend to keep the promises of inclusive education” (Elder, 2020, p. 3).

Using PCT as a lens will unveil such paternalistic approaches of education provision for learners with disabilities in general and those with vision disabilities in particular, in Cameroon. It may cause Cameroon’s education stakeholders to review such provision and develop an inclusion strategy which takes contextual realities into consideration and draws on the strengths and capabilities of local communities (Muthukrishna & Engelbrecht, 2018; Singal & Muthukrishna, 2014). Postcolonial theory has the potential to identify, untangle and disrupt pervasive influences of the colonial curriculum notions from the Global North and challenge all role players to engage in critical dialogues as they enact the present curriculum, which is void of identifying and addressing the learning needs of children with disabilities, especially those with vision disability.

A common thread that runs through BEST, DSE and PCT is the rejection of all forms of prejudice, oppression and discrimination against persons with disabilities in schools and communities in general (Ainscow & Miles, 2009; Beckett, 2015). The theories are intricately linked and enabled me to understand the overarching environmental factors, perceptions of vision disability and the impact of colonialism on the education of students with vision disability. The interwoven nature of the theories also allowed me to collect and analyse data for this study. In the following paragraph, I discuss the interconnectedness of the three theories.

### **3.4 Linking disability studies in education, ecological systems theory and postcolonial theory in the education of students with vision disability in mainstream schools.**

The relationship and interconnectedness across DSE, BEST and PCT have been acknowledged by scholars such as, Connor, (2013 and Slee et al. (2019), in the field of inclusive education. At the centre of BEST and DSE, within the context of this study are the students with vision disability. The three indicators of inclusive education according to

Ainscow & Miles (2009) are presence, participation and achievement. These indicators can be better understood when analysed using the aforementioned theories. Presence is concerned with whether the students attend school; a fundamental right, where they attend school and how punctually they attend. Participation relates to their schooling experiences which must ensure access to all learning and teaching resources, teaching and learning methods and participation in all co-curricular activities. Additionally, learners must be achieving on a par with their non-disabled peers. This means that learning goals must be tailored to meet the varied needs of learners in any given classroom and assessment items and strategies must be accessible and attainable by all (Chakraborty & Kaushik, 2019; Thurlow & Kopriva, 2015). The educational experiences of students with vision disability are influenced by all the layers in the BEST system and DSE where the students are the focus - in this case, inclusive education. For instance, how people in the students' micro-systems view and understand disability will influence their response to the students' needs and will have a chain reaction on the meso, exo and macro systems which have to do with school policies and practices. These factors are influenced by, on the one hand perceptions of disability and on the other hand, national and international contexts. The chrono-system which is positioned outside the layers of the ecological system represents the constant and consistent movement of time and is a vital system, given the evolving nature of inclusive education (Messiou, 2017). Additionally, the chrono-system offers room for amendments and modification of factors within each system and has the potential to significantly influence the educational experiences of these students. From a PCT stance, national and international contexts may include policies on the education of students with vision disabilities and prescriptions of how inclusive education for these students should be implemented.

### **3.5 Conclusion**

In this chapter, I discussed the three lenses which guided the current study. These are Bronfenbrenner's Ecological Systems Theory (Bronfenbrenner, 1994), Disability Studies in Education (Baglieri, 2012) and Postcolonial Theory (Elam, 2019). Proponents of BEST such as Ryan (2001); Singal (2006) & Leonard (2011), highlight the role of the environment in shaping the education of students with disabilities including those with vision disability. BEST advocates argue that the people and factors in a student's environment, such as parents, peers, teachers, LTSM, pedagogy and the curriculum, can either be enablers or barriers to the student's experience of education. Along the same lines,

DSE enthusiasts such as Baglieri et al. (2011) Connor et al. (2008) & Taylor (2006), view disability from the social model stance, arguing that it is the way society is organised that disables persons as opposed to the medical model which views disability as intrinsic to the individual, needing treatment or rehabilitation. Advocates of the social model view disability as a part of human variation which should be acknowledged and respected. It highlights the need for equity in education where learners, including those with vision disability, are given the opportunity to perform at their optimum. I also discussed the colonial legacies bequeathed to Cameroon and how these influence education provision in general but particularly for students with disabilities. Identification and understanding of PCT will help in fighting against the destructive workings of power, privileges and superiority which have pervaded the educational space, thus leading to the failure to address the educational needs of children with disabilities, including those with vision disability in the curriculum. In the next chapter, I discuss the methodology which I used to conduct the study.

## **CHAPTER 4: THE INS AND OUTS OF CONDUCTING A CASE STUDY RESEARCH**

### **4.1 Introduction**

Having discussed my philosophical and theoretical stances in the previous chapter, I now turn to the processes which enabled me to address the gaps in the literature about the education of students with severe to profound vision disability in mainstream schools, with particular focus on Cameroon. I explain my choices of a qualitative research approach and an instrumental case study. I provide details on how I recruited research participants, collected data using different methods, and how the data was managed and analysed. I also address issues around credibility, dependability and transferability, then I wrap up with ethical considerations, reflexivity and the conclusion.

### **4.2 Qualitative Research Methodology**

A qualitative research approach refers to the entire process of conceptualising to formulating research questions, aims, objectives, data collection, analysis, interpretation and writing of the research report, all of which are informed by the researcher's philosophical and theoretical stances. Cresswell (2014); Creswell and Poth (2016); Crowe et al. (2011), make a distinction between three research approaches – quantitative, qualitative and mixed methods – where quantitative research deals with numerical data and experiments, qualitative research involves the collection and analysis of non-numerical data such as texts and videos, in order to understand experiences, concepts, opinions, etc., while mixed methods research, is a combination of the two. The choice of one approach over the other, depends on the focus of the study. Contingent on these definitions and on the fact that I sought to investigate how the learning needs of students with vision disability are understood and accommodated within a mainstream setting, I chose the qualitative approach.

Qualitative research seeks to better understand a particular phenomenon from the participants' perspectives (Rosenthal, 2016), and lends itself to natural enquiries in the real world, rather than experimental or manipulated settings as with the quantitative approach (Ritchie et al., 2013). Qualitative - unlike quantitative - research has the propensity to offer insights into the “underlying reasons, attitudes and motivations behind a variety of human endeavours” (Rosenthal, 2016, p. 510). It demands that researchers should carefully

consider the data collection methods that will provide the most appropriate information which will respond to the research question. It draws upon data collection methods which enable the researcher to gain an in-depth understanding of participants' views, experiences, opinions, feelings and knowledge as noted by Denzin (2000). In this study, I sought to comprehend the phenomenon of understanding and accommodating learners' needs in a mainstream school – the natural setting where academic learning takes place. The perspectives, opinions, feelings, experiences and knowledge of key stakeholders and role players involved with students' learning, such as teachers, parents, support staff, peers and the principal of the school, were sought in ways that could not have been possible with quantitative research approaches. It has been argued that qualitative researchers give voice to the voiceless, i.e. to those who are rarely heard in research. Cook-Sather, (2002) & Opie et al., (2017), note that students' voices are generally absent in most research. To this, Cook-Sather (2006, p. 3), describes the perspectives of young people in teaching and learning practices and schooling in general as, “unique”, granting them an opportunity to shape their education. Equally important are the voices of teachers because the role of teachers is pivotal in “promoting participation and reducing underachievement especially with children who might be perceived as having difficulties in learning” (Rouse, 2008, p. 1).

#### *4.2.1 Choosing a Case Study Design*

Different research designs can be employed in qualitative research such as grounded theory, ethnography, narrative study, action research, case study and phenomenological research. The choice of a particular design will depend on the nature of the inquiry (Ritchie et al., 2013; Rosenthal, 2016). Informed by my research paradigm, research question and discussions with my supervisor, I settled on a case study design as the best design for the current study which was guided by the perspectives of Flyvbjerg (2006), Cresswell (2014); Stake (1995) & (Yin, 2009). According to Yin (2009), a case study is most suitable for examining contemporary issues, in this case, understanding how the learning needs of students with vision disability are understood and accommodated within mainstream schools in Cameroon, when the relevant behaviours such as teaching and learning, cannot be manipulated. Case studies can be used to contribute to knowledge of individual, group, organisational, political social and related phenomena. In the current study, it is about an organisational related phenomenon with the mainstream school as an organisation and the understanding of the learning needs of students with vision disability and how these needs are responded to, as the phenomenon under study.

I chose the case study design because case studies enable the researcher to gain concrete, contextual, and in-depth knowledge about a specific real-world complex issue (Flyvbjerg, 2006). While the information gathered may not be representative of large populations, it provides richer insight into the phenomenon under study than would other research methods. A hallmark of case studies is that they can deal with multiple sources of evidence such as documents, interviews, artefacts and observations (Cresswell, 2014; Yin, 2009), for triangulation purposes which will contribute to the credibility of the research.

I thus preferred a case study approach for the foregoing qualities and also because of its uniqueness in laying emphasis on the role of context in the study of a phenomenon. My aim in this study was to gain a comprehensive understanding of how the learning needs of students with vision disabilities are understood and responded to, within a particular context and to provide a ‘thick’ description (Ritchie et al., 2013) of the phenomenon under study in line with the demands of the case study, as I describe next.

According to Yin (1994), a researcher’s choice in terms of number and type of case studies should be informed by the purpose of the study. For instance, an instrumental case study allows the researcher to gain an insider’s view of the phenomenon under study and may lead to accomplishing something other than just understanding the issue under investigation; an intrinsic case study lays emphasis on the exploration of a particular phenomenon and focuses on a perceived interest in the case itself, its context, and the experiences of its participants rather than in extending theory or generalising across cases. A collective case study involves a number of cases with the aim of allowing the researcher to explore differences within and between cases with the goal of replicating findings across cases. I chose the instrumental case study design because, apart from seeking an in-depth understanding of the phenomenon under investigation, i.e. how the learning needs of students with vision disability are understood and accommodated within mainstream secondary schools in Cameroon, the study is likely to lead to a change in education provision for this group of students.

Case study research design - sometimes referred to as a naturalistic design (Crowe et al., 2011), involves the study of a real-life phenomenon, in this case, understanding and responding to the learning needs of students with vision disability, in a particular natural context – Mabingo Secondary School in the West Region of Cameroon, within a specific period of time – October 2020 to February 2021, with a specific group of people: students

with severe to profound vision disability, their sighted peers, parents, and teachers. According to Flyvbjerg (2006), the context is of prime importance in case study research design because it delineates the environment and circumstances in which the research is conducted, including the participants' culture and location. With case study research design, the researcher has the opportunity to investigate issues as they occur in real-life and real time, by engaging with the participants over a prolonged period of time. Being able to do so using multiple data collection methods, means that the researcher digs deep into the detail and context in order to “unpack more complex experiences and circumstances which may not have a specific or singular outcome” (Lucas, Fleming, & Bhosale, 2018, p. 2). Additionally, case study design is inclined to enabling the researcher to pursue new lines of enquiry as they emerge (Lucas et al., 2018). These features, coupled with my choice of research paradigm - interpretivism - made the single instrumental case study research design, ideal.

I am aware that critiques of the case study design dismiss it for being too specific, not generalizable and limited in what it can contribute to theory when compared with other qualitative research designs (Lucas et al., 2018). However, Flyvbjerg (2006, p. 9), argues that just because “knowledge cannot be formally generalized, does not mean that it cannot enter into the collective process of knowledge accumulation in a given field or in a society”. Flyvbjerg (2006) goes further to assert that case study research “has often helped cut a path towards scientific innovation” (p. 10), which means that the current study can lead to new ways of understanding and responding to the learning needs of students with vision disability in a mainstream setting. Again, since the intention was not to end up with a generalisation, the findings of this study will still contribute to knowledge in the area of disability inclusive education, with particular focus on vision impairment as there is a paucity of literature on this phenomenon in Cameroon. Furthermore, the findings will illuminate the phenomenon, perhaps causing other researchers to replicate the study in their own contexts, given that I have provided a fine-detail description of the study with an audit trail of how it was conducted. Talking of the importance of contexts in case study design, I now turn to a description of the case and its study context.

#### *4.2.2 The Case*

The case is “a phenomenon of some sort occurring in a bounded context” or the “unit of analysis” (Miles & Huberman, 1984). In this study, the case is how the learning needs of

vision disabled students are understood and accommodated within a mainstream secondary school in the West Region of Cameroon. My selection of the case was informed by the increasing number of learners with vision disability who are transitioning from primary to secondary education and into government-run mainstream schools where teachers either have minimal or no knowledge of inclusive education. Additionally, inclusive education in Cameroon is still in its teething stages and policy on inclusive education is scanty and yet to become a reality. Understanding how the learning needs of students with vision disability are understood and accommodated within mainstream schools, will illuminate this phenomenon which is under-researched in Cameroon with the hope of informing policy development for inclusive education and also best practices for those schools and learning spaces which are struggling to include learners with vision disability alongside their sighted peers.

#### *4.2.3 The Research Setting*

I chose this particular school, Mabingo Secondary School (pseudonym) because it has a significant number of students with vision disability. It is one of the oldest secondary schools in the West Region of Cameroon, with a time-honoured history of hosting students with vision disabilities. It is the ‘go to’ secondary school for students with vision disability pursuing the Francophone sub-system of education and therefore stands as a good example for elucidating the phenomenon as it occurs in similar schools. Another contributing factor to my choice of the school was the fact that, although all the students are day students, they come from different regions of Cameroon and while some of the students with vision disability live in a hostel, others live with their families and attend the school. Also, the relatively large number of students with vision disability in this school would mean that there are students with a variety of lived experiences which could provide greater insight into the study. The school is strategically located and easily accessible by any means of transport and by pedestrians also. Again, I could easily have access to the school because the CBCHS is currently running a project dubbed Quality Education for All (QEA) under which I had conducted a three-day workshop on disability inclusive education, in my capacity as the CBCHS’ inclusive education adviser. Over and above all, my choice of the school was influenced by the current conflict in the North-West and South-West regions of Cameroon, widely referred to as “the Anglophone Crisis”. I live and work in the North-West Region and would have preferred to conduct this study there but at the time of developing my research proposal, most schools in these two regions were either not

running or too dangerous to go to. This is because, students and teachers were constantly abducted, with some maimed and killed. In consultation with my supervisor and based on Wood's (2006), assertion that conducting research in conflict zones poses methodical and ethical challenges and should not be attempted in some conflict settings, the choice of Mabingo Secondary School was made. Additionally, Ford and Mills (2009), caution that both the harms-benefit ratio for potential participants and the feasibility and necessity of the research should be considered. Since the research did not qualify for one of the main reasons for conducting research in conflict zones as espoused by Ford and Mills (2009), such as reporting on the health and humanitarian consequences of the conflict, investigating the feasibility and effectiveness of specific interventions or validating models of delivery, I decided to choose a different study site from the originally intended site in the North-West Region of Cameroon. This decision resulted in the research being time consuming and more expensive than anticipated because data collection and transcription involved paying for transcription in the French language and translation from the French language to the English language. In the ensuing sections, I describe the study population and sampling procedures.

#### *4.2.4 Population*

The population for this study comprised all the 24 students with vision disability in the school, their peers in the same classes, all parents of students with vision disability, all teachers of students with vision disability, the staff who serve as focal points (A focal point in this study is the person responsible for the welfare of students with disabilities) for inclusive education, the principal and the resource teachers. The number of students with vision disability dropped from 31 prior to data collection to 24 at the time of data collection because nine students had left, either because they succeeded in their end-of-course examinations or because they relocated to other regions. I now describe the method I used in recruiting study participants.

#### **4.3 Sampling**

I used purposive sampling in recruiting the research participants. In purposive sampling, the researcher defines the characteristics of the population in order to find those who have the attributes that will enable them to respond meaningfully to the research question (Etikan, Musa, & Alkassim, 2016). Purposive sampling allows the researcher to intentionally select 'information rich' participants because of their ability to possess the

knowledge and experiences that will illuminate the phenomenon under study (Etikan et al., 2016). In table 3 below, I provide the selection criteria for the different participants.

**Table 3: Selection criteria for research participants**

Participant	Inclusion criteria	Exclusion criteria
Students with vision disability	<p>Students in forms 2 -7 (grades 8 to 12) who had severe to profound vision disability whether congenital or acquired, who used braille as their reading and writing medium, regardless of age.</p> <p>Students who had been registered in Mabingo Secondary School for at least one academic year.</p> <p>Male and female students (so as to include different gender perspectives).</p>	<p>Students who were internally displaced, because they may have traumatic experiences from the Anglophone Crises which could influence their response to interview questions.</p>

<b>Participant</b>	<b>Inclusion criteria</b>	<b>Exclusion criteria</b>
Parents/caregivers of students with vision disability.	Biological parents of students with vision disability attending Mabingo Secondary School.	Parents whose children had been in Mabingo Secondary School for less than a year.
	Adults who were in loco parentis of students with vision disability.	Parents of children with vision disabilities who were internally displaced.
	Parents who were able to speak and understand French or English because it would be challenging to translate from the many languages spoken by the participants into French or English.	
Teachers of vision disabled children	Full time teachers who were government employees and possessed the higher teaching diploma from a government teacher training college in Cameroon.	Teachers who had previously taught students with vision impairment but were not currently teaching them because their experiences would not be current and I could not observe their lessons since they were no longer teaching students with vision disability.
	Teachers who had taught vision disabled students in Mabingo Secondary School for at least one academic year because they would possess the experience of teaching students with vision disability.	Teachers who were internally displaced.
	Male and female teachers (so as to include different gender perspectives).	
Resource teachers of vision disabled children	Staff who had served as resource teachers (those who support the students in brailing and transcribing their classroom work) in Mabingo Secondary School for at least one academic year.	Staff who were internally displaced. Such teachers would have likely had psycho-social issues from the Anglophone Crises which would have impacted their responses and teaching methods, thus falsifying the data.
	Male and female staff (so as to include different gender perspectives).	
Sighted peers of students with vision disability	Peers who shared the same class with students with vision disability.	Sighted peers who were internally displaced. Such students would have likely had psycho-social issues which would have impacted their responses, thus falsifying the data.
	Peers who had been in Mabingo Secondary School for at least one academic year.	

#### *4.3.1 Sample Size*

The sample size for this study comprised of six students with vision disability, six sighted students, six mainstream teachers, four parents of students with vision disability, two focal points for inclusion, two key informants, two resource teachers and one coordinator of the resource room of the school. In the original plan, I had aimed to have a focus group discussion with six parents of students with vision disability but there were intricacies involved which made it impossible. For instance, the school did not have direct contact with the parents of these students and the hostel owner, who has a firm control over the students with vision disability and their parents, would not allow me to contact the parents except through him. He also informed me that it was not possible to have all six parents in a meeting because some lived out of the city. In consultation with my supervisor, we agreed that I should rather conduct individual interviews with four parents. I was referred to these by the hostel owner and I sought their consent to participate. Also, I had not planned to interview the hostel owner, the resource room coordinator, who was a staff of the CBCHS and the focal points but while in the field, I realised that these persons possessed vital information and experiences which would further illuminate the phenomenon under study.

#### *4.3.2 Piloting*

Prior to data collection, I piloted the study with three students with vision disability, six sighted students, three mainstream teachers, two resource teachers and four parents of students with vision disability. I also observed the lessons of three teachers teaching students with vision disability. The participants for the pilot were drawn from different schools other than the actual study site. The aim of the pilot was to develop my interview and focus group discussion techniques and my lesson observation skills. The feedback from the pilot resulted in me rephrasing some questions, eliminating some and breaking down others into shorter questions to ease comprehension. I also revised my data capture form for lesson observations, eliminating some observation points and adding others. During the pilot, I experienced challenges which enabled me to develop skills in building rapport with research participants, ensuring that the discussions did not go off tangent, and that I did not exceed the stipulated amount of time for each interview or FGD. It also enabled me to check issues of language so that meaning was not lost or distorted in the course of translation by my research assistants.

#### 4.4 Data Collection

Data collection started on the 30<sup>th</sup> of September 2020 and ended on the 20<sup>th</sup> of February 2021. Table four shows a summary of data collection activities.

**Table 4: Data collection activities**

Primary Objective	Data Source	Data Collection Method
To describe how students with vision disability experience learning in mainstream secondary schools in Cameroon.	Students with vision disability	Semi-structured in-depth individual interviews with six students
To explore the teaching and learning approaches in mainstream secondary schools in Cameroon.	Six mainstream teachers	Semi-structured in-depth individual interviews
		Classroom observations
	Two resource teachers	Semi-structured in-depth pair interview
	Two focal point s	Semi-structured in-depth pair interview
	One principal of the school Hostel owner	Key informant interview
To investigate teachers' understanding of disability inclusion in mainstream secondary schools.	Six mainstream teachers	Semi-structured in-depth individual interviews
To examine the role of parents and peers in the education of learners with vision disabilities.	Five sighted peers of students with vision disability	Focus group discussion
	Four parents of students with vision disability	Semi-structured in-depth individual interviews
To describe the study context.	Minutes of staff meetings	Document review

Primary Objective	Data Source	Data Collection Method
To supplement data from students with vision disability, parents of students with vision disability, sighted peers of students with vision disability, teachers, resource room teachers, focal points and key informants	Minutes of administrative meetings	

#### 4.4.1 Recruitment of Research Participants

After obtaining ethics approval from the Human Research Ethics Committee (HREC) of the University of Cape Town (*Appendix 1*), the research protocol together with a written request to conduct research in Mabingo Secondary School (pseudonym) (*See Appendix 2*) were presented to the Regional Delegate (RD) of the West Region, who is the gate keeper for secondary education in that region. The RD granted permission to conduct research at the school (*See Appendix 3*). The ethics approval and permission from the RD were presented to the principal of the school who in turn granted permission for the study to be conducted (*See Appendix 4*). In another meeting with the principal of the school, I explained the study to her and requested her to inform the students with vision disability, their sighted peers, the parents of the students with vision disability and the teachers about the study and the possibility that they would be contacted to participate and their freedom to decline participation. The principal invited one of the school's vice principals who is also a focal point for inclusive education at the school and handed the responsibility of contacting prospective participants to her. This is the person the students report to if they are facing any problems in the school. I was informed, however, that the school did not directly deal with parents of students with vision disability but did so through a third party, the proprietor of a hostel where the majority of the vision disabled students lived and attended the school. I was given permission to contact him to then inform the parents about the study. With all these arrangements made, I engaged in the recruitment activities as outlined below.

**Table 5: Participant recruitment activities**

<i>Vision Disabled Learners</i>	
1	I informed the vice principal of the need to obtain parents’/guardians’ consent and each student’s assent for those under 18 years of age. Students over 18 would give their own consent to participate in the study.
2	I asked the vice principal for a list of the students with vision disability in the school who met the selection criteria.
3	With the aid of the vice principal, I invited the students to a meeting and explained the study to them. I then asked for those willing to participate in the study to indicate their interest. Fourteen students attended the meeting under strict COVID-19 barrier measures as stipulated by Cameroon’s Ministry of Health, i.e. putting on masks, sanitizing their hands as they entered the meeting room and sitting two metres apart. Of these, ten students indicated an interest. Because I needed only six students, I numbered the ten and had one student randomly select six from a hat.
4	Since the school did not deal directly with the parents of the students with vision disability, I contacted the hostel owner who was in loco-parentis of the students and explained the study to him. Once the study had been explained and all questions responded to, I then gave him a letter of information ( <i>See Appendix 5</i> ) which outlined the details of the study which he in turn shared with the parents.
5	For the learners who were aged 18 years and above, I contacted them directly and gave them the letter of information which outlined the details of the study ( <i>Appendix 8</i> ).
6	I gave the learners who were aged 18 years and above who showed an interest to participate in the study consent forms to complete ( <i>See Appendix 11</i> ).
7	Only three students below 18 years of age took part in the study. As they were students with vision disability and I could not directly contact their parents, I gave consent forms to the hostel owner who in turn gave them to the parents of the students to complete ( <i>Appendix 10</i> ).
8	I gave the minors information leaflets (in braille) and assent forms that outlined the details of the study, including the implications of their participation ( <i>Appendix 8</i> ).

9	As the minors who agreed to take part in the study were vision disabled, the vice principal read the information on the assent forms to them as they followed on their brailled copies and their resource teachers assisted them to complete the forms and to sign them.
10	I invited the learners (those aged below and above 18 years) to the data collection session at a convenient time and place.
<b>Teachers of Vision-Disabled learners</b>	
1	I asked the vice principal who doubled as focal point for inclusion of the school for a list of the teachers of the disabled learners in the school who met the selection criteria.
2	I called the teachers to a meeting in the staff room of the school to explain the study.
3	Once the study had been explained and all questions addressed, I invited the teachers to indicate their willingness to participate in the study. Of the 14 teachers who attended the meeting under strict COVID-19 barrier measures as stipulated by Cameroon's Ministry of Health, i.e. putting on masks, sanitizing their hands as they entered the meeting room and sitting two metres apart, ten teachers indicated an interest. Because I needed only six teachers, I numbered the ten and had one teacher randomly select six from a hat.
4	I gave those who showed an interest in participating in the study, a letter of information/invitation that outlined the details of the study, including the implications of participating in it ( <i>See Appendix 6</i> ).
5	I asked the teachers who agreed to take part in the study to complete the consent forms ( <i>See Appendix 11</i> ), after which I invited them to the data collection session at a mutually acceptable time.
6	A similar process was followed for the head teacher, hostel owner, and the two focal point persons, and the resource teachers (except for steps 1 and 2). ( <i>See appendices 12, 7, 13 for letters of information and consent forms, respectively</i> )
<b>Sighted Peers of Students with Vision Disability</b>	
1	I asked the vice principal for a list of the peers of students with vision disability in the school who met the selection criteria.
2	With the aid of the vice principal, I invited them to a meeting and explained the study to them. I then asked for those willing to participate in the study to indicate

	<p>their interest. Of the ten students who attended the meeting under strict COVID-19 barrier measures as stipulated by Cameroon’s Ministry of Health, i.e. putting on masks, sanitizing their hands as they entered the meeting room and sitting two metres apart, all ten students indicated an interest. Because I needed only six students, I numbered the ten and had one student randomly select six from a hat.</p>
3	<p>I gave those who showed an interest in participating in the study a letter of information/invitation that outlined the details of the study, including the implications of participating in it (<i>Appendix 9</i>).</p>
4	<p>Once the study had been explained and all questions responded to, I asked the students who agreed to take part in the study to complete the consent forms (<i>See Appendix 11</i>), after which I invited them to the data collection session at a mutually acceptable time. One of the students was below 18 years of age but declined sharing his parents’ phone numbers with me so he was dropped.</p>

#### 4.4.2 Demographic Details of Research Participants

I provide an overview of the demographic details of the research participants in the table below so as to give an understanding of the research participants. Two of the vision-disabled learners who were 26 and 29 years old explained to me that they not attended primary school until very late and that in secondary school, their needs were not adequately considered in pedagogy, in a high stakes system of education and so they spent several years in the same class.

**Table 6: Demographic details of research participants**

<b>Vision Disabled Students</b>					
<b>Pseudonym</b>	<b>Gender</b>	<b>Age</b>	<b>Class</b>	<b>Religion</b>	<b>Number of Years in the school</b>
Mengwi	Female	16	Form 4	Christian	04
Mezoh	Female	15	Form 3	Christian	03
Timo	Male	29	Upper sixth	Christian	03
Nyah	Male	26	Lower sixth	Christian	06
Awa	Male	17	Lower sixth	Christian	06
Mbuh	Male	18	Lower sixth	Christian	04
<b>Peers of Vision Disabled Students</b>					
<b>Pseudonym</b>	<b>Gender</b>	<b>Age</b>	<b>Class</b>	<b>Religion</b>	<b>Number of Years in the school</b>
Shuika	Female	19	Sixth Form	Christian	03
Wirsy	Male	18	Sixth Form	Christian	04
Tidze	Male	18	Sixth Form	Christian	03
Vidzem	Male	19	Sixth Form	Christian	05
Shemlon	Male	18	Sixth Form	Christian	04
<b>Parents of Vision Disabled Students</b>					

<b>Pseudonym</b>	<b>Gender</b>	<b>Age</b>	<b>Monthly Income</b>	<b>Religion</b>	<b>Level of Formal Education</b>
Nnam	Female	40	Refused to disclose	Christian	Grade 4
Kedze	Male	58	No income	Christian	Advance Level Certificate
Kum/Mbong	Male/Female	50/45	No steady income	Christian	Primary School
Wung	Male	66	120,000 XAF	Christian	Two years in university
<b>Teachers of Vision Disabled Students</b>					
<b>Pseudonym</b>	<b>Gender</b>	<b>Age</b>	<b>Academic Qualification</b>	<b>Religion</b>	<b>Number of Years in the School</b>
Achouh	Male	37	BTS/CAPIET	Christian	05
Nji	Male	30	Postgraduate Diploma in Teaching	Christian	02
Ako	Male	40	Postgraduate Diploma in Teaching	Muslim	05
Bih	Female	35	MSc Mathematics	Christian	12
Ngwe	Female	35	BA Geography	Christian	05
Mankah	Female	<b>35</b>	MA Socio-linguistics	Christian	<b>08</b>
<b>Resource Teachers</b>					
<b>Pseudonym</b>	<b>Gender</b>	<b>Age</b>	<b>Academic Qualification</b>	<b>Religion</b>	<b>Number of Years in the School</b>
Ade	Male	41	Teachers' Grade 1 Certificate	Christian	<b>11</b>

Suh	Male	55	BA French	Christian	<b>02</b>
Ngum	Female	44	Ordinary Level Certificate	Christian	<b>10</b>
<b>Key Informants</b>					
<b>Pseudonym</b>	<b>Gender</b>	<b>Age</b>	<b>Academic Qualification</b>	<b>Religion</b>	<b>Number of Years in the School</b>
Neba	Male	57	Teachers' Grade 1 Certificate	Christian	---
Meshi	Female	55	Postgraduate Diploma in Teaching	Christian	02
<b>Focal Point Persons</b>					
<b>Pseudonym</b>	<b>Gender</b>	<b>Age</b>	<b>Academic Qualification</b>	<b>Religion</b>	<b>Number of Years in the School</b>
Neba	Male	50	Postgraduate Diploma in Teaching	Christian	17
Alieh	Female	50	Postgraduate Diploma in Teaching	Christian	13

Having presented the demographic details of the research participants, I now describe how I collected data from each one of them.

#### **4.4.3 Data Collection Methods**

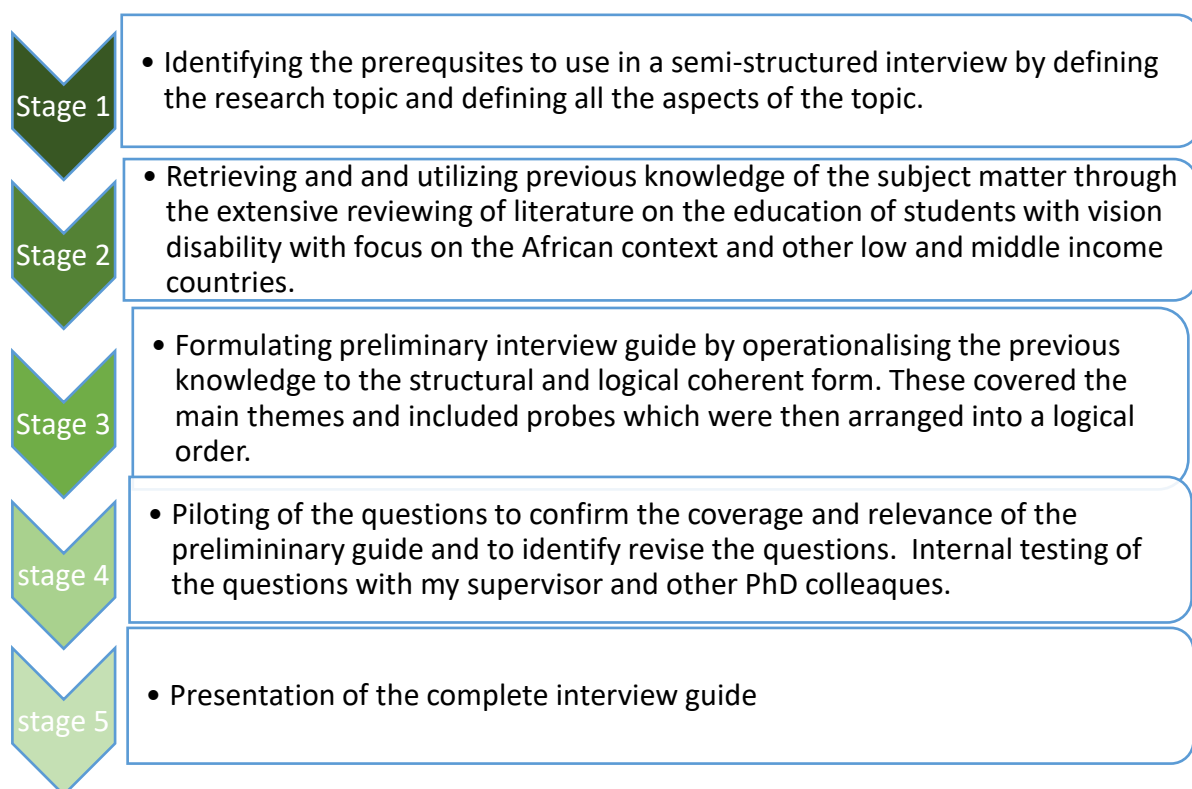
##### *4.4.3.1 Individual Semi-structured in-depth Interviews*

An interview is a way of collecting data involving two or more people where one person - the interviewer asks questions and the other or others – the interviewee(s) respond (Polit et al, 2006). In-depth interviews lend themselves to especially thorough and in-depth coverage of the subject matter under investigation, providing an unadulterated focus on the interviewee (Johnson, 2002). Also, they allow for the detailed exploration of participants'

views and provide the space for extensive and personal understanding of the surroundings harbouring the research phenomenon (Ritchie et al., 2013), while still keeping the interview focused on the desired line of action and giving room for other emerging questions (DiCicco-Bloom & Crabtree, 2006; Jamshed, 2014). This method of data collection was therefore apt because it enabled participants to share their “experiences, perceptions, opinions, feelings and knowledge” on the phenomenon under study (Rosenthal, 2016, p. 510).

In developing the interview guide, I used Kallio’s five stage process of the development of a qualitative semi-structured interview guide (Kallio et al., 2016), as described below.

**Figure 4: Stages in the development of a semi-structured interview guide**



Prior to data collection, I engaged the services of two research assistants who are articulate in both French and English. This is because most of the participants were French-speaking and I am not fluent in French but understand and speak a fair amount of it. Their role was to translate back and forth between the participants and myself during the interview and

FGD sessions. In addition, they had to transcribe data and then translate into English for me to analyse (see details on language below).

I conducted individual interviews with vision disabled students and the teachers of students. I preferred individual interviews with the vision disabled students, in order to give them the space to air their views freely in a context where they would rarely have their voices heard as they are usually in the minority in group settings. Also, I wanted the teachers of the students with vision disability to have the freedom to express their ideas without fear of any repercussions. A semi-structured interview guide was developed to guide the interview sessions (See appendices 14, 15, 16, 17, 18 and ,19 for interview guides for students with vision disability, their sighted peers, teachers, resource teachers, focal points and parents respectively). Digital recorders were used to record the sessions which on average, lasted one hour, as there were back and forth translations from English to French and vice versa, particularly for the benefit of the participants since I understand and speak a fair amount of French (see information on how I handled language issues below). I guided the sessions and probed the participants. I conducted one individual in-depth semi-structured interview with each of six students with vision disability, six mainstream teachers and one resource room coordinator. I also interviewed the principal of the school and the owner of the hostel in which most of the students with vision disability lived and attended the secondary school, as key informants. Although the hostel owner was not in the original data collection plan, he played a key role in the education of the students with vision disability at Mabingo Secondary School and his contributions significantly threw more light on the phenomenon under study. Additionally, I simultaneously interviewed the two teachers who braille and transcribe work for the students with vision disability, generally referred to as resource teachers in Cameroon. I also interviewed the two focal points who were also not in the original data collection plan but whom I realised played a significant role in the education of students with vision disability in the school.

I additionally conducted individual interviews with parents of students with vision disabilities. The original design had been to have a focus group discussion with the parents but this was almost impossible as already mentioned. The principal of the school did not deal directly with the parents of all the students with vision disability and so did not have their contact numbers. The owner of the hostel where most of the students lived was in direct contact with the school on matters relating to all the students with vision disability,

including those living with their parents. So, I sought permission from the principal of Mabingo Secondary School to contact him to arrange a meeting with the parents. He said it was not possible to have a meeting with all the parents as they lived far away from the research setting. With approval from my supervisor, I conducted individual interviews with four parents who were put forward by the owner of the hostel based on the selection criteria I shared with him, as I could not directly contact the parents. These parents gave their informed consent but it is possible that there might be some level of bias because they were selected by the hostel owner. However, while acknowledging this possibility, it seemed better to include their voices than to exclude parents entirely from the study. I interviewed one couple in their home because that was their preference. An office attached to the resource room was mutually agreed upon as the venue for the interviews. This was the most convenient space for all interviewees because it was rarely used and there were no chances of the interview sessions being interrupted. Besides, it offered the privacy which participants needed, to air their views on the phenomenon under study. The other three parents were interviewed in the aforementioned office like the other research participants.

#### *4.4.3.2 Key Informant Interviews*

Key informant interviews are usually conducted with people considered as having expert knowledge and insight into the phenomenon under study (Kumar, 1989). I conducted two key interviews with the principal of the school, based on her role as the administrative head and the hostel owner, based on his role in enabling the transition from primary to secondary school for the students with vision disability. A semi-structured interview guide was developed to guide the interview sessions (*Appendix 20*) and my role as the researcher was to guide the interview while probing the interviewees. I used digital recorders to record the interviews which each lasted for an hour. The venue for the principal was her office while the venue for the hostel owner was the same as for the other participants. During the interview session, I took down brief notes when necessary.

#### *4.4.3.3 Focus Group Discussion*

Focus group discussion is a qualitative research technique in which a small group of participants – between four to six (Onwuegbuzie et al., 2009), - assemble to discuss a specified issue in order to generate data. The objective is to give the researcher an understanding of the participants' perspectives on the topic of discussion (Kitzinger, 1995). The role of the researcher is that of facilitator who encourages participants to communicate

with each other, exchanging ideas or points of view and commenting on one another's experiences. The researcher is able to exploit several forms of communication that people use in everyday conversations including "jokes, anecdotes teasing and arguments"(Wong, 2008, p. 1).

The hallmark of FGD is its tendency to exhibit dimensions of understanding that are often unexploited or inaccessible by other forms of data collection. Besides, it is a quick, cheap and efficient way of obtaining data from multiple participants simultaneously, (Krueger & Casey, 2000). According to Krueger (2014), the chance to generate useful data rests on the willingness to participate and the common thread that runs through the participants such as: age range, gender, social status, ethnic background, etc. Based on this suggestion, I recruited only the sighted peers with whom the vision disabled students shared a class. I also intentionally chose a focus group discussion for these students in order to gain an understanding of the general perception of how the learning needs of students with vision disability were understood and responded to as suggested by Nyumba et al., (2018).

I conducted one focus group discussion with five sighted peers of learners with vision disability. The sixth student was unavoidably absent. Only one student who was below eighteen years of age required parental consent. The school does not have a database of the contact number of parents and so it was challenging for me to contact the parents of students who were below 18 years of age to seek parental consent. The minor who opted to participate in the study provided his mother's phone number but when I contacted her, she referred me to the student's father but the student declined to share his father's phone number with me and so was not allowed to participate in the study. The FGD lasted for one hour and fifteen minutes.

In consultation with the sighted peers of students with vision disability, the focus group discussion took place in one of the information and communication technology (ICT) rooms of the school, at a time it was not occupied. The room had enough space to provide for a comfortable seating arrangement where participants could face each other (Nyumba et al., 2018), sitting two metres apart following COVID-19 barrier measures prescribed by the Cameroon's Ministry of Health (See Appendix 21 for the FGD group guide). My main role consisted of asking questions, guiding the discussion and probing the participants to contribute to the discussion.

#### 4.4.3.4 Observations

Observation is a data collection strategy which integrates all the senses of sight, smell, touch, taste and hearing. It involves detailed observation of how people interact through behaviour and talk, watching and observing what people say and do (Mays & Pope, 1995; Ritchie et al., 2013), and permits the researcher to investigate how something works or occurs in more “natural circumstances” (Mulhall, 2003, p. 3), thus illustrating the entire picture (Flick, 2018). Williams (2008), defines non-participant observation as “an unobtrusive qualitative research strategy for gathering primary data about some aspects of the social world, without interacting directly with the participants” (p. 561). In non-participant observation, the researcher is able to capture subtle and distinctive situations that cannot be captured using other methods (Liu et al., 2010). Prior to observing the lessons, I developed an observation schedule following Rizvi’s two stage guide for developing observation schedules (Rizvi, 2010) by seeking to cover UNESCO’s definition of an inclusive classroom (UNESCO, 2021). Using the indicators of what inclusive pedagogy should look like from UNESCO’s Guide 3 on “Developing Inclusive Classrooms: Reaching out to all learners: a Resource Pack for Supporting Inclusive Education” (UNESCO, 2021), I developed my own observation schedule which I piloted to determine if it could be used in a consistent manner and if the schedule could yield data which could answer the research questions (Rizvi, 2010). I then reviewed the contents as necessary.

In total, I observed 17 lessons; three lessons per teacher except for one teacher who was assigned another class from the one he normally taught, after I had observed two of his lessons. Observation was in three stages: the descriptive phase, where I observed broadly for an overview of the setting; the focused stage, where I observed with a focus on activities that were of interest to me such as classroom dynamics, relationships between the vision disabled students and their teachers and the students with vision disability and their peers, access to lesson content and teaching and learning practices. The third phase was the selected observation phase in which I investigated the relations among the elements of the greatest interest to me – that of accommodating the learning needs of vision disabled learners in mainstream classrooms (Spradley, 2016).

I used the data capture form (*Appendix 22*) to record the elements of interest to me while also taking down field notes. Due to the noise from neighbouring classes or from students

from other classes who were constantly parading the corridors, it was not possible for me to record the lessons. Besides, my interest was not in the lesson content but rather in the interactions between students with vision disability and the teacher, between sighted students and their vision disabled peers, the support given to vision disabled students and their participation in classroom activities. Each single lesson lasted for 45 minutes and double ones lasted for 90 minutes.

#### *4.4.3.5 Document Review*

Documents have the potential to provide data that can illuminate the research context, making vital contributions to information generated from other methods of data collection (Bowen, 2009; R. K. Yin, 2015). Document analysis can reveal behind the scenes activities that the researcher cannot directly view and also assist in corroborating findings from other sources of data (Bowen, 2009; Stake, 1995).

In the absence of school records, school policy on inclusive education and lesson plans from all the teachers, I reviewed the following school documents in order to understand the context in which students with vision disability are schooling:

- Internal rules and regulations of the school;
- Minutes of the general staff meeting for the three terms of the 2018/2019 academic year;
- Minutes of the general staff meeting for the first two terms of the 2019/2020 academic year;
- Minutes of the general staff meeting for the three terms of the 2020/2021 academic year;
- Minutes of administrative meetings for the three terms of the 2018/2019 academic year;
- Minutes of administrative meetings for the two terms of the 2019/2020 academic year;
- Minutes of administrative meeting for the three terms of the 2020/2021 academic year;
- The School Action Plan for the 2020/2021 academic year;
- Lesson notes from two female teachers;
- The 2010 Law on the Promotion and Protection of Persons with Disabilities;
- The 2018 Text of Application of the 2010 Law.

The minutes of the PTA meetings would have provided more insight into the study but the PTA president of the school refused to share the minutes with me even after the principal's request for him to do so and offered no explanation for withholding them.

With the permission of the principal, I photocopied the documents and handed them to one of my research assistants (see discussion on language below for the role of the research assistants) who translated them into English and gave me the translated versions on a flash drive. The soft copies were permanently deleted from his computer. The photocopies were handed back to me and I destroyed them as I had been agreed with the principal.

#### *4.4.3.6 Field Notes*

My personal observations, records of the research experience, personal reflections, detailed descriptions of what I observed and that of the setting constituted my field notes (Mulhall, 2003; Taylor et al., 2015). Field notes are critical to assembling qualitative data as they enable the researcher to record participants' verbal and non-verbal cues in a particular context, including the researcher's thoughts, feelings, and insights (Maharaj, 2016; Miles & Huberman, 1994). I kept a research journal throughout the data collection process in which I wrote down my field notes.

Following, is a description of how I managed and analysed the data from the data collection methods described above. Considering that Cameroon has two official languages which are languages of instruction, I will first describe the language choices of the research participants.

### **4.5 Language**

I informed the participants that they were free to communicate in their language of choice i.e. English Language or French Language. Apart from the resource teachers, the hostel owner and the two female teachers who communicated their thoughts, feelings and experiences in English, all the participants communicated in French. Although I understand and speak a fair amount of French, I am not proficient enough to engage in a discussion at such an academic level. Consequently, I engaged the services of two research assistants who are pedagogic inspectors for bilingualism at the Regional Delegation of Secondary Education in the West Region. Both of them hold BAs in Bilingual Letters and Postgraduate Diplomas in Teaching and are very proficient in both English and French.

They were responsible for translating from English to French and vice versa during the sessions. I paid keen attention to the translations to ensure that they were not distorting the meanings of words. They then transcribed the interviews verbatim before translating them in English. This exercise was not only time consuming but incurred quite some cost.

For the information letters, consent and assent forms for the focus group and interview guides for students with vision disability, sighted students, parents of students with disability and teachers, these were translated into French and back translated into English by another person who is proficient in both languages to ascertain the accuracy and ensure that no information was lost as in the original English version. This done, the resource teachers brailled the information letters for students with vision disability using a braille embosser. In the next section, I describe how I managed and analysed the data.

#### **4.6 Data Management and Data Analysis**

In this section, I describe how I handled the data which I collected for this study and how I derived meaning out of it, so as to respond to the research question. A key characteristic of qualitative research is its iterative nature, hence data management is often fused with data analysis especially as the researcher has to deal with large amounts of data from multiple data sources (Wong, 2008), like in the current study. In the ensuing paragraphs, I describe how I managed the data.

##### *4.6.1 Data Management*

Data management here refers to all the processes I engaged in so as to handle and prepare the data for thematic analysis (Wong, 2008). The processes involved were as follows: transcription, translation, putting the data in a qualitative analysis programme while ensuring anonymity and managing access to the data. In all, I conducted 17 individual interviews, two key-informant interviews, two pair interviews and one focus group discussion. I handed the audio-recorded data from individual interviews and paired interviews, focus group discussions, the key informant interview which were conducted in French to my research assistants who listened to each recording to get a general understanding of the content and then translated them line by line into English and then typed each one into a Microsoft Word document. For the four interviews that I conducted in English, I went through the same process of listening for a general understanding, transcribing each one of them, verbatim and then typing them into a Microsoft Word document. After transcribing the data, the research assistants compared the text data

against the recorded versions for accuracy. I did the same for the data I had transcribed. They then handed me the soft copies in flash drives and deleted copies from their laptops as we had mutually agreed with them through the signing of a confidentiality agreement. (*Appendix 21*). I then entered the text data into a Computer Assisted Qualitative Data Analysis Software (CAQDAS), DEDOOSE, 2014 version (Lieber, 2014), in order to manage and organise it and also as additional backup for data analysis. This was password protected.

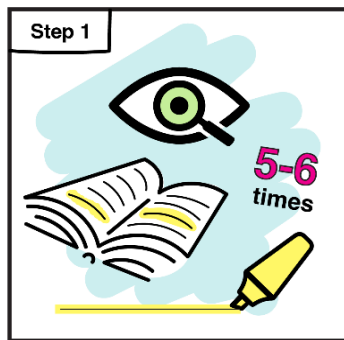
I anonymised the data and stored it in my personal computer which is password protected and known only by me. I shared the data with my supervisor through secured internet connections as the need arose. Data from my field notes was kept in a research journal which I alone had access to and which I could share with my supervisor during the analysis stage, if necessary. After data analysis, soft copies of the data were stored in my personal computer and hard copies in a safe only accessible by me. This was followed by data analysis which I describe below. I have undertaken to destroy the data after five years from when the research is completed.

#### *4.6.2 Data Analysis*

I used thematic analysis to analyse the data generated from students with vision disability, their teachers, their sighted students, and parents. Data analysis had two phases. The first phase was content analysis which involved breaking down the data by coding, comparing and categorising it to identify patterns or themes. To do this, I immersed myself in the data by reading through the transcriptions severally in order to familiarise myself with the contents (Hsieh & Shannon, 2005). I then embarked on the second phase, that of thematic analysis. The focus of thematic analysis is the establishment of patterns or themes from the data (Braun & Clarke, 2012; Maguire & Delahunt, 2017). All the minutes of the different meetings, the lesson plans from two teachers, and the school's internal rules and regulations were translated into English and I uploaded these on Dedoose. I also uploaded my field notes and observation reports derived from the designed data capture form, the 2010 Law and its Text of Application, on Dedoose. Prior to using Dedoose, I received training on the use of this software. This consisted of a week of training from my colleague who was also pursuing a PhD in Disability Studies in the Division of Disability Studies at UCT and had trained himself on the use of Dedoose. I also had inputs from my supervisor

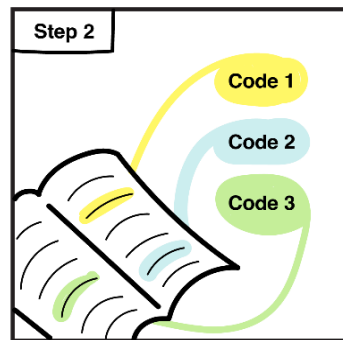
on how to export excerpts and codes from Dedoose. I then followed Braun and Clarke's six-step framework to analyse the data as I describe next.

**Figure 5: Steps in data analysis**



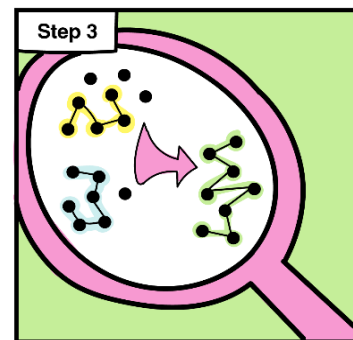
**Step 1: Becoming familiar with the data**

To familiarise myself with the data, I read through each transcript 5-6 times to get a general feel of what the participants were saying. After reading through each transcript once, I started making notes about my impressions of what the participants were saying during subsequent readings. I also highlighted sentences and phrases which I found interesting and relevant to the research question.



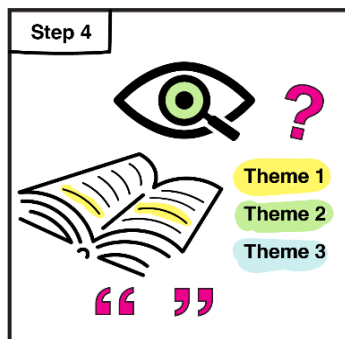
**Step 2: Generating initial codes**

This was the coding stage. Bearing in mind that this was an inductive analysis, I used open coding, meaning that I did not have a priori codes but rather developed these from the data as I went along. I coded each line of each transcript. I highlighted sections of the text such as words, phrases and sentences which I considered relevant to the research question and the research objectives and ascribed label that is, codes to describe the highlighted data. With each reading, new codes kept emerging. I did this for all the text data which I had collected. I then collated all the data into identified codes. At the end of this stage which was supported by my supervisor, I had a picture of the main points that emerged from the data.



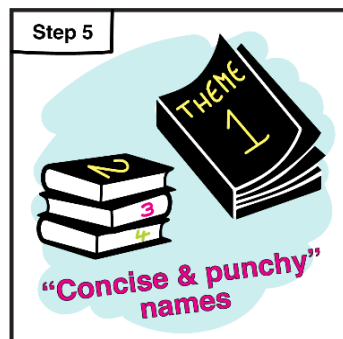
**Step 3: Generating themes**

At this stage, I was looking for themes and sub themes. A theme is 'a pattern that captures something significant or interesting about the data and or research question' (Maguire & Delahunt, 2017, p. 6) and recurs severally within or across sources of participants' responses or transcripts. A sub-theme is a distinct idea that is submerged in the theme. I read through the codes to identify patterns among them and merged those that were synonymous to each other, most of the time, collapsing and combining several codes in order to form a single theme. Where I considered some codes to be too vague or not relevant enough, I discarded them.



**Step 4: Reviewing themes**

In this step, I reviewed and modified the themes I developed in step three. To do this, I went back to the data set and compared my theme against it. I critically examined the themes to see if they made sense and were distinct from each other as suggested by Maguire and Delahunt (2017) and Caulfield (2019). I then extracted the data that was relevant to each code, that is, the direct quotes from participants' transcripts which were relevant to each theme with the help of Dedoose and stored these in the software. I read through the extracted quotes severally to ascertain if they supported the themes, if there were overlaps or if sub-themes were embedded in the themes. Where necessary, I split up themes, combined some, discarded others and created new ones as suggested by Caulfield (2019). This was an iterative process done with inputs from my supervisor until I arrived at the desired sub-themes.



**Step 5: Defining and naming themes**

In this step, the researcher is expected to 'define and refine' the themes through identifying the 'essence' of what each theme is about, that is, what is of interest about each theme and why and determining what aspects of the data each theme captures (Braun & Clarke, 2012). This means that the researcher has to describe the exact nature of the theme while fine-tuning it at the same time and also identifying what portions of participants' responses further illustrated the theme. I identified the story each theme told, how it fitted into the comprehensive story I was narrating about my data in relation to the research question. Having this done, I designed names that were 'concise and punchy' for each theme (Braun & Clarke, 2012, p. 18). In other words, names that were succinct, vivid and effective at the same time.



**Step 6: Writing the report**

In this stage, I chronicled an analytic story which emanated from my data, ensuring that I provided enough relevant and vivid examples of data extracts to illustrate the currency of each of them, making a compelling argument in relation to my research question.

## **4.7 Scientific Rigour and Trustworthiness**

Collecting trustworthy data is central to any piece of research. Lincoln and Guba (1985a), intimate that the researcher needs to establish credibility, authenticity, transferability, dependability and conformability to produce work that is rigorous and robust. I demonstrate below, the rigor and trustworthiness of this study in order for the findings to have the integrity to impact policy and practice. I therefore focused on credibility, authenticity, dependability and conformability.

### *4.7.1 Credibility*

Credibility refers to the veracity of the findings, in other words, the conformity of the findings to the reality of the phenomenon under study. To achieve credibility, I cross-checked the transcribed and typed data with the research participants. I gave hard copies of the interviews to the research participants to read and sign on the script to confirm that the text was what they had said during interviews. For the learners with vision disability, their interviews were read out to them by the research assistants so that they could confirm or refute the contents. Also, with the FGD, the students were assembled and the text read out to them for confirmability.

I also conducted a member check through a meeting with the research participants. According to Lincoln and Guba (1985a), member checking is the “most crucial technique for establishing credibility” (p. 314). It involves sharing the data and interpretations with the research participants for their views on the truthfulness of the information presented to them. Thus, after generating themes from the data, a meeting of participants was organised. Of the 26 participants involved in the study, 19 turned up for the member checking exercise during which I shared the generated themes and also asked follow up questions. For the follow up questions, participants wrote their responses individually so as not to be influenced by “group think” (MacDougall & Baum, 1997, p. 1). I uploaded their responses on Dedoose and analysed them as for other data. Additionally, I kept a research journal in which I recorded my reflections, feelings, observations, relationships, events and reactions to participants during the data collection exercise and took these into account when I was writing the thesis. Noble and Smith (2015) posit that these steps help to improve the credibility of the research. Another way of ensuring credibility in qualitative research is through triangulation (Yin, 2015). I did this by collecting data through multiple data sources which included individual interviews, two key informant interviews, a focus group

discussion and classroom observations. I wrote the thesis in the first person singular when the need arose, in order to expose my own activity and opinion in the construction of knowledge as recommended by Merriam (1998).

#### *4.7.2 Transferability*

Transferability refers to the possibility of applying the research findings to other contexts (Curtin & Fossey, 2007; Lincoln & Guba, 1985b). According to Curtin and Fossey (2007), transferability will depend on whether the study setting and participants have similarities. Accordingly, I have given a detailed description of the study context and provided the demographic details of the research participants. The detailed descriptions are intended to allow readers of this study to possibly transfer the findings to their own contexts if necessary. Tsang (2014), notes that although empirical generalisation cannot be made from case studies, theoretical generalisation or theoretical falsification can be made from them. By implication therefore, the findings of this study can be used to either extend the applicability of theory or to falsify theory.

#### *4.7.3 Dependability*

Denzin (1989) posits that a ‘thick’ description such that the research process can be replicated is the forte of case studies. As such, I have outlined all the steps I used to arrive at the research findings in fine detail such as: the research design and conduct, the processes involved in data collection and analysis, in order to ascertain the extent to which ethical research processes were adhered to.

#### *4.7.4 Confirmability*

Confirmability indicates the extent to which the findings are the result of the information gathered from the various data sources, rather than the views and preferences of the researcher. I collected data from varied sources to ensure that the findings were based on the views, experiences and ideas of the informants, rather than my views as the researcher. These were transcribed verbatim and shared with my supervisor as well as the generated themes and sub themes for her guidance and inputs. All along, I kept an audit trail which, according to Bowen (2009), offers visible evidence from data generation to findings, that the research findings reflect the views and experiences of the research participants.

## **4.8 Ethical Considerations**

The ethics of research involving the participation of humans is built around the principle of causing no harm (Miles & Huberman, 1994). The study was guided by the Declaration of Helsinki, which spells out the ethical considerations when conducting research involving human subjects (Declaration of Helsinki, 2013). To conduct this study, I obtained ethical clearance from the University of Cape Town with approval reference number: HREC Ref: 106/2020 which was renewed in 2021 (Appendix 1). I obtained permission from the Regional Delegate of Secondary Education who is the gate keeper for secondary education in the West Region of Cameroon (Appendix 3). I also obtained permission from the principal of Mabingo Secondary School (Appendix 4). Informed consent was sought both verbally and in writing and in the case of minors, assent (Appendices 8 & 9) to conduct interviews with them, as well as consent from their legal guardians, was sought (Appendix 10). I provided research participants with information sheets and consent forms in accordance with UCT's official ethical guidelines (see appendices 5-13). I shared the contact details of the HREC's chairperson and those of my supervisor with the participants in case they wished to raise any concerns about human rights, their welfare and the conduct of the study. I de-identified the data and allocated a unique code to each participant. Furthermore, information codes to identify material were stored separately to avoid data being linked to participants. I also reported only aggregate findings and not individual level findings using pseudonyms in place of real names to protect the anonymity of the participants and the research setting.

### *4.8.1 Conducting Research with Minors*

Concerning the safety of minors, as a volunteer with the CBC Health and Education Services, I was legally bound by the CBC's Child Safeguarding Policy which sets out, inter alia, guidelines for adult-child interactions intended to safeguard the welfare of children. Besides, all data collection took place in their school to further guarantee the students' safety.

### *4.8.2 Autonomy and Informed Consent*

I was responsible for obtaining informed consent from all research participants. I issued participants with information letters (*Appendices 5, 6, 7, 8, 9 & 12*) to read and understand why the study was being carried out. I gave brailled copies of the letter to participants with vision disability. I gave them enough time to read through the letter and ask me questions

concerning the study. I explained to the participants that their participation in the study was voluntary and that they could withdraw from it at any time if they did not wish to continue, with no consequences. I issued consent and assent forms (Appendices 8, 9, 10, 11 & 13) through which they voluntarily granted me permission to collect the necessary data through either a signature, a thumb print or any personal mark. I did this, three days prior to data collection so as to give participants time to decide if they wanted to participate in the study or not. I collected data only from those who signed the consent forms. For the three minors i.e. below the age of eighteen years, with vision disability whom I interviewed, I issued information letters and consent forms to their parents (Appendix 10) for them to agree or disagree to their children's participation in the study and had the children sign assent forms (Appendix 8) after their parents had consented to their participation.

#### *4.8.3 Beneficence and Non-Maleficence*

The principle of beneficence implies that the research should be of benefit to the participants (Orb et al., 2001). Thus, I informed participants that they would not receive any financial gains from participating in the study but that their transport fares would be reimbursed. However, the findings of the study would be used for academic purposes and advocacy only, which could result in positive action being taken to address how the learning needs of students with vision disability are accommodated within mainstream schools. As for maleficence, the study did not pose any known risk to the teachers, the sighted students and the parents in the study. However, I had made prior arrangements with the counselling unit of the CBCHS' clinic in the study location, in case a participant needed psycho-social support. However, none of the participants required counselling services during and after the data collection exercise.

Regarding the students with vision disability, it was likely that the interviews could evoke emotions as they recounted their experiences of studying in a mainstream school since some of the experiences could have been negative. To manage this risk, I made prior arrangements with the Regional Delegation of Social Affairs who are responsible for issues of child protection and work collaboratively with the CBCHS on matters of child and adult safeguarding and protection, through a Memorandum of Understanding, to refer any minor to their services if need be. I was also obliged by CBCHS' child protection and safeguarding policy to report any cases of child abuse to the Regional Delegation of Social

Affairs but there was no need for this as I was not aware of any case of abuse during data collection.

The principle of maleficence further requires the researcher to protect the participants' right to privacy. The interviews and focus group discussions were conducted in a secluded building in the school, a room next to the RR, in order to protect the privacy of research participants. I however interviewed the parents of a vision disabled learner in their home upon their request. Furthermore, I used pseudonyms to refer to the participants in order to protect their anonymity. Regarding confidentiality of information shared during FGDs and interviews, participants collectively agreed on a code of conduct within the limits of the law which were scrupulously adhered to. This was stated in the information letter. However, I was not able to guarantee the confidentiality of information shared by the principal of the school and the hostel owner as key informants, since the school has only one principal and the hostel owner is the only one with a residential home for learners with vision disability in the study location. I made this known to them so that they could take informed decisions whether to participate in the study or not. They however consented to participating in the study.

To further protect the anonymity of the research participants, I immediately transferred the data recorded in two digital recorders during the interviews and focus group discussion into my personal computer using a secure electrical cable and deleted the data from the recorders in order to avoid unapproved access in the case of theft or loss of them. Also, my personal computer and documents are protected by a password known only by me. I have undertaken to destroy the data after a period of five years from when the research was completed.

#### *4.8.4 Justice*

The principle of justice demands that the researcher treats the research participants with respect and does not abuse them in any way (Orb et al., 2001). I treated all the research participants with respect and fairness. They took informed decisions to participate in the study and data collection was done at their convenience. For participants who came from a distance of more than two kilometres, I paid their transport fare and gave the parents and teachers eight US Dollars each. Each sighted student received an exercise book and a pen while students with vision disability each received 20 sheets of braille paper. During data collection each participant was provided with light refreshment. After I complete this

thesis, I will share copies of the abstract as feedback of the study with the school. I will also organise a meeting with the research participants for those who will be available to share the findings with them. As suggested by Ritchie et al. (2013) good ethical practice demands that the qualitative researcher acknowledges their subjectivity in the research process. In conformity with this dictate, I now discuss reflexivity in the study.

#### **4.9 Reflexivity**

Dodgson (2019), states that reflexivity has often been described as “the gold standard for determining trustworthiness in qualitative research” (p. 1), especially when researchers describe the intersectional relationships between participants and themselves. In this way, the credibility of the research findings is increased and the readers’ understanding of the work is deepened (Dowling, 2006). Reflexivity is an ongoing process during which the researcher reflects about their beliefs, identities, values, perceptions, behaviour and those of the study participants and how these affect the data collection and analysis. The researcher is therefore connected to the research (Dodgson, 2019). Consequently, their subjectivity shapes the co-construction of knowledge and meaning and so must be acknowledged in the research process (Kivunja & Kuyini, 2017). Based on these, I state my positionality in this study in the ensuing paragraphs.

I am a secondary school teacher of English Language and Literature and have been for the past thirty-three years, working for the Ministry of Secondary Education in Cameroon and have taught students with vision disability in my current work place. In the last fourteen years, I have been working part time with the Cameroon Baptist Convention Health Services (CBCHS), volunteering as the Inclusive Education Adviser for two programmes - the Socio-Economic Empowerment of Persons with Disabilities (SEEPD) and the Empowerment and Disability Inclusive Development (EDID) Program, sponsored by the CBM International and Liliane Fonds in the Netherlands respectively. My role in both programmes is to promote the inclusion of learners with disabilities, including vision disabilities, in mainstream primary and secondary schools in the North-West and West regions of Cameroon, and also the University of Bamenda (UBa) in the North-West Region. Additionally, I work closely with the General Certificate of Education (GCE) Board which organises and conducts end-of-course certificate examinations for secondary and high school candidates. My role is to support the GCE Board in the organisation and conduct of disability inclusive examinations. This entails working collaboratively to

identifying exclusionary practices during the examination processes and providing technical support in minimising or eliminating barriers for candidates with impairments during the organisation and conduct of these examinations. Additionally, I run capacity building workshops on inclusive education for teachers and school leaders in the aforementioned regions. Hence, I am seen as the ‘expert’ in matters of inclusive education. These factors impacted on the way I conducted the study as I was keen to lay bare the overt and covert barriers to meaningful participation and achievement in education for students with severe to profound vision disability. I was also hopeful about improving my practice and that of the teachers I assist in training and also effect change within the ministries of education in Cameroon. My push to conduct this study stemmed from my work with the CBCHS and working in mainstream school milieus where the number of students with vision disability enrolling, is on the rise. I was also concerned that these students were not receiving the relevant support to meaningfully access, participate and achieve in their educational journeys. So, I was curious to know how role players understand what vision disability is, how vision disability impacts learning, what needs arise from vision disability, and how these needs are understood and responded to. I therefore went into the study aware of the power imbalances that may arise during my research. I was also aware of how my position as a researcher could cause participants to respond to my questions with a lot of trepidation, seeing me as an evaluator of their practices rather than a partner in co-constructing knowledge.

Coming from the CBCHS which is supporting the school with resources to facilitate the education of vision disabled students, caused the Regional Delegate for Secondary Education and the principal to give me access to the school, perhaps in order to cement their relationship with the CBCHS. Additionally, I realised that some of the participants were careful not to sever connections with the CBCHS, especially as the Minister of Secondary Education had visited the school to inaugurate the RR set up by the CBCHS, a move which put the CBCHS in the spotlight as an organisation supporting the government of Cameroon in the implementation of inclusive education. For instance, the principal’s responses to some of my questions either contradicted what the teachers and students had told me or what I observed. For example, teachers complained that upon their first arrival in the school, they were not informed of the presence of students with vision disability and received no orientation on how to handle these students. Yet, the principal said each new teacher was “instructed” to pay attention to the needs of students with vision disability.

The principal also claimed that the school provided braille papers to students with vision disability; however, I observed that sometimes when the students ran short of paper, they turned to the coordinator of the RR who, as earlier mentioned, is an employee of the CBCHS. Perhaps the principal assumed that telling the story as it was, would have some repercussions and so chose to paint a rosy picture in order to save her face with the CBCHS. This face-saving also reflected in her exaggerated praise of what the CBCHS had done for the school.

Based on my position as a teacher, an inclusive education adviser, and a PhD student, power dynamics affected how I conducted the study. These positions elevated my status in comparison with the teachers. Prior to data collection, I had had a three-day workshop with 90 teachers of Mabingo Secondary School, which was their first capacity building workshop on inclusive education in all of their teaching careers. All of these caused me to be seen as the expert and so this might have influenced the way some teachers responded to the interview questions and interacted with the vision disabled students during my observation of their lessons. For instance, one teacher asked a student with vision impairment ten times within a period of ninety minutes if he was “following the lesson”. I found this to be exaggerated attention, perhaps borne out of concern that I was out to assess her ability to include the student during her lessons.

Some participants perceived the CBCHS as a wealthy organisation which could foot the educational bills of their children and spared no effort in telling me of their financial struggles, perhaps with the hope that I could unlock resources for them. For instance, a parent, knowing that I work with the CBCHS which was supporting the education of her son, constantly referred to her poor financial situation, telling me how she was the breadwinner of the family and at one point stated, “The NGO [referring to the CBCHS] supported us this year in paying for his transportation otherwise, he should have stayed at home because I had to take care of his siblings too.” While she could genuinely be financially hard up, she might also have exaggerated her necessitous state because of my affiliation with the CBCHS. Perhaps she would have not said all of these things if she was talking to someone with no apparent potential to bring her financial support.

Similarly, when I asked another parent to tell me what he considered to be his child’s learning needs, he said, “What I can tell you is that he needs pocket money, money for transportation, food and for examination; registration fees.” When I probed him further, he

said, “What I know is pocket money, money for food, transportation and leisure.” When I asked if he paid fees at the boarding facility where his son lived and attended Mabingo Secondary School, he said, “Frankly speaking, I give what I can afford, i.e. 10,000 francs, 20,000 francs” (approximately 17 and 34 US Dollars, respectively). “There is an organisation called “Leader Force” which helps me to pay his school fees.” It should be noted that these parents are not inherently poor, but rather the poverty is a product of neo-colonialism (Langan, 2017).

The owner of the hostel was not left out of this. In spite of the CBCHS supporting his efforts as already mentioned, like Oliver Twist, he wanted more. He seized the opportunity to innumerate his financial difficulties to me with the hope that perhaps, the CBCHS could go the extra mile. He said:

*The challenge is that you know dormitory is very strong (meaning demanding). Somebody cannot stay without eating. So now, as the parents don't support the children as they should, it's very difficult to support them because first of all, their materials are too expensive. And the centre is supposed to support their materials and then, they are supposed to eat, now it is, it costs a lot of money. And they are supposed to pay people to cook and there are many things that we use like soap, and so on. So now it is very difficult. It means that we don't have enough food to feed them, we don't have even enough materials to work with them and that's the challenge that we face (RRT3)*

Thus, my positionality may have caused these participants to adjust the information they shared with me.

Worthy of note is the fact that some participants exercised some level of power in how they participated in the research process. For example, contrary to the view that my presence as a researcher in the classroom could influence the behaviour of research participants, two of the teachers I observed made no attempt to conceal their indifference towards students with vision disability. Not even once did they communicate with these students or attempt to support them during the three lessons which I observed for each of them. Again, four of the teachers insisted on having their interviews conducted in the English Language, in spite of me telling them to use the language which was more convenient to them and informing them of the availability of professional translators during the data collection exercise. While this may have compromised the quality of the interviews since they struggled with expressing some ideas in English and so reverted to

French periodically, it exhibited autonomy and control on the part of the participants (Giordano et al., 2007) .

#### **4.10 Conclusion**

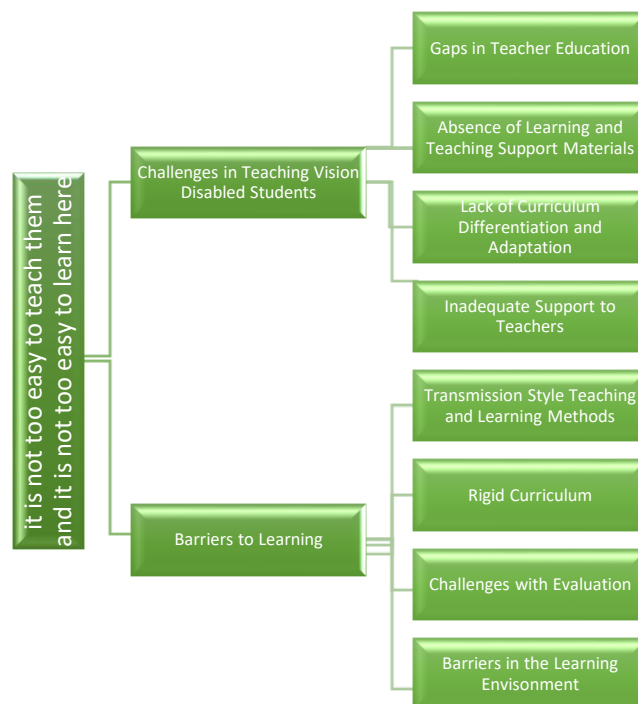
In this chapter, I provided details of the methodology which I used in conducting this study which was aimed at investigating how the learning needs of students with vision disability are understood and accommodated within mainstream schools in Cameroon. I explained my choice of an instrumental case study, participant recruitment activities, and how the data was generated, managed and analysed. I presented issues around credibility, transferability and dependability before wrapping up with ethical considerations and reflexivity.

## CHAPTER 5: CHRONICLING THE EXPERIENCES -1

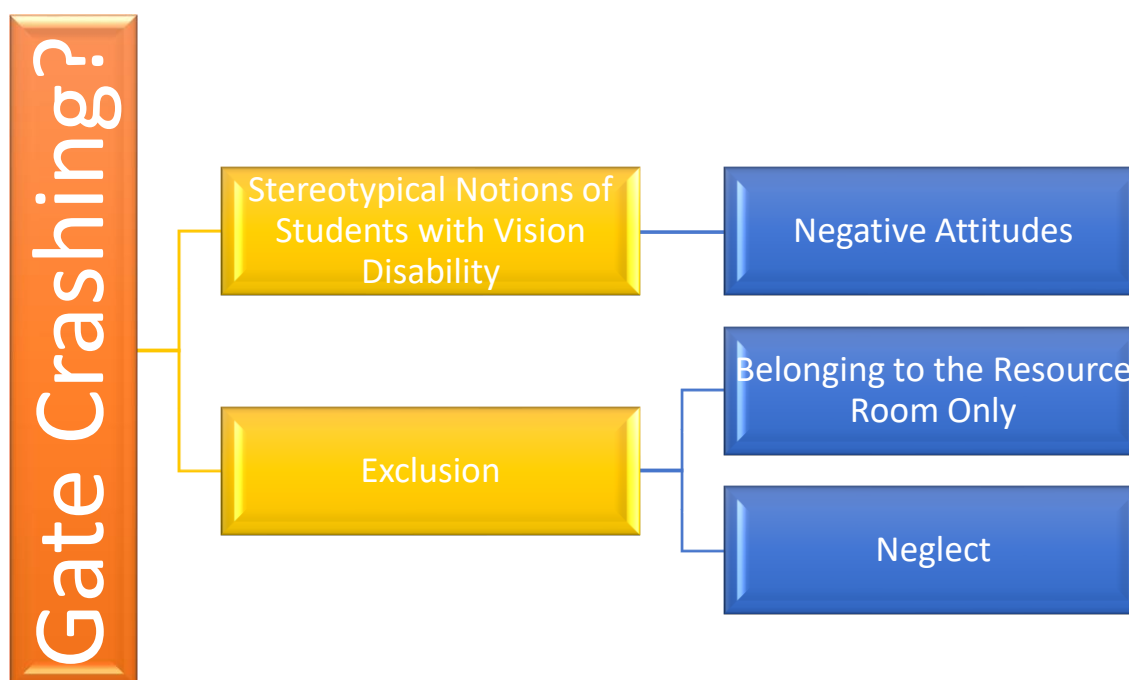
### 5.1 Introduction

In this chapter, I present the findings of the study across five different data sources as the intention was to discuss the case under study and not to present individual accounts from each research participant. The sources are: individual in-depth semi-structured interviews with students with vision disabilities, teachers and parents, a focus group discussion with sighted peers of the vision disabled students, lesson observations, a review of relevant documents and my field notes. Although participants' discussions are co-constructed, I avoid in-depth interpretations here, since the chapter focuses on the description phase of the data, and the meanings, further interpretations and critiquing will be dealt with in the discussion chapter. The findings are reported in two chapters under three main thematic areas. In Chapter Five, I cover the first two themes:

Theme one: Challenges in teaching vision disabled students in a mainstream school. Theme two: Barriers to learning for students with vision disability in a mainstream school.



**Figure 6: Summary of themes one and two**



**Figure 7: Summary of theme three**

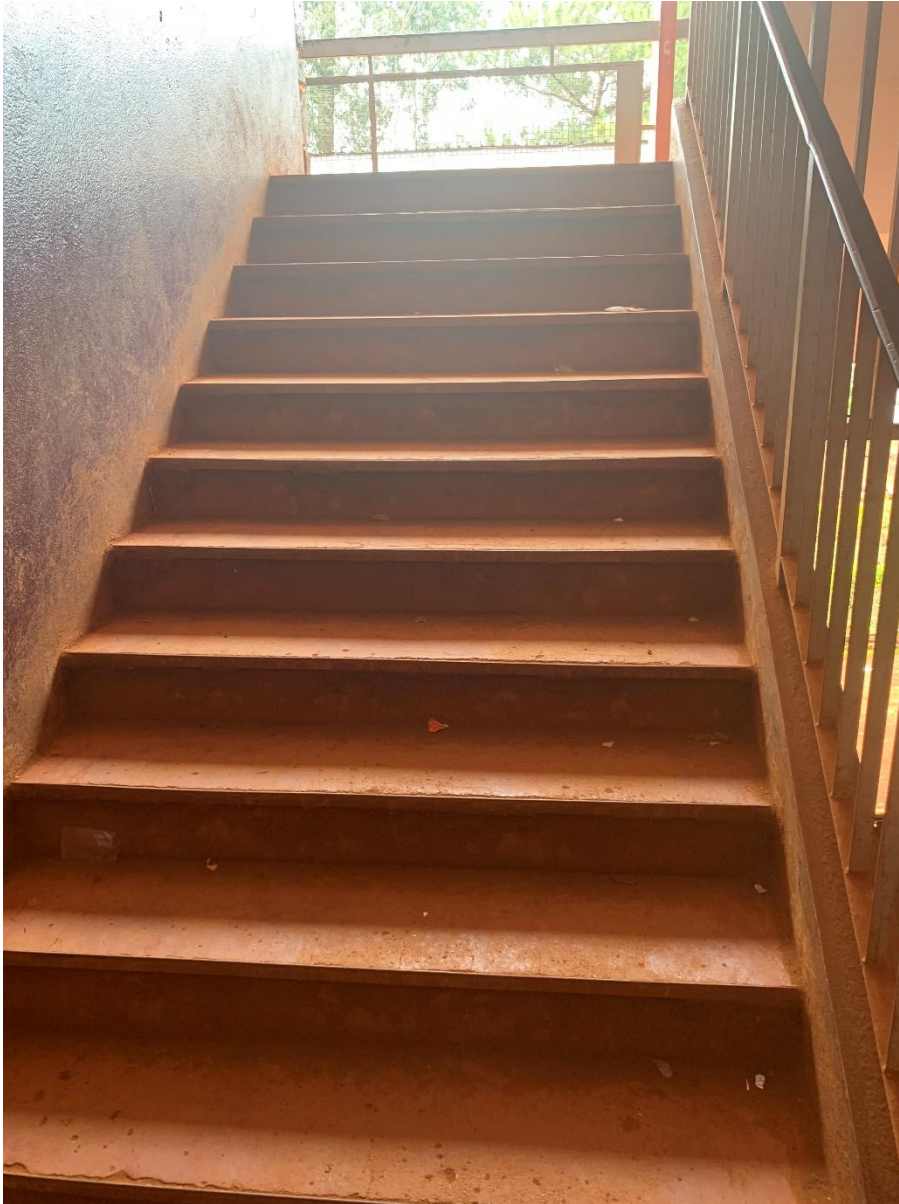
Themes one and two deal with teaching and learning, while theme three deals with other school issues outside pedagogy.

In chapter five, I describe the perspectives of teachers, students and parents on the challenges teachers face in teaching students with vision disability in a mainstream school setting. I also give an account of the barriers to learning from the perspectives of students, teachers and parents. Chapter six chronicles theme three, which hinges on issues which, though not pedagogical in nature, impact on student learning and the overall experiences of vision disabled students in a mainstream school. In both chapters, I identify themes that emanated from within and across different participant groups, lesson observations, field notes and documents and use direct quotes to elucidate what the participants reported. In order to maintain confidentiality yet giving a human face to the findings, I use pseudonyms for the participants who shared their views on the phenomenon under study. The name of the school, Mabingo Secondary School, is also a pseudonym in order to conceal the school's identity.

## **5.2 The Context of Mabingo Secondary School**

The study was carried out in one of the government owned and run secondary schools in the city of Bafoussam in the West Region of Cameroon. This region is part of French-speaking Cameroon and the main language of instruction in schools is French. At the time of data collection, the school had a population of four thousand five hundred students

spread over seventy-eight classrooms with long flights of steep stairs leading to most of these classrooms. Each class had an average of 60 students.



*Figure 8: A long flight of stairs leading to some of the classrooms.*

**Figure 4: A long flight of stairs leading into some of the classrooms.**

Twenty-four of the students had severe to profound vision disability and three had mobility impairments. In total, there were 27 students with disabilities out of a student population of 4500 students translating to 0.6%. This huge gap could mean that many students with vision disabilities were not attending school or transitioning to secondary school. It could also mean that some students with vision disabilities were enrolled in other schools in the

community. Twenty of the students with vision disability lived in a boarding facility co-located within a primary school, both of which are privately owned. The other four students lived with their families. All of the students attended the resource room to learn braille.

The administrative staff at the high school comprised of one principal, eight vice principals, seventeen senior teachers of discipline and five teachers of disciplines. There were one hundred and twenty-five mainstream teachers giving a teacher/student ratio of 1:36. However, the school did not have an equivalent number of classrooms as the teachers so class sizes were generally large. Additionally, there were two resource teachers (those who support the vision disabled students by brailing and transcribing their work), one resource room (RR) staff assigned by the CBCHS to coordinate the activities of the RR and the non-teaching staff which comprised of eighteen auxiliary staff in charge of secretarial duties, the school infirmary and security.

Each class was divided into streams such as form 1 A, B, C, etc. depending on the number of students who enrolled in that class for the academic year. In the French sub-system of education, foreign languages - generally referred to as modern languages such as: Chinese, Italian and German are offered as compulsory subjects in high school. Sixth form classes were identified by the modern language that was taught in that class. While the students did not pay tuition, they paid a (PTA) levy which varied between forty-five and eighty-five US Dollars per year, depending on whether a student was at secondary or high school level; an amount which some parents struggled to pay. This levy was used to augment the funds allocated by the Ministry of Secondary Education for the running of the school. Students with disabilities were exempt from paying this levy as part of government's contribution towards their education. However, there was no budgetary allocation for disability inclusion.

The school day started at 7:30 a.m. and ended at 3:30 p.m., punctuated by two breaks, one from 10:15 to 10:30 a.m. and the second from 12:20 to 12:50 p.m. On Mondays, the school day started somewhat earlier at 7:00 a.m. with a morning assembly during which the National Anthem was sung and announcement were made. Eight lessons were taught each day, each lasting forty-five minutes, although some lessons were double ones. During the COVID-19 pandemic, when I collected data, the school operated a shift system as recommended by the government of Cameroon. The first set of students started at 7:30 a.m. and finished at 12:00 p.m. while the second set of students started at 12:30 p.m. and

ended at 5:30 p.m. The first and second sets alternated in order to create a balance in the amount of teaching each set of students received. Class sizes were reduced to 50 students to respect physical distance. The school ran clubs in dance, journalism, science, drama, environment, philosophy and plastic art but due to the prevailing circumstances at the time, these activities were suspended.

The school has a resource room (RR), which at the time of data collection had ten computers, and a braille embosser. The main activities in the RR consisted of brailing of test items during evaluations and transcribing students' answers for teachers to correct. Sometimes, some teachers visited the resource room during evaluation periods in order to seek guidance from the resource teachers on how they could modify their evaluation items and make them accessible for vision disabled students.



*Figure 9: The researcher in an “office” next to the resource room*

## 5.3 Findings of Thematic Analysis

### 5.3.1 Challenges in Teaching Students with Vision Disability in a Mainstream School

Challenges here, refer to the mental and physical efforts needed to successfully accommodate the learning needs of students with vision disability in mainstream classrooms. This is the first theme that emerged from the study. The challenges were overwhelming and the responsibility for addressing them did not lie solely in the hands of the teachers. There were some that needed the intervention of education authorities while others needed the intervention of the school administration. Some of the challenges were rooted in Cameroon's educational policy. I explore the challenges teachers faced and how these influenced the way they understood and accommodated the learning needs of vision disabled students.

### 5.3.2 Gaps in Pre-service Teacher Education

Pre-service teacher education refers to the education/training that trainee teachers receive prior to becoming certified teachers. Such training should prepare future teachers to teach all students and not just a particular group. Failure to do so, results in gaps in teaching skills including those needed to include vision disabled students in teaching and learning practices.

#### 5.3.2.1 Lack of Training for Disability Inclusion

I found out that teachers were generally not trained to teach a diverse range of students including those with vision disability in mainstream classrooms. This was confirmed by this teacher who noted the difficulty that results from the lack of training:

*It is an up-hill task. Apart from taking them to school, follow-up in class is very demanding because the teachers are not trained to teach students with disabilities (T7).*

This issue was echoed by a number of participants. Bih, a teacher said:” During my training in Ecole Normale [referring to the teacher training college], I was not trained in any methods that would enable me to teach them” [referring to vision disabled students]. (T3)

As a result of the lack of skills in teaching vision disabled students, teachers believed that they should not be expected to be able to accommodate their learning needs. Achuo, another teacher added, “I was not trained to teach students with vision disabilities. I was just trained to teach students in general” (T2). Bih highlighted the need for training saying,

“The first thing is for teachers to be trained. Teachers have to be trained on how to teach those students. We teachers, we have to be trained” (T3). These gaps included the way teachers understood disability as I describe next.

#### 5.3.2.2 *Understanding Disability*

Teachers had a limited understanding of what disability is and this shaped the way they responded to the needs of students with vision disability. In the main, teachers described disability from a medical model perspective maintaining that people are disabled by their impairments alone. When asked what their understanding of disability was Achuoh, a mainstream teacher said: “Vision disability is a situation where people don’t see well or they don’t see at all... Unlike their sighted peers, they don’t see when I draw or write on the board”.

Comparing students with vision disability with their sighted peers means that Achuoh focused on the impairment as the cause of the disability rather than his approach to teaching. The disability was the student’s problem and not that of the teacher and so he clearly did not understand that adaptations might need to be made. This was echoed by another teacher, Nji, who blamed his lack of inclusion of students with vision disability in practical aspects of his lessons in computing on the fact that the students could not see. He said:

*In computer science, I want to present a lesson on the hardware and all its components which are inside. It is impossible for them to see. So, what I do is a video projection of lessons... When the cursor points to a specific part, the computer generates the name of that part and he can hear it. Now the sighted students can see and hear the name of the parts. Our problem is that the visually impaired cannot physically identify the parts. This is an obstacle (T6).*

Nji’s description of students with vision disability’s inability to see and “physically identify the part” and his reference to this ‘inability’ as an ‘obstacle’, points to his understanding of what vision disability is – a problem within the student and not the barriers the student faces such as his teaching strategy. Such a perspective was a barrier to finding appropriate ways of enabling the students with vision disability to meaningfully participate in the lesson.

### 5.3.2.3 Limited Understanding of the Learning Needs of Students with Vision Disability.

Some of the challenges teachers faced were ingrained in their limited understanding of the learning needs of students with vision disability and this influenced the manner in which these needs were addressed. Some defined learning needs in more general terms and did not make a distinction between the learning needs of students with vision disability and those of their sighted peers. For instance, Ako, a mainstream teacher said: “Learning needs entails everything that we use in the teaching/learning process in such a way that learners better absorb knowledge in short term and long-term memory” (T5).

Not naming any specific needs could mean that he did not know what the needs were, even for sighted students. This had implications for teaching and learning. If a teacher does not know the learning needs of his/her students, then preparing lessons and delivering them can be quite challenging. Such a stance indicates that Ako did not plan and prepare his lessons. This was evident during my observation of his lessons. Out of his three lessons I observed, he did not come to class with any resources except for chalk. He talked most of the time and dictated notes to students extempore. It is no wonder that, generally, students with vision disability had their heads bowed on their desks during the most part of his lessons, an indication that they were not engaged. These were all signals that he did not prepare his lessons, probably because he seemingly did not understand what the learning needs of his students were.

Other participants understood the learning needs of students with vision disability to mean material resources such as books in braille and braille paper, as well as technological resources such as digital recorders, android phones and computers with software. For example, Mankah, a mainstream teacher. said:

*They mostly need materials because they use a lot of papers. Braille uses a lot of papers. A student once confessed to me that he doesn't have papers when I asked why he was not taking notes. I even bought him papers. They are in a dire need of paper (T1).*

Another need that was highlighted was the need for books in braille. Ngum, a resource teacher, said, “They need books in braille. Yes. Because it's very important to have books. Not only programme books but they can diversify the books that they can need” (RRT 1).

Meshi, a mainstream teacher, elucidated more on the need to have textbooks in accessible formats saying that:

*The dire difficulty is that of lack of textbooks in braille in the library. Books and other documents in the library are not accessible to the visually impaired. Had there been appropriate books, this could have improved upon their performances (T9).*

Meshi linked the unsatisfactory academic performance of students with vision disability to the unavailability of accessible books and suggested that such access would improve their performance. Along the same lines, Ngwe, another teacher noted how these materials could also improve teachers' skills:

*Textbooks and other things. If the administration or the government could help and provide some textbooks for them, so that we could see, even just to see how the textbooks look like..., it will be better for us so as to improve our techniques in teaching them (T4).*

She disclosed that their [teachers'] teaching methods were not good enough to enable them teach the students effectively and so they desperately needed to see textbooks in braille so as to improve their teaching techniques. Thus, making books available in braille was not just for the benefit of the students but also for the teachers. It is however not clear how seeing a book in braille format would help teachers improve their teaching strategies.

Achouh, a mainstream teacher, added that:

*They need documentation and appropriate didactic materials for them because they should touch and feel things. They don't have textbooks. If they had, I would just indicate some exercise in their textbooks for them to do (T2).*

Mbuh, a vision disabled student, also explained that:

*Books in braille are rare in Cameroon. If we had books, it would be good. Sometimes the teacher gives an assignment but you cannot do it because you don't have a book. It is true that books will be voluminous when transcribed, but we need books any way. (S1).*

Achuoh saw the need for students with vision disability to "touch and feel things" and therefore, the need for "appropriate didactic materials", but he related this to the absence of textbooks which could facilitate work for him - he would just let them do exercises from their textbooks. This was evident during lesson observations where students with vision

disability clearly disconnected from the lesson when teachers made reference to textbooks. Seeing textbooks as a main need therefore caused Achouh not to look for ways of practically including these students in his lessons even though he was aware that some pedagogical practices that involved tactile interactions were needed. The students could be seen with heads bowed down on their desks, an indication that they were not following the lesson.

Students with vision disability also identified textbooks as a much-needed resource, the lack of which prevented them from doing homework. Mengwi, a vision disabled student, said: “Books are also needed as other teachers ask us to come with books and we don’t have books in braille. They keep on insisting that we do all the homework” (S4.)

This quote implies that teachers relied heavily on textbooks for homework and the students, not having these books in braille format, were not doing homework and that did not go down well with teachers. The picture that emerged was that of students with vision disability being passive in class. Teachers saw textbooks as the only source for lesson content. Such heavy reliance on textbooks prevented them from looking for alternative and accessible ways to present their lessons. Consequently, the learning needs of students with vision disability were clearly not being met.

Participants believed that voice recorders would aid the referring to vision disabled students in the process of teaching and learning. Nji, a mainstream teacher, said, “They need special software and recorders for them to record all sorts of learning items so that they can listen to them in the learning process” (T 6).

From my observations, it was clear that the teachers spent a lot of time dictating notes for students to copy and this was punctuated by explanations. It was overwhelming for all students to take in all of the talking and so to Nji a voice recorder would ensure that vision disabled students did not miss out.

Intriguingly, while most teachers defined learning needs in terms of material resources, Bih and Ngwe, both mainstream teachers, understood learning needs for students with vision disability to include adaptations in pedagogy. For instance, Ngwe said:

*When you are in class, they need to touch to understand. They need to act, sometimes to act to understand. So, if you say when a man is old, he walks like this, without describing and demonstrating, it will be difficult for students with*

*vision disability to understand. But if you make them walk like men who are old, they will understand best. Yes. So, I think they need to touch, and do role play (T4).*

This teacher argued for the active engagement of students with vision disability during lessons in order for them to understand. This is in contrast to the beliefs of other teachers who saw dictating of notes as the way to teach all students including those with vision disability. To this teacher, explaining concepts was not enough for students with vision disability, but rather engaging the students in activities was fundamental to their understanding of such concepts. She also emphasised the need to give detailed and vivid explanations to students with vision disability because, according to her, they miss out on incidental learning and so this must be considered in the teaching/learning process. In the ensuing analogy she said:

*When my two-year-old daughter gets up in the morning, she looks for her tooth brush and brushes her teeth because she sees others at home doing it. But if she were not seeing other people doing it, I would have had to teach her how to do it. Therefore, children with vision disability need to be taught even the most basic things (T4).*

According to this teacher, being “taught even the most basic things” and how to do these things went further than explaining to the students and expecting them to understand. It was about adopting a demonstration strategy of teaching which involved having the learner practise what had been demonstrated. Although she did not explicitly talk about the Expanded Core Curriculum (ECC) for students with vision disability, she hinted at it. The comparison between her two-year old daughter’s ability to brush her teeth by imitation while a vision impaired child needed to be intentionally taught to do so pointed to the fact that teachers needed knowledge of an impairment specific curriculum for students with vision disability which was lacking as I describe next.

#### *5.3.2.4 Impact of Braille Illiteracy*

Braille is a tactile writing system, used by people who are blind, in which characters are represented by raised dots and read using the fingertips to feel them. While a general education teacher may not be expected to be braille literate, literacy and knowledge of braille dynamics is of the essence in low technology and resource limited contexts like that of Cameroon, if the learning needs of students with vision impairment are to be met. None of the mainstream teachers I worked with had basic knowledge of braille and this

negatively impacted on how the learning needs of students with vision disability were addressed. A case in point was that, when teachers dictated notes, they were conspicuously unaware of braille dynamics and dictated notes at an uncomfortable pace for students with vision disability. For instance, Nyah, a vision disabled student, stated that:

*Some teachers, when they dictate their notes, they do not take into account that the visually impaired use paper after paper. Therefore, he must change the paper before continuing with the lesson. They do not understand that we cannot turn over a new leaf of the notebook as fast as those who see (S5).*

Not knowing this braille dynamic meant that teachers dictated notes at a fast pace, only to accuse students with vision disability of ‘lagging’ behind in the copying of notes. Thus, Nyah added:

*And it is why we often draw their attention to understand that when the paper has been used up, they must grant us some seconds to put another one in the apparatus [referring to the writing frame] (S5).*

This fast pace of dictating notes was echoed by Mezoh, another student with vision disability, who said, “When the history teacher dictates, she does not verify to know if the one who does not see has understood what she said so as to write” (S4).

The speed of the teacher had implications for students with vision disability. If they missed a word, it was not possible for them to leave space for that and fill in the blanks afterwards; so too, they could not erase a wrongly spelt word as braille dynamics do not permit these. From the information about teachers’ speed in dictating notes, I took the brailled notes of students with vision disability and those of their sighted peers to the resource room where the resource teachers juxtaposed them to find out if there were any differences in the contents. Vision disabled students’ notes were fraught with errors that distorted the meanings of sentences and, in some cases, the whole content of the lesson. Considering that notes were the only resources available to students with vision disability after lessons, it was important for them to have the right notes and all of them. It was however not possible for teachers to check the students’ notes for errors as they were not braille literate. Mankah, a mainstream teacher, confirmed this when asked if she examined their notes to ensure they were copying the right thing and she said, “That is difficult because I cannot read braille”. Not having all the notes or having fragmented ones obviously meant that

students with vision disability received an inferior quality of education in comparison to their sighted peers and so performed poorly academically.

It was noteworthy that some teachers like Mankah expressed the desire to learn braille in order to be more supportive of students with vision disability. She said:

*I have always wished that teachers learn the braille alphabet. The initiative was taken some years back, but it died a natural death. It was suggested that we could learn the basics so that we will be able to read what children have written (T1).*

Nji, a mainstream teacher, added that:

*If teachers can be trained for example, if they learn the braille alphabet, they will be able to decipher what the students with vision disabilities write. We could be able to modify our lessons and teach them better (T6).*

Exposing teachers to the rudiments of braille would inadvertently expose them to basic strategies of teaching students with vision disability in mainstream classrooms as Nji suggested. Currently, teachers' inability to read and write braille was an impediment to meeting the learning needs of students with vision disability.

Also, teachers were seemingly not aware that there were differences in congenital and acquired blindness and that not all students with vision disability had the same lived experiences and that both factors impacted the students differently. For instance, Mbuh reported that:

*I lost my eyesight three and half years ago. I am still learning the braille. I am slow in writing braille. I am not as fast as X. So, when the teacher dictates notes and he is fast, I cannot cope (S1).*

Mbuh therefore needed extra support to enable him to cope but this was not available to him. When teachers were fast, he missed some of the notes and this had implications for his access to the lesson content, considering that students with vision disability depended solely on these notes as references for the lessons taught. When this happened, the onus was placed on the student to get the notes from his peers and failure to do so was none of the teachers' business.

To conclude, while teachers were generally aware that students with vision disability needed to be taught differently, they had very limited knowledge of a curriculum for vision

impaired learners such as the Expanded Core Curriculum (ECC). This knowledge gap posed challenges to the teachers in lesson preparation and delivery, compounding the implications for the inadequate learning and teaching resource materials as I describe next.

### ***5.3.3 Insufficient Learning and Teaching Support Materials***

Learning and teaching support materials (LTSM) refer to a range of educational materials that teachers use in the classroom to help in the processing of information by creating and sustaining the interest of their students, maintaining attention, understanding and aiding memory with the aim of increasing learners' knowledge, enriching their learning experiences and supporting specific learning objectives as set out in their lesson plans. Such materials should, *inter alia*, take into consideration students' needs and strengths. Having such materials in a mainstream classroom with students with vision disability does not suffice if such materials are not adapted to the needs of the latter. By and large, teachers had only the nationally prescribed textbooks in print format and hardly used other didactic materials to support their teaching. Teachers could have requested the RR to assist with brailing key content for students with vision disability but the lone braille embosser could not withstand such volume of work.

#### ***5.3.3.1 Insufficient Braille Equipment and Computers with Relevant Software***

The resource room had only one braille embosser which was used to braille assessments for students in two schools supported by the CBCHS. This put a lot of strain on the embosser which sometimes could not handle the volume of work. Suh, a RR teacher said, "Another reason lies in the fact that there is only one embosser which is used for both Mabingo Secondary School and School X (*RRT4*).

During evaluations, the RR staff were overwhelmed with work since every teacher teaching a student with vision disability submitted their evaluation items there for brailing and very often in the nick of time. This sometimes resulted in some evaluations not being brailed and the students had to resort to their friends dictating the exam items for them to then respond to them.

Additionally, during lessons that demanded practical activities such as Computer Science, students with vision disability were completely excluded from the practical part of the lesson as the computers at the Multimedia Centre were not equipped with the relevant software. Mezoh, a vision disabled student, confirmed that, "there is no NVDA [referring

to a text-to-speech software] in them [referring to the computers in the Multimedia Centre]”.

### 5.3.3.2 Absence of Textbooks in Accessible Formats

In Cameroon, the Ministry of Secondary Education prescribes textbooks for each subject and class/grade. Each student is expected to purchase the books on the book list and these constitute their learning resources. Although teachers are expected to use the prescribed texts as guides for lesson planning, preparation and delivery, teachers tend to adhere to the text and refer to it in class constantly. Homework is also usually given from the textbook and teachers simply refer students to exercises to do at home. Sadly, these books are not available in braille and the government has made no effort to have these books in accessible formats for the students who are print disabled. Ngum, a resource teacher, confirmed this saying:

*The ministry will take care that at the beginning, when the schools resume, they try all their best to produce books on the programme. But they don't think about children with disabilities, particularly children with visual impairment... The government doesn't think about them. To give them, to give some example of a book in braille so that they can use (RRT1).*

Ngwe, a mainstream teacher, added that: *So, all we know is that they [referring to students with vision disability] come with the sheets and stylus, slate ... They don't have documents...we know that they don't have...(T4).*

The two quotes reveal that even the Ministry of Secondary Education does nothing to make available accessible learning and teaching resource materials and so students with vision disability do not have access to lesson content. The statement by Ngwe was confirmed by my observations and interviews that all the students with vision disability had as scholastic materials were the slate, stylus and braille papers which were often not sufficient. Timo, a student with vision disability, also confirmed this saying: “The materials we have are: the tablet, the stylus and the braille papers” (S2).

It was interesting to note how these students learned without having the necessary resource books and it is no wonder that their academic performance was generally poor. The unavailability of books in braille had implications for the students. They spent a lot of valuable time copying notes and homework and this put a lot of strain on them. Again, Timo, regretted that:

*The time spent on copying from the textbook could be spent on learning other lessons or other subjects. You overwork yourself to be at the same pace instead of doing some reinforcement exercise (S2).*

Even without books in accessible formats the teachers could have devised ways of making the lesson content available to these students but they seemingly had no knowledge on adapting or differentiating lessons.

#### **5.3.4 Absence of Curriculum Differentiation and Adaptation**

Both curriculum differentiation and adaptation refer to the modification of the content, the teaching and learning process, the assessment and evaluation methods and the learning environment to enable students with support needs to participate and achieve on a par with their typical peers. However, while differentiation deals with the ‘what’ of teaching and learning, adaptation is concerned with the ‘how’ of teaching and learning. One fundamental way of practising adaptations and modifications in the classroom is to make available all teaching and learning resources in accessible formats for all students. This study revealed that students with vision disability were disadvantaged because there were no learning and teaching resources in accessible formats and teachers neither modified the content of what was taught nor the way it was taught.

Homework, which was generally seen as a way of reinforcing the learnings in class, and textbooks played a key role as most homework was given from such books. Because there were no textbooks in braille, students with vision disability hardly did homework and were tagged as lazy. Mankah, a teacher, said, “I’ve noticed that these students are very lazy; they never do homework” (T1). However, Tse, a discipline teacher who doubled as a focal point for inclusion, came to their defence by saying:

*They don’t do homework because they don’t have textbooks. Teachers give homework from the textbook. Textbooks in braille are not available. That is a big handicap for their learning. So, absence of textbooks in braille is a big handicap (T7).*

Not having the opportunity to reinforce learning or assess their understanding of material that was taught in class put the students in a disadvantaged position. A way out would have been for teachers to ensure homework for the students with vision disability was brailled but there were issues with brailing and transcription. However, even when they did the homework, it was not corrected as the teachers argued that they did not read or write

braille. The homework, if done, needed to be transcribed for teachers to correct it but the RR teachers were not always available to transcribe homework. The teachers could have also given homework that was not textbook based but this was not the case.

It was evident that most of the teachers did not consider differentiating instruction or adapting the curriculum to meet the learning needs of students with vision disability when planning and preparing their lessons.

For instance, when asked whether teachers planned and prepared lessons with students with vision disability in mind, Nji, a mainstream teacher, said, “I think very often, it is because during lesson planning and preparation teachers do not include specific activities for the visually impaired” (T6).

Nji was well aware that for students with vision disability to be engaged during lessons, teachers must design activities in which they can participate and went on to say:

*For example, if I prepare a lesson with practical activities for the sighted and the visually impaired students, you will notice that the visually impaired are going to be interested in the lesson. When you don't include specific activities for them, they sit and they just copy the lesson (T6).*

Ako, another teacher, reiterated that “Teachers do not do it. They rather prepare lessons for ordinary students and the visually impaired overwork themselves to fit in” (T7).

He further added that:

*When teachers come in the classroom, they teach the lesson, they draw diagrams on the board these children only listen. They don't see. So, it is difficult for them to acquire knowledge.*

Not making such diagrams, which certainly facilitated the explanation of the concept being taught, accessible to students with vision disability points to the fact that this teacher lacked knowledge in lesson adaptation for these students who consequently missed out.

When teachers did not build in activities which included them, students with vision disability inevitably became passive members of the lesson. Ako, was very upfront with his confession when he said: “*In planning and preparing my lessons, I don't have students with vision impairments in mind, but it is during effective teaching that I include them*” (T5).

It was intriguing to figure out how a teacher would include students in his lessons when he did not plan and prepare for them. Even though this teacher claimed to include students with vision disability during “effective teaching”, his lack of preparedness for the specific curriculum for students with vision disability was apparent during my observation of his lessons. His lessons, which were very teacher-centred, were rife with long periods of note-copying and explanations. After each explanation, he would ask rhetorically if the students understood, to which they responded in the affirmative, perhaps just to satisfy him. During this exercise, he would write new words on the board but fail to spell them orally for students with vision disability. He hardly gave room for interactions which would have enabled all students and particularly those with vision disability to understand the lesson. He constantly looked at his watch, stepping out frequently for about a minute or two, indications that he had not prepared his lesson and was perhaps impatient for his teaching period to be over.

### ***Inadequate Support to Teachers***

Enrolling students with disabilities in a mainstream school where teachers were not trained to teach inclusively places additional demands on them and makes their job more complex. In such a scenario, teachers need continuous professional development (CPD) and ongoing support to enable them to engage with the students with disabilities, assess their learning needs, revise the curriculum, and implement it using appropriate pedagogy. New and old teachers alike were not given the support that they needed to be able to accommodate the learning needs of students with vision disability.

#### ***5.3.5.1 Lack of Orientation of Teachers***

Orientation refers to a brief educational programme that prepares people for a new environment. One would expect that since Mabingo Secondary School admitted students with vision disability which is not the norm in Cameroon and that initial teacher education does not prepare teachers to teach students with disabilities in mainstream classrooms, teachers posted to the school would be given basic guidance on how to teach students with vision disability. Worthy of note was that newly posted teachers to the school were assigned to classes with students with vision disability but were not even informed of their presence to say the least. Bih revealed that she was shocked to find students with vision disability in her class. She said: “When I reached here the first year, I entered the first class.

I saw children with vision disability, I was so surprised. I was falling down... I was saying what is the problem?" (T3).

This teacher did not expect to find such students in her class as it was not common practice in government secondary schools in Cameroon. She was unprepared for this and completely thrown off guard.

Other teachers only realised there were students with vision disability during or after evaluations. Achuoh disclosed that:

*It is frustrating and disturbing when a teacher discovers these students by himself. Sometimes after a test he has scripts with dots...when you bump into them in class, you have to fend for yourself. That is not good (T2).*

According to this statement from Achuoh, teachers were abandoned to fend for themselves when it came to the teaching of students with vision disability. This meant that they were improvising on how to include learners with vision disability, and this was not being supervised to ensure quality and efficacy.

So apart from not being trained to teach students with vision disability in mainstream classrooms, these teachers were unaware that such students were in the school and the school administration did not inform them of their presence, and neither did they offer any orientation, knowing full well that disability inclusion is not part of the training curriculum for trainee teachers in Cameroon. The teachers, therefore, did not prepare to accommodate them. Mankah, another teacher, had an even more poignant experience:

*I saw him [referring to a student with vision disability] the first time with a tablet [referring to his writing frame] I scolded him because I didn't know what it was. When I heard the noise made by the stylus, I asked him to stop immediately. I didn't know that they have a different way of writing. I didn't know that they were immersed in a class of sighted students. I thought they had a special school. I cried and I went back home...I didn't know. He was a little boy in form one and my reaction frustrated him (T1).*

This confession is a stark indication that the training this teacher received did not prepare her for meeting and teaching students with vision disability and neither did the school give her the basic induction on how to teach them. This resulted in her exhibiting regrettable ignorance which frustrated her student. Such ignorance depleted her self-esteem and she had to return home.

To save teachers and students from such embarrassment, Mankah suggested that:

*When school resumes, and during the general assembly, the administration should seize that opportunity to sensitise teachers on inclusive education. They should prepare teachers on how to handle classes with visually impaired students instead of letting teachers discover them in class and react like I did the first time (T1).*

Ngwe, another mainstream teacher, reiterated the point saying that:

*Normally, any new teacher should receive some directives especially when there are special cases [referring to students with vision disability] in class. The administration ought to organise a meeting at the beginning of each academic year to that effect. Failure to do it gives room for nonchalance (T4).*

Again Neba, a RR teacher, said:

*During staff meetings, we [referring to RR staff] could be given time to sensitise teachers on how to support students with vision impairment in class. It will be good support for the teachers (RRT3).*

This clarion call for the school authorities to ensure proper orientation for teachers, especially teachers recently transferred to the school, was not only indicative of the lack of capacity in teaching students with vision disability but also pointed to the fact that teachers were facing challenges in meeting the learning needs of these students and were uncomfortable with the status quo. Intriguingly, there was support available through the resource teachers as indicated by Neba's plea, yet neither the teachers nor the school administration was taking advantage of this.

#### *5.3.5.2 Inadequate on-going Training for Teachers*

The only support the students with vision disability and the teachers received was through a resource room, set up by an individual and supported by the Cameroon Baptist Convention Health Services (CBCHS) which implemented an inclusive education project in the school. The CBCHS also organised workshops on inclusive education for some of the teachers of the school, targeting those teaching classes with students with vision disability for that academic year. Prior to these workshops, the teachers had never received any guidance on how to include learners with vision disability in their lessons. Prior to data collection, the teachers had had only one of such workshops although, a few more were later on organised.

Teachers and students alike clamoured for capacity enhancement for teachers saying that it would enable them to modify their teaching strategies in order to adequately meet the learning needs of all students including those with vision disability. Timo, a student, highlighted the importance of capacity building for teachers. He said:

*Once a seminar was organised here. I gathered that those who attended it changed their teaching methods. A teacher said to us one day 'look, before the seminar, I could not understand your alphabet i.e. the dots. We were told you are slow learners. Now when he teaches, he always takes care of us. Usually he asks, 'are you following? Are you at the same level? Because he was sensitised (S2).*

Such questions, though seemingly vague, made Timo to feel valued and respected and that his needs were being taken into consideration.

Nji, a mainstream teacher, also expressed the need for capacity building which would not only enable teachers to add to their repertoires of teaching strategies but more importantly equip them with the knowledge and skills in teaching students with vision disabilities in mainstream classrooms. He said:

*Capacity building for teachers is very important. I think that trained teachers in that particular domain will widen their horizons so that they could be well equipped to handle classes with students with vision disabilities (T6).*

Mankah was conscious of the consequence of her inability to read braille and expressed what knowledge in braille would enable her achieve, all geared towards meeting the learning needs of students with vision disability. She said:

*I need other training sessions. I want to learn the braille alphabet so as to be closer to them i.e. being able to read what they have written or checking whether they are at the same pace, and even taking their papers to check the conformity of their notes with the lesson that I have taught (T1).*

In conclusion, teachers had very limited support to enable them teach students with vision disability in a mainstream classroom and expressed the need for such support to be given them.

Apart from the challenges which teachers faced in teaching students with vision disability in mainstream classrooms, the students were confronted with a plethora of hurdles which meant they had to work twice as hard in order to achieve but, even then, the quality of

education they received was disproportionately lower than what their sighted peers received.

#### **5.4 Barriers to Learning**

Barriers to learning is the next theme that emerged from the data and refers to the impediments that prevented students with vision disability from fully participating in the teaching and learning process, resulting in poor performances. I focus on barriers as perceived by students with vision disability but also give the perspectives of their sighted peers, teachers and parents. These barriers were many, though largely unintentional in most instances. In a high-stakes examination-oriented education system, this had implications for the academic progress of the students. Although the participants generally did not say that the students with vision disability had the tendency to repeat some classes, Nnam, a parent, revealed that it was not uncommon to find many of them staying in one class for several years. Referring to her son, she said, “He has spent many years in one class.” Then referring to another student she said:

*I don't think other disabled have made some progress. I know of a 28-year-old visually impaired who is still in Upper Sixth. He has spent 4 or 5 years in Upper Sixth. You see they don't perform better than him [referring to her son] (P1).*

Also, the demographic data of some of the students such as Timo and Nyah who were twenty- nine years and twenty-six years old, respectively, revealed that they were not in age-appropriate classes; an indication that they could have spent more time in school than was necessary or enrolled in school later than their typically developing peers.

The study revealed that this could be attributed to many barriers which the students with vision disability faced, such as challenges with: teacher centred pedagogy, rigidity of the curriculum, time constraints, teachers shifting their responsibility and also the learning environment.

##### **5.4.1 Barriers in Teacher-centred Methods**

Transmission teaching/learning method refers to a teacher-centred teaching and learning approach in which the teacher's role is to design lessons aimed at predetermined goals and to present knowledge and skills in a predetermined order and manner. With this approach, the students' tasks are to passively acquire teacher-specified knowledge and skills. Such a method assumes that all students learn by rote.

Teachers generally adopted transmission style teaching methods which did not give them the flexibility to address individual students' needs. This style of teaching was characterised by teachers dictating notes for students to copy, explaining concepts to which students were expected to listen, memorise and regurgitate during evaluations. With this style of teaching, teachers did not intentionally explain concepts in accessible ways for students with vision disability.

Mbong, a parent, said, "In school teachers treat students as a group. They give advice [referring to explanations] to the whole class and not to individual students" (P3). Mbuh, a vision disabled student, supported this saying, "She, [referring to a teacher] generally explains for everybody. There is no special explanation for the visually impaired students" (S1).

On the issue of using a single teaching approach, Mengwi, a vision disabled student, stated that: *Apart from guiding us, dictating notes to us and asking if we are following the lesson, and asking us questions, there are no other ways* (S3).

Some teachers also made assumptions about their teaching styles being accessible to all students. When quizzed about how she includes learners with vision disability when she teaches, Mankah, a teacher, said:

*In my subject we often deal with texts. Once students have their texts, there is no problem. There may be problems in other subjects. I assume that they take notes like others and back home they read their notes. My teaching method is to manipulate texts and together we come up with the summary of the lesson. They have listened to explanations and understood the lesson, and they have taken notes. I assume that once at home, they read them. I always ask them to jot down any questions and ask them the following day* (T1).

This teacher assumed that if students did not have impairments, they were easily taught using the transmission style of teaching as I observed during lessons. Dictating notes, explaining concepts and asking a few questions in between was the dominant teaching style and students 'learned' by copying notes, listening to long lectures and responding to a few questions. It was not uncommon for teachers to explain a concept for twenty minutes continuously while students were expected to listen very attentively and say nothing until they were asked questions. Such explanations would then be followed by the copying of notes, perhaps for another thirty minutes uninterrupted.

This style of teaching, based on assumptions about what students know or do not know, meant that the teacher was not proactive in finding out what the students' needs were. While such assumptions affected all students, this was double jeopardy for those with vision affected issues because they did not have the textbook the teacher referred to and so could not "manipulate" the texts in the manner expected of them.

This teaching method was characterised by inadequacies in lesson presentation and engagement of students with vision disabilities.

Teachers found it difficult to make teaching and learning accessible and this was signalled by the way content was presented in a one-size-fits-all manner, the dominant and inflexible transmission style of teacher-centred pedagogy and the complete absence of learning resources adapted to the impairment-specific needs of students with vision disability as previously reported. Tse, a teacher, said: "When teachers come in the classroom, they teach the lesson, they draw diagrams on the board; these children only listen. They don't see. So, it is difficult to acquire knowledge" (T7).

This quote reveals that teachers considered the students as a homogeneous group who could all listen to explanations, see the graphics on the board and understand the concepts being explained. Even when students with vision disability signalled that they needed the teacher to provide an explanation of the graphic that had been drawn on the board, the teacher relinquished this responsibility to a sighted student. Mengwi, a vision disabled student, said:

*Well, when the teacher draws a map on the board and no longer has much time, he asks my reader to help him describe the map to me and she is now the one who is responsible for the description (S3).*

Describing a diagram goes beyond just describing the physical appearance. It could be subject to interpretation by the person describing it and from the quote there was no guarantee that the "helper" who was obviously a sighted peer had understood the diagram and was in a position to aptly describe it to the student with vision disability. From what Tse said, students with vision disability appeared to be invisible and their needs totally ignored. One way of making the graphics accessible to students with vision disability could be to produce tactile versions so that the students could interact with them but the lack of the engagement of students with vision disability was very obvious.

Similarly, when it came to a subject like Mathematics, some teachers were vague in their illustrations on the board, making it challenging for the students with vision disability to understand what was being taught. Mezoh said, “There are some teachers of Maths who come... they say that this plus this equals this. They don’t explain so that we also understand calculations” (S4). This was attested by Ngum who said:

*Because if the teacher thinks about this thing the day before. How can I teach this Mathematics so that my children will acquire the competence, you will not go to the class next day and say ‘this plus this equal to dash, dash times dash equals to dash’. You [referring to students with vision disability] are not seeing and the child will stay like this without knowing what is dash, what’s another dash (RRT1).*

This implies that some teachers did not consider the presence and learning needs of the students with vision disability and so did not intentionally explain concepts in ways that were accessible to them. Therefore, there were significant gaps in the content received by students with vision disability compared to that received by their sighted peers as the former were hardly engaged during lessons.

#### *5.4.1.1 The Need for More Student Engagement.*

Student engagement here refers to the depth to which students interact with the material of a lesson and the extent to which they are committed to a given activity. Not only were students with vision disability deprived of chunks of lesson content but their classroom interactions were also minimal. Since teachers typically adopted a teacher-centred transmission style teaching/learning approach, all students, but particularly students with vision disability, were very passive during lessons. Most lessons had a pattern of note-copying followed by explanations and then questions from the teacher. Teachers typically called out students who raised their hands to respond to questions and students with vision disability hardly did so and so were rarely asked. Tse noted that, “Teachers seldom ask them questions or allow them speak in class” (T7).

This was substantiated by Timo, a student with vision disability, who observed that:

*Often, teachers could ask a question, you know the right answer and you put up your hand, but he doesn’t give you the floor. Maybe he thinks because you are visually impaired you cannot give the right answer. Other teachers have framed their minds in thinking that the visually impaired students cannot just cope with studies. Like some of our friends, they have misconceptions in their mind (S2).*

This student felt that some teachers had stereotypical notions of them and erroneously equated their lack of sight with low cognitive abilities and so ignored them even when they raised their hands to respond to questions the teachers posed. Having students respond to or ask questions was a way of engaging students and also assessing their understanding of the lesson being taught. Refusing them these opportunities meant that the teacher could not ascertain whether these students understood the concept being taught or not and this had a negative knock-on effect on their academic performance, as remarked by Tse:

*In our classroom practices, the teacher rarely looks at the list of students to call on one to answer a question. He usually gives the floor to those who put up their hand. That's a problem. As long as you don't choose him to listen to his answer, you will not know that he has a problem and it affects his performance. During a test, you realise that he did not understand what you taught and it is too late because it's evaluation (T7).*

Teachers considered the number of students with vision disability too small in comparison with their sighted peers to bother with engaging them. Not intentionally involving students with vision disability in this way, also demotivated the students and so they made little effort to participate in lessons since they were aware of teachers sidelining them. Tse further said:

*What happens is that they are in classes where the majority of students are sighted. Consequently, they are side lined. And it comes into play. When they know that the teacher will not ask them questions, they don't make any effort. But if he knew that he would be asked to answer questions, then he would make more effort (T7).*

When another student was in doubt, she even feared asking questions to some teachers who the student said did not build a rapport with vision disabled students, thereby giving the impression that their learning needs were subordinate to classroom order.

#### *5.4.1.2 Subordination of the Needs of Students with Vision Disability to Classroom Order*

Subordination here refers to the act of placing someone or something in a lower rank, class or position. It was very obvious that the needs of students with vision disability were not in the forefront of teaching and learning. Some teachers were more focused on maintaining classroom order than meeting the learning needs of students with vision disability.

Interestingly, even when students with vision disability sought help from their peers, because teachers were dictating notes at a fast pace, some teachers forbade their peers from

assisting them with the excuse that such assistance was disturbing. Nyah, a student with vision disability, said:

*That is to say, to reduce us, and some teachers, when the volunteer is next to you, to dictate to you, he forbids the one who helps you to talk any more saying that this disturbs his lesson. And sometimes, we complain that no, when you write on the board, the pace at which you write while speaking is very fast and we do not succeed to copy correctly what you say when you write. One therefore needs the assistance of a sighted person (S5).*

He went further to quote an instance where a teacher constantly prevented his peers from assisting him. He said:

*It happened to me in form two when I had a teacher, an English Language teacher, who would not allow me to copy notes. She said that when I copied, I hit the tablet and it made noise. She forbade me to write. She did not even put me outside. She forbade me to write. She did not even allow the student sitting next to me to assist me. She said it was disturbing. I was always obliged to remain quiet. She finished her lesson and left before my friends could dictate to me, so I could copy (S5).*

These quotes indicate that the students with vision disability were made to feel invisible and humiliated and that they did not have a right to the lesson content, whereas Tse said, “Children should have a right to equal access to education. This group of children is disfavoured” (T7).

#### **5.4.2 Rigid Curriculum**

Rigid curriculum refers to the absence of diverse methods and resources needed to give students access to the lessons and academic content taught in a school. The secondary school curriculum in Cameroon is such that demands every student to learn the same content in the same way and in the same time frame and also to be evaluated in the same way. All students are subjected to pen and paper tests, sometimes responding to compulsory test items. This means that a certain amount of academic content must be taught within a specified time frame irrespective of whether students are actually learning in the process or not. It does not take cognisance of the diversity of student populations and teachers generally adopt a one-size-fits-all pedagogical approach. In such an atmosphere, teachers race to “cover the programme” for fear of sanctions and this had implications for accommodating the learning needs of students with vision disability as I discuss in the ensuing paragraph.

#### 5.4.2.1 Time Constraints

Time constraints refer to the various factors that hinder the achievement of activities in terms of time. In Mabingo Secondary School, teachers reported that “programme coverage” was one of the main hindrances to meeting the learning needs of students with vision disability. Programme coverage in this study refers to teaching all the detailed content of a subject with expected learning outcomes as prescribed by the national curriculum within a specified period. At the beginning of every school year in Cameroon, teachers are requested to submit their schemes of work for the year to their immediate supervisors who are the vice principals. After teaching each day, teachers are also requested to fill out log books detailing what was taught for that day. This is periodically checked against the scheme of work submitted in order to monitor progress. Failure to teach the expected amount of material within the stipulated time span can invite sanctions on the teacher. Programme coverage therefore was seen as one of the hindrances to accommodating the learning needs of students with vision disability. This teacher said:

*Another difficulty is that of programme coverage. The administration often scolds us when we don't finish the programme because we had spent more time on visually impaired students. You remember the lesson I taught three times and I did not finish. The time allocated to it is 4 hours, but I have already spent 5 hours and I haven't finished it because you [referring to himself as the teacher] want them to understand the lesson. The administration doesn't want to understand. They will scold you and say: 'these children have always been in this school. So why do you say it is difficult to finish the programme?' (T2).*

The school administration was more interested in the teachers' ability to complete the content of subjects rather than ensuring that students were engaged and that their learning needs were being addressed in the course of teaching. Teachers on their part excused their inability to cover the syllabus because of the presence of students with vision disability. This teacher claimed that accommodating the learning needs of students with vision disability caused them to slow down since they had to spend more time to explain concepts to these students. Achuoh, another teacher, backed this by saying that:

*One must speed up to cover the syllabus and avoid being scolded at the end of the year. In such a dilemma, you have to choose between covering the syllabus or focusing on the visually impaired students and face blame at the end of the year for poor performance. Our educational system is exam oriented and so one must finish the programme (T6).*

This teacher stated that speed and not efficacy was important to the school administration. Teachers had to hurry up to complete the programme irrespective of whether students' needs were being met or not. This teacher also saw the teaching of students with vision disability as something extra he had to do, which could result in his being sanctioned, instead of meeting the students' needs in an inclusive way.

Peers of students with vision disability also attested to the fact that some teachers were more interested in covering the syllabus and so did not care about the students with vision disability and so ignored them most of the time. One student said:

*It all depends on teachers. Some just teach ignoring the visually disabled. When we call their attention to their presence, they argue that they must cover the syllabuses in time (FGD with sighted students).*

The students with vision disability were made to feel marginalised by the teachers who ignored their presence. Even when attention was drawn to this, teachers argued that they needed to “cover” their syllabuses:

*Some teachers don't just care. When they write for example, the name of an author on the board and a visually impaired student asks her to spell the word, she would say: “there is no time left we must cover the syllabus”. So, it is evident that she does not care about them (FG with sighted students).*

As the sighted peers said, it was evident that to this particular teacher, basic tasks such as the oral spelling of new words for students with vision disability was a waste of valuable time which could be used to ensure syllabus coverage. The teachers also thought that the number of students with vision disability per class was not significant to warrant their time. Tse, a mainstream teacher, said, “What happens is that they are in classes where the majority of students are sighted. Consequently, they are sidelined” (7).

Another teacher was very candid about the issue of numbers and said:

*For example, when they give 50 min.  $\times 2 = 1$  h 40 minutes. It not two hours. You are psychologically defeated and you must finish the programme. There are only two students with vision impairment out of 80 students in your class. I had better forge ahead rather than wasting time on these children (T6).*

In a nutshell, the rigid nature of the curriculum meant that the learning needs of the students with vision disability were traded for completing a stipulated amount of work within a

fixed time frame. According to teachers, preparing and teaching lessons inclusive of students with vision disability were exacting tasks which time constraints did not permit them to do. More emphasis was placed on the quantity of material taught and on the number of students “benefitting” from the rigidity of the curriculum rather than the “insignificant” number of students with vision disability.

### ***5.4.3 Challenges with Evaluation***

Evaluation here refers to the methods and measures used to judge student learning and understanding of the material taught for grading and reporting purposes. The education system in Cameroon is rigid and examination oriented. Examinations are high stakes and so a key determinant of students’ academic progress. The academic year is divided into three terms of two sequences each. A sequence is made up of six weeks during which teachers administer three tests; two are considered as continuous assessments and the last one an examination at the end of the term. For the first two tests, teachers are free to individually design evaluation items for the classes they teach. When it comes to end-of-term evaluations, these have to be harmonised. This means that all teachers of a subject teaching the same stream but different classes, say forms 1 A, B and C, must come together to design the same evaluation for that stream. The manner in which evaluation exercises was conducted in Mabingo Secondary School, particularly for students with vision disability, raised questions about the rationale for the evaluations.

The evaluation exercises were characterised by a number of challenges and irregularities such as issues with braille, the administration of the evaluation and the correction of students’ scripts.

#### ***5.4.3.1 Challenges with Brailing Evaluation Items***

During evaluations, it was incumbent upon teachers to provide braille versions of the evaluation items for vision disabled students. The teachers were expected to submit the evaluation items to the resource room for brailing. Most often than not, these were returned late when sighted students had started doing the evaluation and students with vision disability were not given additional time to make up for the lost time, as explained by Mankah, a teacher:

*Late arrival of their question papers. During summative assessments questions are harmonized per level. Question papers are sent to the transcription centre, but they come out late. In the same class ordinary students [referring to sighted students] begin writing, but the visually impaired begin 30 minutes later (T1).*

This means that students with vision disability were treated unfairly and this also would have had a negative impact on their performance. Mengwi, a student with vision disability, said:

*When they give the paper to be brailled, others come late to give and when they give question papers to our sighted peers, our own come even after ten minutes. When we write, they snatch our scripts at the same time with those of the students who see (S3).*

While Mankah indirectly blamed the staff of the resource room for late arrival of brailled questions, the RR staff on their part argued, during member checking, that the teachers brought work for brailing virtually on the eve of the exams and did not consider the volume of evaluations they had to braille. It was interesting to note that when the evaluation was not harmonised, some teachers were very indifferent and ignored the presence of students with vision disability by not ensuring that they had copies of the evaluation in braille format. The students were left to “fend” for themselves as stated by Timo:

*Generally, our questions are in braille when the tests are harmonised, during summative assessments. But in formative assessments, questions may come in braille or not. You fend for yourself. Sometimes they forget that you are in class. Look at what happened today. When I asked my copy, she said that she had forgotten that I was in class. What can you do? You only have to fend for yourself (S2).*

During the said evaluation, I observed that Timo, a student with vision disability, who sat at the back of the class, did not have a braille version of the evaluation items. I noted that the teacher made no effort to ensure he had access to the questions. The student pleaded with his peers to read out the questions for him to respond to them in braille. While it was not optional for teachers to provide braille copies of evaluation items for students with vision disability, there were also no consequences for not doing so and the students with vision disability seemed to be helpless in such situations. It was therefore a matter of “fending for yourself” or not doing the evaluation. Forgetting the presence of a student with vision disability in a teacher’s class is apparent as this teacher did not include the

examination needs of this student when she designed the evaluation. Even so, when teachers evaluated students with vision disability, it was done unscrupulously.

#### 5.4.3.2 Unethical Evaluation Methods

Some teachers who failed to provide their evaluation items in braille format evaluated the students in very disorganised and humiliating ways as expressed by Timo:

*Talking about testing, some teachers do not take care of students with vision disabilities. When he comes to class. He asks us to come and sit in front. He says: "I am going to dictate the questions to you. You answer orally and I write your answers" (S2).*

This was done under the full glare of his sighted peers and certainly the student could not perform at his optimum because of the noise around, the pressure of peering eyes, the teacher's impatience and the lack of thinking time for the student. Mbuh confirmed this saying:

*Sometimes you cannot answer correctly because of the mounting pressure on you. If you had your question paper before you, you would have time to read and answer questions correctly. But when you are in front with him, he asks a question and you are thinking about the right answer, he says, "Mbuh?! Answer quickly". So, you see some teachers do not bother about the transcription of questions (S1).*

Putting students under such humiliating pressure gave the impression that this teacher was angry with the presence of the students with vision disability in his class and evaluated them because he, the teacher, had no choice. Not doing an evaluation under favourable conditions already put the student in a disadvantaged position. Timo revealed that:

*Once I met a teacher who said that I should find him later. When I met him, he said: "Are you ready?" I said, "Yes." He asked me five questions and gave me a mark on the spot (S2).*

Nyah, another student with vision disability, added that:

*Well, sometimes when the teacher assesses those who see saying that he has no time to follow my test in Braille and that he is going to assess me afterwards, I always try to run behind him to remind him that he must also assess me (S5).*

From these two quotes, there is every indication that evaluating students with vision disability for these teachers was an after-thought and the whole exercise came across as box-ticking. This state of affairs was reinforced by the fact that even after providing braille copies to students with vision disability, some teachers did not correct the scripts and awarded “invented marks” to these students.

#### *5.4.3.3 Invented Marks*

Invented marks refer to marks that were concocted and recorded in the progress record of students with vision disability. It was surprising to note that, while some teachers corrected the scripts of students with vision disability and returned these to them, other teachers even after receiving the transcribed work of students with vision disability did not correct their scripts and some teachers did not evaluate them at all but fabricated marks which they recorded in the students’ progress report cards. There was compelling evidence to support this. Nyah revealed that:

*At the level of the class, sometimes when we are writing a test there are some teachers who do not take, who do not mark the scripts of the visually impaired. You are obliged to run after him every time so that he tries even only to look even at your script (S5).*

Mbuh, another vision disabled student, added that:

*After a test, he takes your script to the transcription centre. He then takes it home. After correction, you want your script. He would say: “your script is at home. I will find it later”. He never brings your script to class. Surprisingly, in your report card you see a mark. You had not received your script (S1).*

Again Mezoh, another vision disabled student, said:

*They mark only for those who see and when I ask for my script, they say that they have forgotten. And that’s how they invent a mark and put in the record booklet. They can put 10 throughout the year (S4).*

Furthermore, Tse, a teacher, confirmed all these saying, “Others [referring to vision disabled students] complain that they see marks in their report cards without having received their scripts” (T7).

According to Mezoh some teachers tried to justify this practice by saying that braille hurts their eyes: She said, “No, just that there are some teachers who do not mark our scripts saying that braille hurts their eyes” (S4).

This was an interesting revelation because the students’ evaluation scripts were always transcribed and teachers had to focus solely on the transcriptions. This apathy towards the correction of the scripts of students with vision disability could also stem from the fact that some teachers, as Mbuh had earlier indicated, correlated vision disability with low cognitive ability, and wrongly thought that the students would not have presented any material worthy of their time and effort and thus correcting the scripts of these students would be a waste. Even more surprising was the fact that some teachers did not evaluate the students at all but still awarded them marks and expected the students to be content with that. Nyah said:

*Yes, sometimes, when he assesses even, he even does not try to give your test so that they reproduce in Braille for you to write. Well, now, when you complain, he gives any mark which he wants, to fend you off (S5).*

This quote indicates that not correcting the students’ scripts was deliberate and when students sought to have their scripts returned to them, the teachers saw that as pestering and so awarded the marks to pacify the students. This fraudulent attitude did not go down well with the students who were more interested in their performance than marks they were not sure they deserved. Awa, another student with vision disability, expressed his dissatisfaction declaring, “I am not happy when they give me a mark which I have not merited” (S6). Mezoh added that:

*When you complain a lot, they say that it is okay, he has already allocated you a mark. That is, perhaps you could have even 14, as he did not mark, he does not know if you were to have 14, he gives you even a 12. It makes that afterwards you don’t really know what you had wrong and what you had correct (S4).*

This outright deception of students with vision disability with cooked up marks was not welcomed by the students who would have loved to know what they got right and what they got wrong, perhaps in order to learn from their errors and improve on their performance subsequently.

Other teachers seemingly regarded the education of students with vision disability as worthless and stifled their academic progress. Bih, a teacher, said:

*When you [referring to teachers] programme your evaluation and you reach the class, you give the test to all the classmates and he [student with vision disability] doesn't have the test, he just has to sleep. We are killing their knowledge, as we have killed the knowledge of Penka [referring to a past student with vision disability] (T3).*

To sum up, some teachers were not intentional in including students with vision disability in evaluation exercises as signalled by the late arrival of braille versions of evaluation items for them, teachers' inconceivable forgetfulness of the presence of students with vision disability in their classes and also the dishonesty in mark allocation for these students. These, coupled with barriers in the learning environment, made it challenging for students with vision disability to participate in teaching and learning on an equal footing with their sighted peers.

#### ***5.4.4 Barriers in the Learning Environment***

Learning environment refers to the diverse physical locations, contexts and cultures (school culture and ethos) in which students learn. The learning environment of Mabingo Secondary School was complex and posed some barriers to learning for all students but particularly students with vision disability in ways that made them feel unwelcome. From unintentional exclusion of these students from co-curricular activities to challenges with access to the built and unbuilt environment, students with disabilities did not experience a comprehensive school life.

##### ***5.4.4.1 Large Class Sizes***

Large class sizes refer to classes that have 50 or more students for one teacher in a school. The number of students in every class ranged from 60 to 80 and above, though during my study class sizes were reduced to 50 in accordance with barrier measures put in place by the government of Cameroon to curb the spread of COVID-19. Even the 50 students per class was still too large to give teachers the opportunity to know individual students, focus on their learning needs and styles and so develop strategies for meeting each student's individual learning needs. Besides, such large numbers meant that noise levels were high and since students with vision disability depended mostly on their auditory senses to "learn" it was challenging for teachers to accommodate their learning needs in such an environment. Tse, pointed this out in this rhetorical question: "The enrolment of 60 to 80

students generates a lot of noise. Since they rely mostly on their hearing, how can they cope in such a situation?” (T7).

#### 5.4.4.2 Inaccessible Physical Spaces

The RR was the pivot of activities for students with vision disability. This is where they were dropped off by a bus in the mornings to attend lessons and it is from here that they assembled to wait for the bus to take them “home”. This is where they loitered during break time or when there was no teacher in their classrooms. It is at the RR that some teachers sent them when they were taking sighted students to do practical exercises which they thought students with vision disability could not take part in. It was from the RR that students with vision disability found their bearings to any part of the school. It was therefore important for the vision disabled students to be able to leave from the RR to the classrooms and from the classrooms to the RR but the paths along the way had lots of obstacles.

When it came to accessing the built and unbuilt environment, students with vision disability faced some challenges. I observed that all classrooms where they attended lessons had long flights of stairs leading to them and posed risks of these students falling over. This was compounded by the fact not a single student used a mobility cane, and neither had they been trained in Orientation and Mobility (O&M) skills. This meant that students constantly needed a guide to access the classrooms and they did not always feel comfortable. Mengwi said:

*Euh, as need I can, euh, I need the white cane. I also want to know how to leave my class and come here in order not to be disturbing those who see all the time, to move around alone (S3).*

This desire was echoed by a Nnam, a parent, who said:

*Yes, he needs some training in order to avoid holes, gutters and stairs. He told me that he has a friend who takes him around. He [referring to her son with vision disability], sustained a wound because his friend was absent and in an attempt to move around alone, he toppled and fell (P1).*

This was a serious concern as the vision disabled student could have sustained life-threatening injuries.

Timo on his part said, “It [referring to O&M] will help me move around freely. And you will take a guide only in times of serious need. I am unhappy because I am not free” (S2).

While Mengwi felt that constantly asking her sighted peers for guidance to move around the campus was disturbing to them, both students felt the lack of skills in O&M had constrained them as they were always in the company of someone. In addition to the stairs, some of the classrooms were located in huge blocks where a large number of students could be found pushing and shoving during rush hours such as break and closing times. This also made navigating these spaces a challenge for students with vision disability. Talking about gaining access into her classroom, Mengwi said:

*It depends first on where the classroom is located. When I am put in a big building, where there is too much ‘traffic jam’, I cannot easily leave my class and come here [referring to the RR] alone. And however, when I was there, behind the office in form three, I could leave from there to come here alone. When I will be accustomed to this class, I will know if I can guide myself or not. But for the moment, I am still not accustomed (S3).*

From this quote, it is evident that the school authorities were oblivious to the O&M needs of the students with vision disability, so they were not deliberate in assigning classrooms that accommodated learners with vision disability, even though there were classrooms in accessible spaces.

#### *5.4.4.3 Limited Infrastructure*

The issue of noise was very disturbing as noise didn’t only come from their peers in the same class but also from neighbouring classes when their teachers were absent and this was very common during my observations. This made teaching difficult as most teachers spent a lot of time explaining concepts and students with vision disability needed to listen to these explanations. During my observation of Bih’s lessons, she constantly called the class to order, reminding sighted students that their vision disabled peers learnt by listening. Nji added that “their classmates make a lot of noise when they are seated. The visually disabled cannot listen to what the computer is saying carefully” (Teacher’s individual interview).

Apart from the classrooms not being accessible, other key spaces in the school had issues with access and this prevented students with vision disability from participating in activities therein.

Timo revealed that: “the pitch for sports, the canteen and the toilets are not accessible. The paths leading to those places are not good. There is constant water shortage” S2.

This was confirmed by Mbuh, another vision disabled student, who sometimes had to return home to answer nature’s call, as the toilets were inaccessible for him. He said:

*Visually impaired do not have easy access to the toilets. They are generally overcrowded. The government could build toilets especially for us. I rarely use the toilets here. Let me take an example, my friends go there to ease themselves. On arriving there, there are faeces near the hole. He looks for the hole with his feet and step on the faeces (S1).*

Nnam, another parent, supported the claim saying: “I have told you that some stubborn students will defecate on the floor and you can imagine what happens when a visually impaired student comes after that student” (P1).

Because of this state of affairs, Mbuh was forced to return home whenever he felt pressed and missed out on lessons. On missing lessons during such instances, he said:

*If I have missed a lesson, I copy. If the toilets were clean, I wouldn’t go home. Since I don’t see, who will check and tell me? ... If there were special toilets for the blind, it would be better (S1).*

In conclusion, the infrastructural design of the school did not take the needs of students with vision disability into account from the start as having students with vision disability in Mabingo Secondary School was a recent development. However, one would have expected some adjustments to be made to accommodate their needs but this was not the case.

#### **5.4.5 Suggestions to Overcome Barriers**

Mengwi [a teacher] challenged teachers to engage them in lessons by making teaching methods and resources accessible to vision disabled students. She said:

*If the teacher says that the earth is round and he brings a sample map of the globe and we touch it, it will be very easy for us to understand the lesson (S3).*

Another missed opportunity to learn or reinforce learning for vision disabled student was when teachers grouped students and assigned them tasks to work on as homework and then do presentations during the next lesson. Students often stayed back at school to do such homework, but it was challenging for vision disabled student who lived in the hostel to

participate because they had to return to the hostel at the end of the school day by bus. Staying behind would have meant paying their way back to the hostel, a “luxury” they could not afford.

It was however enthralling to note that some teachers made efforts to engage students with vision disability in their lessons.

Bih, a very proactive Maths teacher, was quite intentional in the way she engaged a student with vision disability by asking him questions directly and giving him room to figure things out for himself. This was evident in the way he derived his own method of memorising a formula in the form of a table, registering it in his memory and using that to solve mathematical problems. He also often times offered alternative methods for solving such problems to the amazement of his teacher and peers. Talking about her experience of teaching students with vision disability alongside their sighted peers, Bih stated, “My pedagogy is group pedagogy, [meaning cooperative learning] because they need to have friends so that the friends can help them” (T3).

She constantly used this strategy to engage all her learners. I observed that each time she introduced a new Mathematical concept, she asked the learners to either work in pairs or groups on an assigned task while she purposefully guided and probed them including those with vision disability. Nonetheless, the rigidity of the curriculum prevented teachers such as Bih from being more liberal in finding creative ways of working with students with vision disability.

## **5.5 Conclusion**

This chapter has presented the context and part of the findings of this study which sought to investigate how the learning needs of vision disabled student are understood and accommodated within a mainstream secondary school. Although they are physically present, access to teaching and learning and learning and teaching resource materials are severely hampered by teachers’ lack of capacity to teach these students and the absence of accessible teaching and learning resources which, put together, make meaningful learning for students with vision disabled student an uphill task. The next chapter presents the other part of the findings.

6.1 Findings of Thematic Analysis 2

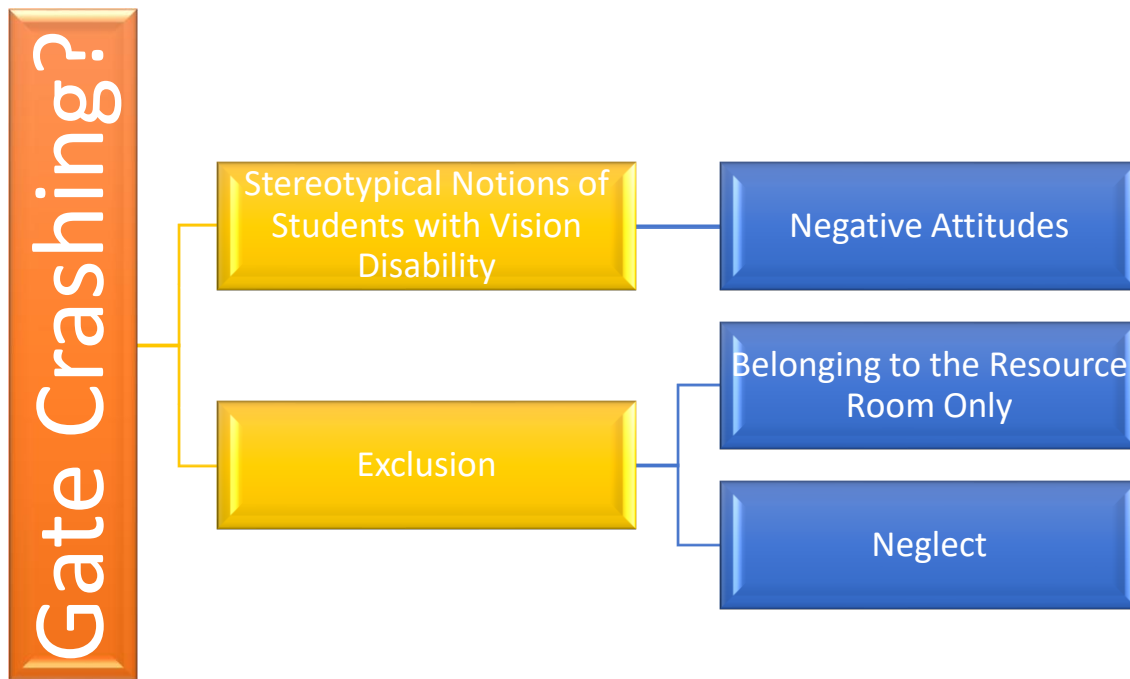


Figure 10: Summary of theme three of the findings

6.2 Introduction

Gate crashing is the third overarching theme that emerged from the data. I remind the reader that although participants’ discussions are co-constructed, I avoid in-depth interpretations here, since the chapter focuses on the description phase of the data, and the meanings will be dealt with in the discussion chapter. Gate crashing refers to attending a party or gathering uninvited. People who gate crash an event are hardly attended to because the hosts did not prepare to receive them. They may be allowed to participate in the event if they can fit in. The students with vision disability at Mabingo Secondary School were treated as uninvited guests to a party whom the host, in this case the school, had not prepared to receive but did not also have the choice of sending them away because of the stipulations of the law. Thanks to the interventions of an individual and the Cameroon Baptist Convention Health Services, the students managed to navigate their way through. In order to give insight into the theme, this chapter begins with an overview of how students with vision disability gain admission into Mabingo Secondary School and the external support they receive to enable them to pursue learning in a mainstream setting. It then

proceeds to discuss the factors that painted a picture of students with vision disability being seen as intruders.

At the time of data collection, 24 students with profound vision disability were enrolled in Mabingo Secondary School. Twenty of these students lived in a hostel owned by an individual and four lived with their parents. The students at the hostel were transported to and from school every day by bus. The initiative of enrolling students with severe to profound vision disability was that of the hostel owner, himself severely vision disabled. He would go into communities and identify children with vision disabilities, convince the parents of the need for the children to attend school and bring them to his facility where the children spend some time in a resource room learning braille. When the RR teachers are satisfied that the children have enough braille skills to pursue mainstream education, they will be enrolled in a co-located mainstream primary school still owned and run by the hostel owner. Once the children complete primary education and pass the end-of-course examination, the hostel owner seeks admission for them to attend Mabingo Secondary School.

The RR staff also served as house parents at the hostel and as itinerant teachers at Mabingo Secondary School. Although the children were supposed to pay approximately three hundred US dollars for tuition and boarding at the hostel, many did not, as the majority were from poor backgrounds. A few parents did pay some amount of money while others paid in kind, depending on what they could afford. Kedze, a parent, said, “Frankly speaking I give what I can afford i.e. 10,000 francs or 20,000 francs [approximately 16 or 32 dollars (P2). US dollars instead of the stipulated 300 US.”

Ngum, a RR teacher added, “There are some poor parents who show an interest in their children. Sometimes they will come with one bunch of bananas”. (RRT1).

Also, some parents did not think it worthwhile to spend money educating a child with vision disability whom they believed would most likely never secure paid employment. The hostel owner, however, still allowed children of such parents to attend his facility as he received financial and material support for the vision disabled students from some benefactors. He said:

*Some organisations out of the country support our work. Even some people in Cameroon support with some braille papers. These people want their*

*support to be used to help the children. That's why we cannot close our doors to even the children whose parents cannot afford the tuition (RR3).*

In Mabingo Secondary School, two teachers from the resource room at the hostel supported the students and teachers by brailing evaluation items for the students and transcribing them for teachers to grade. This braille support was in addition to assistance that was given by others as I describe below.

In 2018, a faith-based organisation, the Cameroon Baptist Health Services (CBCHS), stepped in to provide support for the education of vision disabled students in Mabingo Secondary School through a project dubbed Quality Education for All (QEA). The support provided by the CBCHS comprised of providing 75% of the funds which the hostel owner used for the purchase of a new bus for the students, refurbishing the existing RR at Mabingo Secondary School and equipping it with computers, text to speech software like Job Access with Speech (JAWS) and Non-Visual Desktop Access (NVDA), a braille Embosser and digital recorders. The CBCHS organised a one-month training on ICT skills for vision disabled students although this happened during holidays and so not all the targeted students participated. CBCHS also assigned one of its staff to serve as Project Officer with the duties of overseeing the activities at the resource room and the welfare of the students while at Mabingo Secondary School. The CBCHS paid quarterly subsidies to the hostel owner for the fuelling of the bus and also for payment of the RR staff. For the students living with their parents, the CBCHS paid their transport fare to and from school. Prior to data collection, the CBCHS had organised one capacity building workshop for one hundred teachers of Mabingo Secondary School, targeting teachers teaching students with vision disability during that academic year as the CBCHS the CBC trainer could not afford to take on board the entire staff population of 189 teachers. The CBCHS also advocated for two staff members to be assigned as focal points for inclusion. Tse said, "The workshop was the first of its kind the staff had received in the domain of disability inclusion" (T7).

To provide this support, the CBCHS entered into a partnership with the Regional Delegation of Secondary Education which oversees secondary education provision in the region in question, through a Memorandum of Understanding (MoU). Both partners were to work in synergy to enable the practical inclusion of vision disabled students in Mabingo Secondary School and another neighbouring secondary school in the region. In spite of the Minister of Secondary Education inaugurating the RR, no funds were allocated for

disability inclusion and I observed that all financial provisions were made by the CBCHS while the Regional Delegation officially authorised the different activities implemented by the CBCHS. Also, activities that promoted inclusion such as an inclusive sports activity which I witnessed during data collection, when COVID-19 restrictions had been significantly reduced, were initiated and financed by the CBCHS with support from the hostel staff. Worthy of note, was the fact that the government or, more specifically, the Ministry of Secondary Education, did not give any form of financial support to the school or the hostel owner and this was upheld by Neba who said, “We also need support. Government doesn’t support us [referring to the himself and his staff]. If the government can support, it will be better.”

Aliéh, a mainstream teacher who doubled as focal point for inclusion added that:

*As a focal point in charge of the follow-up of students with disabilities in Mabingo Secondary School, there is a lot to do because I have noticed that these children are abandoned by the state. No provisions have been made to take care of them (T8).*

The overall impression of the way the partnership worked was that both the delegation and the school were not proactive in fostering inclusion but had to go with CBCHS’ flow because of the Cameroon’s 2010 Law on the Promotion and Protection of the Rights of Persons with Disabilities and its 2018 Text of Application which encourage non-governmental organisations (NGOs) to support the government of Cameroon in the implementation of the law.

### **6.3 Gate crashing?**

Apart from the challenges teachers faced in meeting the learning needs of students with vision disability in Mabingo Secondary School and the barriers to learning that the students faced, their school experiences were marred by exclusionary practices, negative attitudes, stereotypical assumptions about students with vision disability in general and the nonchalance of the school administration, teachers, and parents alike. This state of affairs gave the impression that the students with vision disability at Mabingo Secondary School were uninvited guests and so were not welcome.

#### ***6.3.1 Stereotypical Notions of Students with Vision Disability***

Stereotypical notions here refer to commonly held ideas or preconceptions about vision disabled students, with such ideas being rooted in prejudice. Some teachers and sighted

students harboured stereotypical assumptions of vision disabled students and this affected the way they responded to the learning needs of these students and interacted with them. Some teachers assumed that students with vision disability were not academically capable and this impacted the way such teachers addressed their learning needs. For instance, Ngum, a resource teacher, said, “They [referring to some teachers] have some expression, some bad expression like this”: “your students don’t understand anything” (RRT1)

The frown on Ngum’s face was indicative of her indignation at such a remark. This statement from the resource teacher could mean that some mainstream teachers did not consider students with vision disability as an integral part of the student body of Mabingo Secondary School but rather as appendages.

Also, saying that the students with vision disability did not understand anything was a sweeping statement which must have been borne out of preconceived ideas about being vision disabled and academically unsound. Ako, a mainstream teacher, added, “They are slow learners and they don’t take notes at the same pace” (T5).

According to this teacher, not being able to copy notes at the pace of sighted students was a signal that the vision disabled students were “slow learners”. It was interesting to note that he associated the pace of note-copying to the pace of learning by juxtaposing two sets of students writing in two incomparable formats and then concluded that all students with vision disability were slow at learning taught concepts. According to Bih, another mainstream teacher, some teachers also concluded that students with vision disability were disruptive. She said:

*I’ve said that some teachers don’t pay attention...so much attention to them. And some teachers used to say that they are students who complain a lot who er...[silence] who disturb a lot (T3).*

Such stereotypical notions of students with vision disability led to negative attitudes by some teachers as I describe next.

#### *6.3.1.1 Teachers’ Negative Attitudes*

Negative attitudes here refer to the tendency to display annoyance or belligerence towards someone. Teachers’ stereotypical notions of students with vision disability translated into negative attitudes towards them. Nyah, a vision disabled student, noted that students with vision disability were stigmatised. He said:

*And also, also the stigmatization of the handicapped in class. When a teacher enters the class, instead of teaching his lesson, he focuses on the fact that there are students with vision disability to say that: "Why did the State even send you here? For what purpose do you go to school?" This frustrates (S5).*

Ngum, a resource teacher, added that:

*One year, one teacher said that...at break time. All those children with vision disability were packed somewhere and that teacher looked at them and said... it's good to kill them so that the world can be free.*

It was regrettable to note that some teachers did not only not see the need for educating students with vision disability but that they even wished such students dead. The sarcastic questioning of the *raison d'être* of vision disabled students in the school could mean that this teacher equated vision disability to inability and so saw no reason for these students receiving an education. Such teachers could therefore not consider the needs of students with vision disability in their lesson planning, preparation and delivery. Passing on such negative attitudes to these students was discouraging and stifled their enthusiasm. Ngwe, a mainstream teacher confirmed this saying:

*Because some of them as I say, when you meet them in other classes they are discouraged. All of them, they don't want to ask questions because they are discouraged. They are already discouraged (T4).*

Mankah, a mainstream teacher, added, "I am convinced that some teachers have contributed enormously to their withdrawal attitude" (T1).

Being discouraged and withdrawn could have stemmed from the negativity that surrounded these students and with such feelings it was challenging to concentrate in class; the reason some students with vision disability questioned why they were in school in the first place.

Nyah, a vision disabled student, further said, "There are some teachers that after their arrival in class they put the visually impaired outside before teaching" (S5).

The act of sending away vision disabled students before teaching was an indication that such teachers did not consider education a necessity for the students and so saw them as intruders. It was evident that teachers such as the one described by Nyah did not consider the learning needs of students with vision disability when planning, preparing and delivering their lessons and so sent them out of class before teaching. The message this

type of behaviour sent was that the education of students with vision disability did not matter and so they were not welcomed to her class. The onus was then on the student to exercise agency to learn but this was also challenging in a context where some sighted peers' attitudes were a cause for concern.

#### *6.3.1.2 Negative Attitudes from Sighted Peers*

Some sighted students shunned students with vision disability and did not want to associate with them for various reasons, including the unfounded fear of being contaminated with vision disability just by interacting with their vision disabled peers. Mengwi, a vision disabled student, reported that:

*Sometime ago, when the bus was still being parked far over there, when it was time to return home, I sometimes called on a sighted student to accompany me to the bus, they would refuse saying that: "hey! You are going to contaminate me!" (S3).*

This was confirmed by Timo who added that, "Some students dodge when they meet us. They consider the visually impaired as being different" (S2).

The students who intentionally avoided students with vision disability could, apart from fearing "contamination" be avoiding to assist them to find their way around the school, further highlighting the need for orientation and mobility skills which the learners said was a core aspect of being independent in school. Even in class, these students needed the assistance of their sighted peers but this again their requests for assistance were met with repudiation from some peers who did not want to share the same seat with vision disabled students. Nyah, a vision disabled student, said: "It is not always easy because sometimes even when there is space in class, some students refuse to sit with us, although the bench is empty "(S5).

Mengwi, another vision-disabled student backed this up saying, "And when we arrive in class, students put us on the last bench, they don't want us to sit in front" (S3).

Putting the students with vision disability on back seats or avoiding to share the same seat with them could mean that their sighted peers generally marginalised them and so wanted to avoid seeing them, interacting with them and giving them the much-needed assistance by supporting their learning in class. Nji, a mainstream teacher, said, "Generally sighted

students tend to marginalise the students with vision disabilities ... They usually have fewer friends” (T6).

This statement was authenticated by my observation of the students’ interactions during break times. Generally, the students with vision disability tended to interact with each other and not so much with their sighted peers. The attitude of keeping students with vision disability at arm’s length, caused them to feel rejected and seek the company of fellow vision disabled peers, which was counter-productive as they could not help each other in class. I also observed that during break time the students with vision disability were always around the RR where they seemed to feel more comfortable. When the students felt shunned in class, they sought intervention from the focal points for inclusive education who were put in place by the CBCHS as earlier explained. Tse, a discipline teacher who doubled as a focal point, said:

*Two students came to me and complained that they are abandoned in class because their classmates refused to help them during lessons. The two disabled students were seated on the same desk. So, we had to go to that class and change their seats. We got students willing to help them, seated near each of them (T7).*

Tse went further to express the need for regular sensitisation of both staff and students on disability equality. He also suggested that the sighted students supporting their vision disabled peers, ought to be trained on how to offer such support and also appreciated for doing so. He said: “Students are the ones acting as guides. Nobody cares about those guides. They must be trained and motivated. Guides must be encouraged and sensitised” (T7).

Although the two students were “abandoned” by some of their peers, there were others willing to assist them. Mbuh, a vision disabled student, revealed that his friends supported him in class. He said:

*So, my classmate comes in and says: “Mbuh, you have not finished copying the notes, come, let me dictate them to you.” You see some classmates are kind. When you came in, I was copying the history lesson because I did not finish it the other day. The same thing applies when I want to go round the school; there is always someone to support me. I just have to ask and they volunteer to help (S1).*

Kedze, a parent, added that:

*He (referring to his vision disabled son) usually talks about their relationships positively. They dictate notes and he copies them. They stroll together in the school campus, etc. Both visually disabled and sighted classmates pay him visits to Bandjoun and even spend the night with him. so, there is total understanding among them (P2).*

These two quotes are indicative of the genial relationship that existed between some sighted and vision disabled students. Some students showed empathy towards their vision disabled peers and expressed concern when teachers failed to include them during lessons. Vidzem, a sighted student, attested to this saying, “Some [alluding to teachers] just teach ignoring the visually disabled. When we call their attention to their presence, they argue that they must cover the syllabuses in time” (FGDS4).

This quote indicates that some sighted students showed empathy towards their vision disabled peers and even intervened when some teachers did not pay them the attention they deserved. Although there were sighted students who provided support to students with vision disabilities, others resented them and made them to feel uncomfortable in school, giving the impression that students with vision disability were not welcome in their milieu. Some sighted peers justified these negative attitudes by saying that some students with vision disability were rude, while others refused to be assisted. On this Tidze, a sighted student, intimated that:

*Some visually impaired students refuse to be supported. I met one of them going down the stairs. I offered to help, but he refused and said, “No, I can go down alone” (FGDS3).*

This statement reveals that Tidze had little knowledge about disability etiquette and gave a negative interpretation of the student’s refusal of the offer of assistance. Shuika added that:

*Another point is their naughty attitude. Sometimes they embarrass us with some dirty words. When accompanying one of them, he once said, “I don’t see, no doubt, but what I have in my head you sighted students don’t have it”. This was really shocking (FGDS1)*

Wirsy, another sighted student, was quick to argue in favour of students with vision disability saying that:

*They are not the only people to blame. We, the sighted students, sometimes use inappropriate words which make them believe that we are making a*

*mockery of them so they launch a counterattack against us... they need a conducive environment where they will be prepared for socialisation (FGS2).*

These exchanges between Wirsy and Shuika indicate that there were subtle tensions between sighted and vision disabled students which needed ironing out. This is a further confirmation of the need for disability equality education for all stakeholders as suggested by Tse.

### **6.3.2 Exclusion**

Exclusion here refers to the act of barring someone from participating in activities of a community to which they belong. Although students with vision disability were present in Mabingo Secondary School, they were, for the most part, excluded from the life of the school.

#### *6.3.2.1 Exclusion from Learning and Co-Curricular Activities*

The stereotypical notions harboured about students with vision disability and the negative attitudes portrayed towards them led to these students being excluded from some academic and co-curricular activities. For instance, Mbuh, a vision disabled student, said:

*In computer science, we do the written part of it, but there is the practical aspect in the computer room to check understanding of the lesson taught in class on machines. So, he [referring to the teacher] only takes sighted students. We also want to be included so that we could learn more (S1).*

The teacher may not have been trained to teach computer skills to learners with vision disability as stated by Timo:

*The teacher once told us that the computers in the room do not have a special audio application for the visually impaired. He doesn't know it. So, he cannot teach you something which he does not master (S2).*

Additionally, the computers in the mainstream computer room did not have the software necessary to facilitate the inclusion of vision disabled students, a signal that the installations did not consider their learning. However, the computers in the resource room had the necessary installations but it was challenging for the teacher to be in both spaces at the same time, so preference was given to the sighted students. This resulted in the students with vision disability being excluded from the practical lessons and this did not go down well with them as they also wanted to acquire the skills. The result was therefore

a huge knowledge gap between the computing skills of sighted students and those with vision disability. This was a missed opportunity of enabling the vision disabled students to acquire computing skills which would have facilitated teaching and learning.

Students with vision disability were also excluded from sporting and club activities. There was an assumption that, because of their disability status, vision disabled students could not carry out certain activities such as sports, music and cleaning. A case in point was that of Awa who, referring to cleaning in the school, said, “It is the teachers who don’t let me do it. They say I cannot see weeds” (S6).

Although the teacher concerned seemingly meant no harm, this student was not happy with such restrictions as they amplified the notion of inability being synonymous with vision disability whereas at home or in the hostel, they did their own cleaning and laundry as stated by Nnam, a parent:

*He [referring to her vision disabled son], does the household chores. He fetches water; he does the laundry; his clothes, my clothes, his father’s clothes and his junior brother’s. He also does the cooking (P1).*

Mbuh also spoke on the issue of excluding him from participating in his favourite hobby - playing music. He said, “When you want to take part, they say: you are a visually impaired”. (S1).

While those exempting this student from participating in music lessons may have done so out of ignorance, refusing them the opportunity to participate in events because they were vision disabled, exacerbated feelings of rejection and inadequacy as revealed by Ngum, a resource teacher. She said, “All the time this kind of taking care remains in their head that they are not normal or they are very... they are not like human beings” (RRT1).

The schedules for club activities also meant that vision disabled students could not participate. Club activities generally took place after school hours and this was unconducive for the vision disabled students living in a hostel since they were all transported back to the hostel immediately classes ended. Not boarding the school bus meant that the students had to pay their way home, something they could not afford. Mengwi revealed that:

*Because [in response to why she did not participate in club activities] the car is going to leave me if I take part in clubs. It will not stay to wait for me. I, I don't have money every time to take motorbike (S3).*

The issue of transportation also prevented all the vision disabled students living in the hostel from attending morning assemblies in school. Lessons on Mondays started with an assembly of students in a courtyard for singing of the National Anthem, giving of instructions to students and passing on announcements which would guide the students for the week. For the entire period of my data collection, I observed that the bus dropped off the students after the morning assembly and sometimes they arrived in their classrooms when the first lessons had already begun. These students missed out on these activities, meaning that they were not fully aware of what was happening around them. On one occasion, students who had performed poorly in the first term evaluations were asked to invite their parents to a meeting with school authorities on a set date so that their academic progress could be discussed. Since the vision disabled students were absent during the assembly, they did not get this information and so neither their parents nor the owner of the hostel attended and no eyebrows were raised, perhaps an indication that their academic progress was unimportant.

The school administration was generally unperturbed about the education of the vision disabled students and this was signalled by the manner in which matters concerning these students were largely left in the hands of the hostel owner and his staff. It was thus easy for anyone to conclude that the students with vision disability belonged to the resource room only.

### ***6.3.3 Belonging to the Resource Room Only***

As earlier mentioned, vision disabled students seemingly belonged to the resource room only. A critical evaluation of the activities of Mabingo Secondary School would reveal that the welfare and well-being of vision disabled students in that school was the sole responsibility of the staff of the resource room, meaning, therefore, that without the resource room, these students would not be in the school. Even school projects which were generally financed by PTA fees, paid by every parent [excluding those of children with disabilities] did not consider the learning needs of students with vision disability in spite of the law stating that all PTA funds belong to the state and should be utilised to the benefit of all students. This was revealed in the school action plans which did not mention any

actions directed at improving the schooling experiences of vision disabled students. This deafening silence on the welfare of these students pointed to neglect.

#### ***6.3.4 Neglect of Students with Vision Disability***

Another factor which made the students feel unwelcome in the school was the negligence they faced on multiple fronts. The attitudes and behaviour of the school administration, some teachers, peers and even some parents smacked of dereliction of duty. The admission of vision disabled students at Mabingo Secondary School was the initiative of the proprietor of the hostel in which they lived, as I earlier stated. Most had lived at the hostel from the onset of primary school and continued to live there so as to attend Mabingo Secondary School. The parents of vision disabled students seemed to relinquish their roles to the hostel owner.

Since it was the proprietor who sought admission for vision disabled students into the school instead of parents as was the case with sighted students, the school authorities and teachers saw the education of the vision disabled students as his responsibility and shied away from theirs. Since it was also the proprietor who employed and paid the resource teachers with support from the CBC Health Services and so, the students were constantly referred to as their responsibility.

When Meshi, the principal of the school, was asked if she was in touch with the parents of the vision disabled students, she said: “We don’t receive individual children. It is Mr. X who brings their files to me. He is the only person who knows them better as they live in a hostel. I only receive their files” (T 9).

She went further to say that:

*Frankly speaking, children live in a hostel so, I cannot tell. We just see children coming to the school. I remember last year when a meeting [referring to a meeting convened by CBCHS with parents of vision disabled student] was held, I just popped there to greet the parents. You see I don’t know their needs.(T9).*

This stark confession meant that even the school principal did not consider herself responsible for knowing and addressing the learning needs of the vision disabled students. It also revealed that whatever was being discussed at the meeting was none of her business as she only passed by to greet them. When quizzed if the school action plan considered the

needs of vision disabled students, the principal said, “No, because one needs to know their needs in order to decide on an amount of money to be allocated to them.”

This admission was confirmed by my review of school action plans which did not mention anything about students with vision disability or inclusion in general. Her response implied that if she knew the students’ needs, she would “decide on an amount of money to be allocated to them”, yet she had not made efforts to know what their needs were.

When asked why she had not investigated their needs she said, “It is not feasible since they are not in one classroom.”

Not being in one classroom did not seem to justify her neglect as there were several avenues through which she could make such findings if she so wished. Her response also suggested that she saw students with vision disability as a separate entity from the rest of the student body. It could also mean that the principal did not understand the concept of inclusion as Ako, a mainstream teacher, confirmed saying:

*You see, neither the administration nor teachers is ready to get involved in inclusive education. It is my feeling that for inclusive education to be effective in the school, the head of the institution should be a sensitive and committed person (T5).*

The aforementioned revelations by the principal attest to the suggestion that she was not “sensitive and committed” otherwise she would be curious to find out what the needs of these students were. This also points to the need for capacity development for school administrators in inclusive education.

Ako, further emphasised that:

*In this school students with vision impairments are frustrated because they are not taken care of either by the administration or the teaching staff. Some teachers even go up to assessment before they realise that these students were in their class (T5).*

Not realising that there were vision disabled students in a class meant that their needs were not taken into consideration. Learning therefore depended on the students to a large extent. When I inquired to know the extent to which teachers took responsibility for the learning of vision disabled students Timo, a student with vision disability, spontaneously replied

that, “At a percentage rate of 80%, it [referring to the responsibility] depends on us.” Timo went further to explain how they were neglected. He said:

*Sometimes they forget that you are in class. Look at what happened today. When I asked my copy [referring to a copy of the evaluation that was taking place], she said that she had forgotten that I was in class. What can you do? You only have to fend for yourself (S2).*

The student did fend for himself because I observed this evaluation exercise and it was interesting to note that the teacher responded with such nonchalance and concentrated on something she was doing at her table. The student then constantly asked his bench mate to read out question after question for him to respond to. One would have expected the teacher to do some improvisation for the student but she was indifferent. The teacher’s attitude revealed that she did not feel any remorse and it was up to the student to look for ways of doing the evaluation or miss it.

When it concerned parental support, teachers were of the impression that that the majority of parents were unconcerned about the education of their children with vision disability. They typically saw the education of their children as investments but did not see what benefits would be derived from educating a vision disabled child. Ngum said:

*And other thing is that until now, there are some parents that they cannot...they are not sure that those children can help them. That’s why when you meet some, they say no, I cannot spend my time, I cannot waste my time and then spend my money for, for a person who is not seeing. I think that if I send those who are seeing in school... they can work and help the one that is not er...disability person (RRT1).*

It is worthy of note that parents who thought this way did not think that students with vision disability could find paid employment especially as they were aware of many young non-disabled people who had received university education but still couldn’t find jobs:

*The NGO supported us this year in paying for his transportation; otherwise, he should have stayed at home because I had to take care of his siblings too. It is also traumatizing because I don’t know whether he will have a bright future after passing his Ordinary Level or Advanced Level (P1).*

The motivation behind parents investing in the education of their children is the hope that they would eventually gain paid employment. This statement from Nnam, a parent, could mean that, since she was unsure of her vision disabled son gaining paid employment after

school, she would have prioritised the education of her non-disabled children if the CBCHS did not support her. Some parents who felt that schooling for their children with vision disability was a waste of time, abandoned the children to themselves and such students resorted to begging the hostel owner not to evict them so that they could continue to live in the hostel and attend school since they lived far away from Mabingo Secondary School. In response to his parents' attitude towards his education, Nyah said:

*Because for her, well, she tells herself that when somebody sees, he studies hard, he does not have a job, talk less of you who does not see... Therefore, she also knows that my going to school is a waste of time... That is why she does not like to be interested, because every school resumption I am obliged to come to beg Mr. X even if I do not have money to pay him. Well, he understands me. He also includes me (S5).*

Conversely, some parents were proud of their vision disabled children and did their utmost to provide for them. Wung, a parent, said:

*I am amazed at the way she speaks French impeccably, even better than a university student. In addition, she took part in the writing competition for secondary school students. She was among the first eight out of 500 candidates. So, you see, I am so satisfied when she performed so well at school that I have accepted to give her what she wants (P5).*

This student's performance could result from the love and support she received from her parents and the fact that her parents were willing and able to provide for her learning needs. Other parents saw schooling as a way of being relieved of the responsibility of looking after their vision disabled children and once they were in school the parents turned their backs on them and did not want their children even for holidays. Asked about parents' involvement in the education of their children, Ngum said, "We are sorry but many parents abandon their children" (S 5).

Ade, another resource room teacher, added that:

*At the beginning of the term, they come and leave the students at X then go and stay at home. May be during the holidays yes, they just find their children at home (RRT 2).*

Abandoning the children at the hostel was an indication that some parents felt relieved once their children were at the hostel. By not visiting the children, the parents were sending a clear message that they did not care about the children's welfare and education and were

just too happy to see the backs of them. It is no wonder Ngum stated that for the parents who abandoned their children, “it’s by force” that they come to collect them for holidays”. In other words, the hostel owner had to mount pressure on them to do so.

#### **6.4 Conclusion**

This chapter has presented the non-pedagogical barriers to learning which students with vision disability face at Mabingo Secondary School. It provides a clear picture of the treatment these students receive, which gives the impression that they are unwelcome intruders in the school where the onus is on them to fit in rather than the school system making changes to accommodate their learning needs. These, coupled with the barriers to learning which they encounter as discussed in chapter five, make access, participation and achievement on a par with their sighted peers a far-fetched expectation. In the following chapter, I illustrate the meanings of these findings.

## CHAPTER 7: PEERING BEHIND THE CURTAINS

### 7.1 Introduction

After presenting the findings of the current study, I now turn to discussing and critiquing them, with the intention of providing a comprehensive understanding in relation to the literature and the theoretical frameworks that guided the study. In this chapter, I begin with the first key finding which I discuss under some key elements of Disability Studies in Education such as: the social model of disability, the critical paradigm, disability rights and inclusive education before concluding this section. I then use Bronfenbrenner's Ecological Systems Theory to discuss the second key finding under the micro-system, the meso-system, the exo-system, the macro-system and the chrono-system. I weave postcolonial theory into both findings by illustrating the impact of colonialism in Cameroon's educational space with particular reference to students with disabilities including those with vision disability. I also discuss the theoretical implications of the findings before concluding the chapter.

### 7.2 Key Finding 1

The policy on the education of children and young people with disabilities is located within a medical model and this influences how role players such as teachers, sighted peers and parents conceptualise and respond to the learning needs of students with vision disability.

RAND (p. 1, n.d.), defines education policy "as the laws, rules and processes that govern the operation of education systems put in place by schools, nations and other related organs with the aim of pursuing and achieving academic goals".

This study revealed that the policy on the education of children and young people in Cameroon is located within a medical model perspective and seems to be influenced by colonialism. These influences how role players such as teachers, sighted students and parents conceptualise and respond to the learning needs of students with vision disability. As earlier mentioned in the literature review, the highlights of the 2010 Law and its Text of Application declare that the state will support the education of children and young people with disabilities including those with vision disability by giving them age and fee waivers, and providing educational materials appropriate to their needs. The Law also

makes provision for the training of specialist teachers in the skills of sign language and braille and other personnel who will “supervise” these learners.

### **7.3 Disability Studies in Education**

In order to gain an insight into this key finding, I will examine it through some of the key tenets of DSE as espoused by Connor et al. (2008); Gabel (2005) and Baglieri et al. (2011). They posit that DSE’s key elements include but are not limited to the social model of disability, disability rights, the critical perspective, inclusive education and intersectionality.

#### ***7.3.1 The Social Model of Disability***

The social model of disability lays emphasis on the fact that disability is not only an individual medical problem but that it is shaped by the social and environmental factors which create barriers to participation for people with impairments. This means that in formulating policies on the education of learners with disabilities including vision disability, attention ought to be paid to the factors in the current school system which are likely to create barriers to learning for those students who do not fit the perceived norm, such as students with disabilities. There is a need to look for ways of minimising or eliminating such barriers to enable the full participation of these students. Starting with the definitions of key terminology relating to disability within the 2010 Law, these definitions, from a DSE perspective, are based on the view that disability is inherent within the individual and do not consider the role of the environment in disabling persons with impairments. The use of words and phrases such as ‘unable to ensure by himself/herself’, “normal”, “alteration of a psychological, physiological or anatomical function or structure”, “within the limits considered normal for a human being” are pathologising and create a binary where people with disabilities are perceived as abnormal and those without are perceived as normal. Such vocabulary also exert an intense form of “othering” within the public domain (Connor et al., 2008) thereby causing schools to see difference within the student populace as problematic, instead of seeing such difference as opportunities for innovation, growth and development of the quality of education provided to all learners.

A further analysis of the law reveals that although school principals of mainstream schools should not refuse admission to any students on the basis of disability, the manner in which the law prescribes education provision for students with disabilities, including those with vision disability, smacks of special education tenets. According to Slee (2018) “traditional

special education sustains ableist assumptions about disability through longstanding practices of categorisation and separation of children according to deficits” (P. 14). This is reflected in the 2010 Law which states that specialist teachers will be taught sign language and braille so that they will be the ones to supervise the education of learners with disabilities. In this case, sign language and braille are seen as the “tools” with which to “fix” the students who require these skills in order for them to fit into the “norm”. Such clauses about the role of specialist teachers, create an atmosphere of “disability expertise” (McKenzie & Macleod, 2012). While sign language and braille play key roles in the education of students with hearing and vision disability respectively, they are not the only strategies needed to ensure equity in education for these groups of learners. It is not surprising therefore that the mainstream teachers in this study gain their understanding of disability from the relevant government policies and thus sometimes relinquish their responsibility of teaching students with disabilities to the “experts” because they [mainstream teachers] consider themselves as not possessing the competence needed to teach students with vision disability. This may explain why some teachers in the current study referred students with vision disability to the RR during practical lessons on information and communications technology (ICT), where it was perceived that they will be taught in a better way by the RR teachers. This is similar to the situation in Botswana as reported by Habulezie et al. (2017b), where some mainstream teachers categorically refused to teach students with vision disability because they claimed that it was the job of specialist teachers who were receiving scarce skills allowances. Consequently, the students were always asked to go to the Department of Special Education when the practical aspects of biology were being taught. This resulted in students receiving an incomplete lesson. Similarly, still in Botswana, Habulezi & Phasha (2012) revealed that mainstream teachers were reluctant to provide remedial classes for students with vision disability, considering this as the job of specialist staff.

Students with vision disability will sometimes need remedial classes in order to catch up with what was missed or not understood during the regular teaching time. Missed opportunities for remedial classes means receiving a lower quality of education which could negatively impact their academic performance. In the three scenarios, the schools would have used the opportunity of having specialist teachers to institute co-teaching (Cook & Friend, 1995; Hang & Rabren, 2009), on the proviso that both teachers were made to feel respected and each person’s contributions equally valued (Fitzell, 2010). This

way, the vision disabled students would benefit from full access to the general curriculum and qualified content-area teachers while simultaneously receiving support appropriate to their vision-specific support needs (Scruggs & Mastropieri, 2017).

### *7.3.2 The Critical Perspective*

Born out of critical disability theory, the focus of critical disability perspective explores society's failure to provide support to persons with disabilities. According to Garland-Thomson (2013) the critical disability theory analyses disability as a cultural, historical, relative, social and political phenomenon which focuses on viewing ableism as operating against persons with disabilities and seeks to dismantle the structures which promote it.

The views of teachers, shaped by the 2010 Law, are also reflected in their understandings of what vision disability is, which then informs how they understand and respond to the needs of students with vision disability. For instance, teachers defined vision disability as being inherent within the students and thus described their needs in terms of tangible resources such as books in braille and audio recorders. This reflects policy prescriptions for learners with disabilities, giving the impression that if these material needs were met, the students would automatically have access, participate and achieve. Such a view is tantamount to prescribing a "treatment" for the students and this limited view prevented the teachers from "holding a mirror" to their teaching and learning practices (Connor & Gabel, 2013), in order to identify the pedagogic barriers that were denying access and participation for students with vision disability, so as to address them. This view has stifled teachers' creativity and sense of agency to an extent that that even when a possible solution is suggested to some teachers, such as spelling new words orally as they write on the board, teachers find reason not to do so. This gives the impression that the teachers are not happy with the presence of the vision disabled students because, according to the teachers, these students are supposed to be in special provisions rather than in the mainstream schools. With Cameroon recently ratifying the UNCRPD and passing its own laws on the education of persons with disabilities, teachers should realise that inclusive education is non-negotiable. Therefore, it is not a question of "can we do this?" but rather "how can we do this?".

### *7.3.3 Disability Rights*

A further analysis of the 2010 Law reveals that stakeholders such as the students with vision disability and their parents were not consulted in the process of formulating the law.

DSE is grounded in the disability rights movement which seeks to promote the rights and full inclusion of persons with disabilities in all aspects of society, including education. In line with the principles of “nothing about us, without us” as propounded by Charlton (1998), the exclusion of persons with disabilities in the formulation of policies about them is a form of oppression. The International Disability Alliance (IDA), foregrounds the need for persons with disabilities, including those with vision disability, to exercise control over decisions that affect their lives. IDA further states that the exclusion of persons with disabilities in decision-making processes, such as in formulating policies about their education, is an infringement on their rights and amounts to oppression which leads to ineffective and non-responsive programmes. This is reflected in the current study where students with vision disability are present in the school but are excluded within education. This is contrary to UNESCO’s view of inclusive education which cautions education systems about excluding children from and within education (Unesco, 2005).

The absence of the voices of persons with disabilities in the crafting of the 2010 Law is also reflected in this study in that the views and opinions of students with vision disability and those of their parents are absent in the school, resulting in education provision that does not address their learning needs, hence their lack of participation and low achievement levels. This could be linked to an uncritical importation of inclusive education strategies from the Global North to the Global South, which fail to consider contextual realities (Abdulrahman et al., 2021; Elder, 2020; Muthukrishna & Engelbrecht, 2018). The silence of the voices of parents and students, to some extent, is contrary to what Habulezi & Phasha, 2012), found in Botswana where teachers met with students with vision disability once every term to discuss their support needs for better inclusionary practices. However, the contributions of parents were almost non-existent as with the current study.

Cain and Fanshawe (2019) assert that parents are the first teachers of their children and possess vital information about them which should be shared with teachers in order that better support mechanisms are put in place to facilitate the education of these children. It is believed that parental involvement in the education of their children helps the children to develop a positive self-concept and results in better achievement (Moroni et al. (2015). It should be noted, however that the parents in the current study and that conducted by Habulezi & Phasha, 2012), did not necessarily choose to be absent in the educational

trajectories of their children. The intersectionality between disability and poverty had a huge role to play as I describe next.

#### *7.3.4 Intersectionality*

DSE recognises that disability intersects with other identities such as race, gender, sexuality class and poverty and that these intersections shape experiences of disability and education. As already explained in Chapter 2, the mutualistic relationship between disability and poverty can have negative consequences for the education of learners with disabilities such as those with vision disability. In this study, the intersection between poverty and disability had implications for the education of vision disabled students. This study, like the one conducted by McKenzie et al. (2018), in South Africa and Karisa (2020), in Kenya, highlighted the fact that the education of children with disabilities is more expensive in comparison to that of students without disabilities and this influenced how parents supported the education of their children with vision disability. Whether congenitally or adventitiously blind, the students in the current study had to attend a special, residential, fee-paying school, in order to acquire braille skills prior to transitioning to the mainstream. Even after completing primary school, the students continued to live in the hostel as they either came from distant places or the parents believed their children could be better supported in the hostel. The cost was largely unaffordable for parents and, intriguingly, in spite of the law stating that learners with disability will receive financial and material support, the students at Mabingo Secondary School received neither of these. This is contrary to what McKenzie et al., (2018), found in South Africa where the Department of Education was investing heavily in resources for students with severe to profound intellectual and sensory impairments, including vision disability, even if the provision was flawed by unequal distributions and inadequate training on the uses of assistive technology for teachers. Even in the mainstream school in the current study, where the students with vision disability were exempted from fees, parents still had to bear the cost of uniforms, braille paper, feeding and transportation which still posed enormous challenges for parents as most them were on low or no income (see demographics details of research participants in chapter four).

On a similar note, the absence of the voices of parents in this study and the ones conducted by McKenzie et al., (2018) and Habulezi & Phasha, 2012), does not necessarily mean that these parents were negligent. Their low financial status was exacerbated by the presence

of a disabled child in their families. While they struggled to pay the fees demanded by the hostel owner, travelling from distant places to attend school meetings was a “luxury” they could not afford and so depended on the hostel owner to represent them in the school. However, it was not possible for the hostel owner, who hardly ever attended such meetings, to know the learning needs of individual students and collaborate with the teachers like their parents would have done. The absence of parents during PTA meetings and other meetings organised to discuss the poor performance of students in general, including that of those with vision disability, as the findings revealed, led to missed opportunities for parents to make valuable contributions towards the education of their children. This further disadvantaged the vision disabled students.

### *7.3.5 Inclusive Education*

The 2010 Law, as earlier explained, prescribes a deficit-driven, medical model of education provision for students with disabilities, including those with vision disability, which is deeply rooted in inequalities which continue to segregate students because of disability. DSE, on the contrary, promotes inclusive education which seeks to create welcoming and supportive environments that enable all students, including those with disabilities in general and vision disabilities in particular, to have full access to education, participate in and achieve on an equitable basis with their sighted peers.

Although the 2010 Law encourages NGOs and similar organisations to support the government in the education of children and young people with disabilities, it is not explicit on how this should be done. This lack of clarity has resulted in organisations setting up support systems within some schools which promote segregation of students with disability rather than include them. When impairment is viewed as a deficit rather than a difference, it encourages practices that alienate those who do not fit the norm.

For instance, this study revealed that the resource room, which was established as a support system for both students with vision disabilities and their teachers, rather helped to reinforce segregation and created a semblance of special provision where the mainstream school did not really play a significant role. Having been established by an individual as previously discussed (see Chapter 2) and resourced by a religious organisation, as is typical of most resource rooms in the African context (Dakwa, 2014; Karangwa et al., 2013), it was seen by the teachers as a “nursery” where the resource teachers could “babysit” the learners with vision disability when they could not be included in lessons. Seeing the RR

as a separate entity where teachers could only go for braille services and for adjustments to their evaluation items and not collaborate for meaningful inclusionary practices, made it seem like an extension of the special school from where the students lived and attended Mabingo Secondary School.

Slee (2018) argues that the presence of students with impairments in educational spaces ought to be the stimulus for schools and education systems to transform education provision to cater to the needs of all students, including those with impairments, in mainstream settings and not to alienate them through special provision. The fact that the vision disabled students mostly came from a residential school environment, sent signals to the mainstream school that the students were problematic and needed to be attended to by professionals who were trained to handle such learners. The belief that the RR teachers were responsible for the education of the students with vision disability is rooted in the 2010 Law which led to the mainstream teachers not exercising agency to look for ways of supporting the students with vision disability, seeing such support as the responsibility of the resource room teachers. Even so, the RR teachers in the current study complained that teachers tended to despise them and not give value to their work. While the 2010 Law proposes that NGOs should set up learning spaces such as the RR in Mabingo Secondary School to enable the education of children with disabilities in the mainstream, careful thought and planning should be dedicated to what purpose such spaces will serve and how they will be set up and run. This should be the opportunity where there is reciprocal support, influenced by the impairment of the learners, where there is parity between resource room and mainstream teachers, enabling them to collaborate to look for the best possible ways of supporting the learners to access and participate in teaching and learning so that they can perform optimally.

To sum up, provisions of the 2010 Law have shaped the views of role players in the education of students with vision disability. Apart from the 2010 Law, cultural norms and beliefs about disability also influence the way in which persons with disabilities are viewed and treated on the African continent in general and Cameroon in particular. For instance, African Child Policy Forum reports that in field studies conducted in Cameroon, Zambia, Uganda, Ethiopia and Senegal disability was seen as an ancestral curse or demonic possession (Rohwerder, 2018). Such conceptions have led to children with disabilities being abused and denied their basic human rights such as quality inclusive education as

reported by Tsangue et al. (2022). As a consequence, most of the teachers and the school administration are lackadaisical about the education of students with vision disability. This unconcerned attitude is further compounded by the fact that even the provisions of the law are not matched by concrete actions by the very law maker, the state.

Although the law is framed from a medical model perspective, some teachers, as stated in the findings, who attended a capacity building workshop on inclusive education, were beginning to change their perspectives and thus their pedagogies to include students with vision disability albeit with limited resources. Perhaps if the resources such as the financial and material support were provided, more teachers would have been inclined to review their beliefs and practices. Also, the school administration would have taken the law seriously and made efforts to attend to the needs of vision disabled students since their annual report to the Ministry of Secondary Education would have documented how these resources were distributed and how they impacted on the students' performances. In the same vein, if the roles being played by the hostel owner, the RRTs, the focal points and the CBCHS were taken up by the Ministry of Secondary Education or coordinated by her, the response from the teachers, the school administration and sighted students would have been different.

Cameroon ratified the CRPD in December of 2021 and is therefore compelled to implement the prescriptions of all the articles including Article 24 on Education. As earlier stated, inclusive education is no longer optional but an obligation to which the government must comply. The expectation is that educational policies will align with the definitions and prescriptions of the CRPD and especially as articulated in General Comment 4, here discussed in the literature review. This compliance will influence a move away from a medical model mindset, of the education of students with disabilities in general and those with vision disability in particular within schools, to perspectives and practices that are underpinned by DSE. Tchombe and Shey (2017), are of the opinion that education for all, including learners with vision disability, must be driven by a policy that is constructive and reflects the needs of those for whom it is intended.

Apart from the factors in the 2010 Law which influenced perceptions around the education of vision disabled students, thereby influencing how the educational needs of vision disabled students in this study were understood and responded to, the environment in which teaching and learning took place had a significant impact on their academic performance.

## 7.4 Key Finding Two

Although students with vision disability are present in Mabingo Secondary School, the learning environment posed significant barriers to access, participation and achievement.

### 7.4.1 Introduction

It has been widely acknowledged (Anderson et al., 2014; Bronfenbrenner, 1994; Krishnan, 2010; Leonard, 2011; Ryan, 2001), that the environment in which children and young people learn, plays a significant role in their educational progress and growth. As stated earlier, Bronfenbrenner's Ecological Systems Theory (BEST) articulates this by discussing the systems in which development occurs and how the different factors in each system interact and influence the child's development (see chapter 3). At the centre of this study are the students with vision disability. I will discuss this finding in relation to the different systems in BEST which are the micro-system, the meso-system, the exo-system, the macro-system, and the chrono-system. The study revealed that in each of the systems, vision disabled students encountered barriers which prevented them from accessing the curriculum, LTSM and teaching and learning pedagogies, on a par with their sighted peers.

### 7.4.2 The Micro-System

As earlier discussed, Bronfenbrenner (1994) posits that within his ecological systems theory, the micro-system is the most influential of the five levels because it is the immediate environmental setting containing the developing child. In this study, the students with vision disability are at the centre of the micro-system which consists of the peers, parents and teachers of the students with vision disability. In addition, it includes the curriculum, pedagogy and learning and teaching support materials or lack of them and the physical learning environment including class sizes. The study exposed the barriers that the students faced within their immediate surroundings.

#### 7.4.2.1 Parental Involvement

The impact of parental involvement in the education of their children has been widely acknowledged. For instance, Gonzalez et al. (2005) and Hoover-Dempsey et al. (2002)

assert that parental involvement positively influences developmental and educational outcomes for their children who are then motivated to learn. Conversely, lack of parental involvement demotivates the learner. In a context where parents see their children's education as an investment from which they will reap benefits, they might tend to prioritise the education of those children who are most likely to gain paid employment, to the detriment of the not so promising children such as those who are vision disabled.

In Kenya, Karisa (2020) sought to understand the involvement of fathers in the education of their children with intellectual disabilities and found that some parents were unsure of the financial benefits of investing in the formal education of these children. This finding is similar to that of the current study where some parents, especially those who were indigent, were hesitant about spending money on the education of their vision disabled children because they were doubtful of what financial gains to reap in the future. Parents generally felt that the chances of their children with vision disability securing gainful employment were not remotely possible and this caused parents to prioritise the education of their non-disabled children. Parents are therefore not willing to compromise their future social security for the education of their disabled children. From a DSE lens, such discrimination creates social categories (Skrtic, 2005), where non-disabled children are elevated in comparison to their disabled siblings. From a postcolonial perspective, this mind-set was inculcated by the colonialists whose interests were at the centre of the education of the colonised and not for the benefit of the latter and their communities, (Diang, 2013; Gwanfogbe, 1995). When parents are not enthusiastic about their children's education because of perceived inability to achieve and be successful, the children may internalise this and become apathetic to schooling.

In this study, like the one conducted by McKenzie et al. (2018), parents were out of touch with the education of their children. The hostel owner assumed disability expertise and deliberately cut off links between the parents of the students with vision disability and the school. He was the sole mediator and this was detrimental to the education of the students. As partners, parents have a significant role to play in the education of their children as they are the children's first teachers and possess information about the child which could help teachers to better accommodate students in their lessons. However, the dislocation of students from their own community through this removal to the hostel meant that parents, families and communities become estranged from their children. When parents are cut off

from PTA meetings as was revealed by the study, they miss out on opportunities to partner with the teachers to identify the needs of their children and collaborate in a bid to respond to these needs in meaningful ways.

When a meeting of parents was organised, it was either done by the hostel owner or the RR coordinator who is an employee of the CBCHS and these meetings did not involve the school administration. No wonder teachers often referred to the students with vision disability as the students of the resource teachers. Such practices, though intended for the good of the students, rather sent the wrong signals to the rest of the school community. It gave the impression, synonymous to special education, that these students were problematic and so needed specialised attention which only the resource room had the capacity to offer. This prevented the school from reflecting on the disabling nature of its cultures and practices as noted by Slee, (2018), in order to look for ways of eliminating such barriers to enable the vision disabled students to access, participate and achieve like their sighted peers. Another factor which reinforced beliefs that the vision disabled students were problematic to teach, was the fact that the majority of them lived in a hostel and attended the mainstream school.

#### *7.4.2.2 Living in a Hostel*

In Cameroon, most children with sensory disabilities such as vision disability often attend residential schools which are often far flung from their homes because their neighbourhood schools do not have the capacity to accommodate them. By implication, these schools are special schools. Segregating children in this way can result in stereotypes and stigma. Although this study did not seek to investigate the lives of students with vision disability in a hostel, living in this facility impacted on their participation as noted in the findings. Missing out on the morning assemblies and the first few minutes of the first lesson each day and not being able to stay back and participate in after school clubs or work with peers on class projects meant that the students were not having access to the full educational package which negatively impacted their performance. Even if the students were to be available at all times, the curriculum would still have excluded them as I describe next.

#### *7.4.2.3 The Curriculum*

Kelly (2009), defines curriculum as the sum of learners' experiences that occur within the educational process. It usually incorporates the planned interaction of learners with the instructional content, materials, resources and the processes for evaluating the attainment

of educational objectives (Adams & Adams, 2003). The study revealed that the curriculum was not only rigid but did not meet the learning needs of students with vision disability. Cameroon's curriculum for secondary schools is based on the objective model inherited from the colonialists (see Chapter 3). This curriculum, as previously discussed does not take into consideration the needs of those for whom it is intended, such as the learners and the state of Cameroon. Tchombe and Shey (2017), posit that the current curriculum for education in Cameroon is predetermined while on the contrary, Baglieri et al. (2011), assert that, when a predetermined curriculum is used in mainstream schools, learners with disabilities are ultimately excluded as their learning needs were not factored into the development of the curriculum and thus will be seen as lacking the capacity to meet the targets in the curriculum. Whereas, it is actually the curriculum in and of itself that poses barriers to the learners. This explains why the vision disabled students in this study were seen as "slow learners" because they were subjected to a pre-determined curriculum.

Similarly, Asamoah et al. (2018), Similarly, reported that students with vision disability were categorised as slow learners whereas they were subjected to a pre-determined curriculum designed for sighted students. Instead of modifying the curriculum to make it accessible to students with vision disability, they were rather expected to adapt to the curriculum and this was not possible. As a secondary school teacher in Cameroon for over thirty years, I observed that the curriculum and teaching and learning resources are often designed for sighted students and this makes it challenging for students with vision disability to have access. This observation is confirmed by Negash and Gasa (2022), in Ethiopian mainstream schools, who reported that the curriculum was designed for sighted students and teachers did not have the capacity to differentiate the curriculum or modify it to include students with vision disability. In both situations, teachers would benefit from knowledge of the Universal Design for Learning (UDL).

The concept of Universal Design for Learning emanated from the field of architecture in which access to buildings was provided through ramps, elevators and automatic doors for everyone, including persons with disabilities (Almumen, 2020). Hinged on three main principles, i.e. multiple ways of engagement, multiple ways of representation and multiple ways of action and expression, UDL is a framework to improve and optimise teaching and learning for all persons based on scientific insights into how humans learn (Rose & Meyer, 2002). Adopting these principles imply that from the start of designing any educational

endeavours such as teaching and learning, including assessments, the needs of all learners are considered and factored into lesson planning, preparation and delivery (McKenzie & Dalton, 2020). This, according to Johnson-Harris and Mundschenk (2014), is an effective approach to classroom procedures, which ensure that instruction is designed to be accessible to all learners, including those with vision disability.

Farrell (2002) posits that all students, including those with vision disability, need to access the curriculum on an equal basis and, where the need arises, resources, assessment methods and pedagogic practices should be adapted to enable full participation by all. In the case of vision disability, therefore, teachers need to employ non-visual means of teaching and learning since the success of every learner depends on the instructional strategies which teachers use. Additionally, as earlier mentioned, vision disability poses unique educational needs which cannot be fully met through the core curriculum alone and so students with vision disability need a set of skills delivered through the ECC to enable them to effectively access the core curriculum while preparing them for adulthood and life in their (Hatlen, 1996; Lohmeier et al., 2009; Opie, 2018; Sefotho et al., 2020).

Unfortunately, this study revealed that students with vision disability like those in the studies conducted by Brydges and Mkandawire (2017); Ralejoe (2019) and Zulch-Knouwds (2010) did not have access to the ECC and this resulted in them not fully participating in some lessons and activities such as physical education. Also, they could not freely navigate the school environment, much of which was inaccessible. In Lesotho, Ralejoe (2019) reported the injuries that vision disabled students were sustaining as a result of the inaccessible nature of the school and more so because they had not been trained in orientation and mobility skills. In contrast, Habulezi & Phasha, (2012) reported that in a school in Botswana, students with vision disability were taught O&M skills which enabled them to move safely, efficiently and independently to key buildings and educational spaces such as the classrooms, the dinning-hall and toilets, thus giving them a level of much appreciated independence. Zimmermann-Janschitz et al. (2017), describe mobility as “a basic human need and a prerequisite for an independent and self-determined life, as well as an important factor for equal participation in social life” (p.1). They further state that persons with vision disability have to deal with a bunch of mobility barriers, inaccessible infrastructure and sometimes even inappropriate or humiliating human behaviour from sighted people. These challenges could be dealt with through the acquisition of good O&M

skills. Not equipping vision disabled students with this skill and others that make up the ECC in the educational space means that access to and participation in education is limited for them and this has negative consequences for students' achievement levels. Apart from the curriculum not being accessible and adequate, the manner in which it was delivered posed enormous barriers for participation and achievement for students with vision disability.

#### *7.4.2.4 Pedagogy*

Pedagogy refers to teaching and learning practices and are located within the students' micro- system because they directly impact all students including those with vision disability.

Another finding of this study was that the manner in which the curriculum was delivered was problematic for all students but posed significant barriers to especially to students with vision disability because the teaching and learning methods were teacher-centred and inaccessible. In nearly all of the studies I reviewed about the education of students with vision disability in secondary school settings such as Dakwa (2014); Mwakyeja (2013); Negash and Gasa (2022), findings revealed that teachers mainly adopted a one-size-fits-all strategy; the lecture method, where learning was by rote, with the teacher constantly using the chalkboard. While students with vision disability could hear what was being said, they could not see what was written on the board and most teachers failed to verbalise what they were writing and used vague words such as "this" and "that" when referring to something on the chalkboard. This was reported by Mwakyeja (2013), in Tanzania when he investigated the way general teachers teach students with visual impairments in inclusive classrooms and the challenges facing them. This way, anyone could easily conclude that the vision disabled students were not able to learn, whereas, it was the mode of lesson delivery which posed barriers for them. This points to the fact that the teachers in the study, like those in the aforementioned studies, did not understand how vision loss impacts learning. Sefotho et al. (2020), postulate that when a student loses her vision, she will need to use her other senses to learn, including learning experientially. When these other learning pathways are not engaged, the student with vision disability receives a lower quality of education than their sighted peers.

Even though the teachers in the study conducted by Ralejoe (2019), in Lesotho were aware of other methods they could use to include learners with vision disability in their teaching

and learning processes, such as drama, role play, video presentations, discovery, and experimentation, they complained of time constraints because the curriculum was overloaded with content which needed to be covered within prescribed time lines. This worry was expressed in the current study by teachers as well. The school authorities were more interested in the quantity of material taught than the quality of teaching and learning that took place. I argue that being interested in the quantity of material taught rather than quality of learning that has occurred serves the interests of the policy makers rather than those for whom the policies are intended and so the learning needs of students with disabilities in general and vision disability in particular continue to be marginalised (Tchombe & Shey, 2017). Furthermore, Tchombe and Shey (2017), assert that, “When an education system is examination-oriented, teaching will be based on a rhythm whereby teachers are rushing to complete the syllabuses because quality is judged quantitatively on the percentage of passes” (p. 65). This rush could cause teachers to see the inclusion of students with vision disability as impractical and unachievable and so will tend to ignore them as this current study and that conducted by (Zulch-Knouwds, 2010), revealed. Unfortunately, students with disabilities in general and vision disability in particular, will always perform poorly in such a system because their impairment-specific needs have not been considered. It is however interesting to note that in Ghana, Asamoah et al, (2018), found out that, in spite of the odds, students with vision disability used the opportunity of being in a mainstream school to compete with their sighted peers and mostly outperformed the latter in academic matters. Learning and teaching support materials could mitigate the challenges posed by the manner in which curriculum is delivered but this study revealed that these too were a scarce commodity and where they existed, they were either inaccessible to vision disabled students or the teachers were not trained on how to use them.

#### *7.4.2.5 Teaching and Learning Support Materials*

As part of the students’ micro-system, learning and teaching support materials (LTSM), according to UNESCO, are crucial in the education space as they are pivotal to curriculum access and provide linkages between the students and the teacher. Another finding in this study that has a direct impact on vision disabled students is the lack of accessible learning and teaching resource materials. LTSM ensure access to the curriculum and support its delivery. LTSM links students to teachers for effective classroom participation and student achievement. Without LTSM, it is difficult to engage students, hence participation for such students is limited. As discussed in the literature review, the Department of Education of

the Republic of South Africa lists a series of resources which need to be made available for learners with vision disability so as to enable access to and participation in teaching and learning in meaningful ways. Inclusive Development Partners (IDP), a woman-owned small business that leverages expertise in the field of inclusive development recommends creative ways to leverage local materials (e.g., cardboard and pebbles for braille letter cards, bottle caps for math counters) to promote inclusive education.

This study like those conducted by Akakandelwa and Munsanje (2012); Negash and Gasa (2022); Zulch-Knouwds (2010), revealed that students with vision disability had practically no teaching and learning materials in braille or other accessible formats. In Ethiopia, Negash and Gasa (2022), discovered that learning resource materials like textbooks were teeming with graphics which were not accessible to students with vision disability. Additionally, there were no braille services resulting in students and teachers reading and writing for students with vision disability. While these students may be seen to be receiving an education, it is not the type of education they deserve. From a DSE perspective, this is an infringement on their rights as enshrined in international instruments such as the UNCRPD. Not providing resources for these students begs the question as to why this is so. This may cause the students to ask like Watermeyer (2014), what it is within them that makes them undeserving of basic resources which are provided for their sighted peers. Such deprivations he argues “may carry traumatic effects which cement the status quo” (p.1) - that of vision disabled students being seen as unable to access pre-determined learning and teaching support materials prepared for sighted students rather than looking for ways of making these materials accessible to the students with vision disability. The resulting traumatic effects will certainly negatively impact their participation in teaching, learning and achievement, especially when poor pedagogic practices are compounded with matching assessment practices.

#### *7.4.2.6 Assessments*

Inclusive education demands that students with vision disability are assessed in ways that consider the specificities of their impairments while still maintaining the intended rigour of the assessment. For students with vision disability, the assessments should be in accessible formats such as braille, audio or delivered through the use of assistive technology (Allman, 2004). The content should be void of inaccessible graphics and feedback should be timely. This study revealed that all the teachers made conscious efforts

to differentiate assessment items to ensure access for students with vision disability. This is unlike what happened in Ethiopia where Negash and Gasa (2022) disclosed that test items were not differentiated and were full of graphics which were not accessible to students with vision disability, thus negatively impacting on their performances. Thompson et al. (2002), posit that while differentiating assessment items and providing accommodations are good strategies for addressing the needs of students with disabilities in general, adopting the principles of the Universal Design for Assessments (UDA) is a better option as this enables teachers to create assessments that are inclusive of learners with disabilities from the beginning. In addition to the aforementioned features of an accessible assessment, Thompson et al. (2002), cite the following as characteristics of universally designed assessments.

- The needs of diverse learners are considered in the earliest stages of the assessment design process and field-tested with an assessment population that includes learners with disabilities, linguistic, and cultural minorities.
- The assessment can directly measure learner proficiency in the content without the influence of any irrelevant knowledge or skills.
- All questions in the assessment are checked for biases that might advantage or disadvantage certain groups of learners. Reasonable accommodations can be used without significantly changing the nature of the assessment.
- Instructions and texts are written using language that is simple, concise, and developmentally appropriate.
- All text and non-text items are legible using font and size that can be viewed by persons with low vision.

However, the current study also exposed the unethical ways in which some teachers administered assessments for students with vision disability such as failing to give their questions for brailing, and not correcting their scripts but then recording “invented” marks against their names. They also gave them oral assessments to do, under the watchful eyes of their sighted peers who would have finished writing, then often rudely asked the vision disabled students, like the teachers in Ethiopia did, to “hurry up”. Allman (2004) asserts that assessments should reflect the inclusive education principles of access, meaningful participation and progress. Hence assessments should provide feedback about students’ achievement including, about on-going learning so that teachers could carefully plan and

organise teaching in ways that consider individual learner's characteristics, aiming for the best possible outcomes. Failure to do this, as this study uncovered, means a disrespect of the right to quality education for all students, including those with vision disability. Not considering the individual needs of students with vision disability in the construction and conduct of assessments leaves the impression that teachers do not consider their education to be important. Even where the students have accessible LTSM and assessment practices are inclusive and equitable, the physical learning environment needs to be conducive for learning, otherwise students' performances will be greatly compromised.

### **7.5 The Physical Learning Environment**

Le Fanu et al (2022) posit that education for children with disabilities and especially those with vision disability should be "delivered in supportive environments... which are physically accessible for instance, easily navigable, adequately illuminated and sufficiently sound-proofed' to avoid distractions which may interfere with students' learning" (p.5). In Ethiopia, Negash and Gasa (2022), found that classrooms faced the main road where noise from passing trucks interfered with teaching and learning. The situation was made worse by classrooms which did not have sound proof systems leading to the echoing of noise from neighbouring classrooms. This is similar to the findings of this study where classrooms were closely linked, with some sighted students constantly parading the corridors noisily, which prevented all students, but particularly students with vision disability, from hearing what the teachers, who mainly lectured, were saying. Donohue and Bornman (2014), assert that unconducive school and classroom environments pose barriers to learning for students with disabilities. Added to this was the inaccessible nature of classrooms which were located in storey buildings with long flights of stairs, devoid of handrails. The food court and sporting arenas were also located in inaccessible spaces. Without skills in orientation and mobility as earlier discussed, students with vision disability were often supported by some of their sighted peers to navigate the stairs and spaces, similar to the support received by vision disabled students in Lesotho as reported by Ralejoe (2019). While this could be heralded as a step in the right direction towards social inclusion, I argue from a DSE perspective that over reliance on sighted peers for assistance conjures up the medical model view of deficits in persons with impairments who always need help and this invalidates their social position. The right thing to do would have been for orientation and mobility skills to be taught to these students so

that they could independently navigate their school environment and in the process, “gather, recognise and interpret an amazing array of sensory information which can broaden the student’s awareness of the environment, resulting in increased motivation, independence and safety” (Gense & Gense, 2004, p. 1), as already discussed. Additionally, the school would benefit from adopting universal design (UD) principles (Burgstahler, 2009), in constructing new classes and modifying already existing buildings and infrastructure. Apart from the noise levels and inaccessible physical spaces, class sizes also presented barriers to teaching and learning.

### *7.5.1 Class Sizes*

Another barrier to learning which this study uncovered, were the class sizes which were generally large, with up to 50 students, making it challenging for teachers to attend to the needs of individual students. I draw the reader’s attention to the fact that class sizes were usually larger, ranging from 60 to 100+ and had only been down-sized to 50 following COVID-19 restrictions. The large class size was similar to the situation in Ethiopia as reported by Negash and Gasa (2022). There, they found that class sizes were large, the physical spaces inaccessible and the infrastructure was generally poor. When classes sizes are large, teachers tend to adopt the “easy” pedagogic practices which will favour the majority of learners as this study revealed. Teachers were torn between concentrating on the disproportionately few students with vision disability in their classes and attending to a larger number of sighted students and always tended to attend to the majority. Moreover, large class sizes make it challenging for teachers to provide individualised support to those who need it the most, such as students with vision disability (Sikanku, 2018). When this does not happen, the learners may feel neglected. Large classes also pose challenges with classroom management and teachers spend valuable time managing noise and untoward behaviour which hampers the learning of those with vision disability. I found that teachers constantly had to remind sighted students to stop talking because their vision disabled peers depended on their auditory skills to hear what the teachers were saying. This would have been less likely if the class sizes were manageable. Also, there is need for teachers to adopt the principles of UDL which enable teachers to plan for all students at the very beginning instead of retrofitting through the introduction of adaptations and modifications (Florian & Black-Hawkins, 2011). According to BEST, interactions between the factors in the child’s meso-system also impact the child’s development as I describe next.

## **7.6 The Meso-System**

### *7.6.1 Interactions between Students with Vision Disability and Teachers*

The study uncovered stereotypical notions of students with vision disabilities held by both teachers and students which led to stigma. One such notion on the part of the teachers was that most of them equated vision disability with low cognitive abilities and so treated the students with a wave of the hand so would not correct their scripts and record the marks. This is similar to the findings of Habulezi et al. (2017), in Botswana who found out that marks for students with vision disability had not been recorded for two consecutive terms. Even when students raised their hands during class time, some teachers ignored them. This was also noted in Ghana by Abraham et al (2022), who conducted a study on the effect of inclusion education on the perceptions of sighted school children about the abilities of students living with severe visual impairment and blindness in junior high schools in Ghana. They disclosed that some teachers did not give room for students with vision disability to answer or ask questions because of presumptions that students with vision disability were intellectually incapable. Refusing the students the opportunity to ask or answer questions made them feel invisible and that their education is inconsequential. This antiquated view of students with vision disability translated to the students in the current study being denied the opportunity to take up science subjects. This is similar to findings in studies conducted by Habulezi et al. (2017a), where students with vision disability were observed not to do science subjects either because the mainstream teachers were not trained to teach them or because those who had been trained and were receiving scarce skill allowances, chose not to work in mainstream schools where the workload was perceived to be heavy. Not taking up science subjects meant that the future career paths, choices and employment opportunities were limited.

Even during the practical aspects of some subjects like computer science, students with vision disability were asked to go to the resource room under the pretext that the computers in the laboratory were not equipped with the necessary software for students with vision disability. In Botswana, again, Habulezi et al. (2017), uncovered a similar practice where students with vision disability were often asked to go to the Department of Special Education whenever their biology teacher was carrying out practical lessons with sighted students. During Maths lessons especially, teachers' pedagogies were generally tailored for sighted students and their explanations were vague. Palan (2021), opines that when

students with vision disability are constantly denied the opportunity to study science and Maths, it may cause them to lose trust in their abilities.

### *7.6.2 Interactions between students with vision disability and sighted peers*

On the part of sighted peers, while some were willing to assist their vision disabled peers, others avoided them for fear of being “contaminated with blindness”. Allen and Birse (1991) posit that such stigma can lead to decreased “social and self-acceptance”, which can pose barriers to learning (p.1).

Similar to what Brydges and Mkandawire (2017), found in Nigeria, was the constant relinquishing of teachers’ responsibilities to sighted students. Teachers constantly asked students with vision disability to seek help from their sighted peers in academic matters. Such shifting of responsibility may reinforce perceptions that disability equals inability. It may lower the self-esteem of students with vision disability and send out signals that they occupy a subordinate position in school (Brydges & Mkandawire, 2017), which could puncture a hole in their self-esteem (Lamichhane, 2017). This could also result in a situation where the quality of education received by vision disabled students is sub-standard in comparison to that received by their sighted peers (Brydges & Mkandawire, 2017). Peer support in education is often hailed as a strategy for promoting cooperative learning (Carter & Kennedy, 2006; McLinden et al., 2016; Slavin, 1987; Wentzel & Watkins, 2002), leading to improved interactions, understanding, and communication between students with vision disability and their sighted peers (Gadirju et al., 2020). . However, this causes students with vision disability to be too reliant on their sighted peers and according to DSE, and it smacks of a medicalised model of support (Simui et al., 2018). Ainscow (2020a), states that outcomes for vulnerable groups of children, such as those with vision disability, are not likely to change if behaviours and attitudes of those with whom they constantly interact do not change. This means that teachers and sighted peers in the current study need to make conscious efforts to learn how vision disability impacts learning in order to identify and change aspects of their attitudes and behaviours that foster disabling environments for vision disabled students. Agran et al. (2014), postulate that when participation in the classroom is well organised, this can lead to increased access to relevant and interesting curricular content, shared learning opportunities, new peer relationships and raised expectations for all students. In addition to the interactions between factors in the students’ meso-systems which posed barriers to learning for vision

disabled students, there were also disabling factors within the students' exo-system as I describe next.

## **7.7 The Exo-System**

According to Bronfenbrenner (1994), the exo-system consists of those factors which are not directly experienced by the child, but which impact her development. In this study, the exo-system consists of teacher education, both pre-service and in-service and meetings such as the PTA meetings, administrative meetings and performance-monitoring meetings for parents of students who academically underachieve. The study uncovered practices within this system which resulted in the learning needs of students with vision disability not being adequately met.

### *7.7.1 Teacher Education*

IGI Global, defines teacher education as the programmes, policies, procedures and provision designed to equip future teachers with the knowledge, attitude, skills, behaviours, and approaches which they need to perform the task of teaching effectively in the classroom. This means that teachers should be able to engage with their learners to enable them to understand and apply knowledge, concepts and processes.

According to Rockoff (2004), student achievement is mostly determined by the quality of teachers they have. A sighted student in this study came to the defence of teachers by saying that they cannot offer what they do not know. This defence encapsulates the situation of teachers vis-à-vis teaching students with disabilities in general and teaching vision disabled students in particular, alongside their sighted peers. All the teachers in this study and most of those in studies conducted by Mwakyeja (2013); Ralejoe (2019), Dakwa (2014); (Zulch-Knouwds, 2010), complained of not having received training during initial teacher education and also did not receive in-service training which could equip them with the knowledge, skills and attitudes needed for the inclusion of students with vision disability. They mainly adopted teacher-centred pedagogies which caused them to ignore these students, resting the onus on the students to fit in rather than on the teachers to teach in ways that enabled their participation and achievement. With the curriculum not tailored to the needs of vision disabled students, their teachers neither possessed skills in lesson adaptation nor lesson differentiation. As discussed in Chater2, Florian and Linklater (2011), call on teachers to adopt inclusive pedagogies which will consider the learner needs of all learners from the start. In other contexts, as reported by McKenzie et al. (2018) and

Negash and Gasa (2022), the training was minimal, ranging from only a few days to a few weeks. When teachers are not adequately trained to teach inclusively, they will not fully understand the learning needs of students with disabilities and so lack the skills in effectively implementing inclusive education in ways that enable access, participation and achievement for these students. These gaps, according to McKenzie et al. (2018), pose significant barriers to the education of students with disabilities. Lack of training could cause role players to make wrong moves such as buying wrong resources and being unable to justify the request for appropriate resources which end up not being bought even though there are available funds like in Botswana as reported by Habulezi et al. (2017).

When teachers are not trained to teach students with vision disability, they may not understand how vision impacts learning and this may cause them to take wrong decisions which instead pose barriers to learning for the students and delay their academic progress (Connor et al., 2008). Such was the case of a student in the current study who became blind in Grade 11/form four and was forced by the RR teachers to spend time in the RR learning braille which caused him to remain in one class for a number of years. The time spent in learning braille could have been used to teach him skills in Information and Communications Technology (ICT), considering that he had visual memory from which he could tap. This is similar to what Lynch et al. (2014), found in Malawi where a learner with albinism was made to learn braille because teachers had preconceived ideas that children with albinism will eventually become blind whereas the student could benefit from low vision devices.

Non-governmental and religious organisations are contributing enormously to the education of learners with disabilities including those with vision disability in many African countries like Cameroon, as I mentioned in chapter 2. Sometimes, these organisations have their own agendas which may not necessarily work in favour of the students for whom the support is intended. I remind the reader of the workshops organised for some teachers and the students with vision disability (see chapter 1). Although these efforts were much appreciated by the staff and students of Mabingo Secondary School, they had some flaws which need to be addressed in future interventions. Only teachers who taught learners with vision disability for that academic year were invited to the workshops and these were half of the number of teachers in the school. The question arises as to how the other half will support these students when they eventually have to teach them in

subsequent years. The argument may be that most of the teachers were heads of departments who were expected to pass on the knowledge to their colleagues in the department but this cannot always be guaranteed. Besides, intermittent three-day workshops are not sufficient to warrant teachers to become trainers of others. Also, the training on ICT skills and the use of JAWS did not include all the learners with vision disability and the question also arises as to what happens to those who were not included?

One is tempted to believe that such fragmented support is controlled by funding partners, mostly from the Global North, who in typical Western hegemonic style dictate how their money should be spent without consideration of the impact of such uninformed dictatorial decisions. This makes the need to decolonise inclusive education as suggested by Elder (2020); Abdulrahman et al. (2021) and Walton (2018), urgent. Worthy of note was also the fact that the school did not follow up to ensure that these skills were put into practice. One would have expected this training to be delivered on condition that the school committed to ensuring that the skills were put into meaningful and fruitful practice as a way of improving the quality of education that vision disabled students received. The expectation would have been for students to use the computers in the RR in the writing of evaluations given that the brailing and transcription of students' work generated so much tension between the mainstream and RR teachers but this was not the case. The question then arises as to whose interest this training served? That of the donors, that of the CBCHS or that of the students? Did the CBCHS implement this activity to satisfy the donors? These questions are rhetorical in nature and are intended to draw the reader's attention to the fact that even well-meaning initiatives can be counter-productive if not properly coordinated, researched, monitored and evaluated.

I also found the power which the hostel owner wielded to be concerning. Not allowing parents to have direct contact with the school authorities, and being in full control of the education of vision disabled students, further erected barriers which hampered the education of these students. Such actions give the impression that the hostel owner had a hidden agenda; perhaps that his enthusiasm to have the students in the school served his interest rather than that of the students. There is a need for collaboration among the stakeholders and NGOs in efforts to understand and address the learning needs of students with vision disability in ways that will be meaningful and beneficial to the learners. Also, such efforts need to be harnessed in order to continuously improve on education provision

for vision disabled students in mainstream settings. Considering the foregoing gaps in the education of vision disabled students, I agree with Connor et al. (2008), that the curriculum for initial teacher education should be revised to ensure that teachers understand disability as an issue of social justice. Teachers also need to understand the role of the environment in disabling learners with vision disability and to be equipped with impairment-specific knowledge, pedagogy and curriculum.

Considering that knowledge is dynamic and students' needs may change over time, teachers also need to keep abreast with new trends through in-service training. In fact Mariga and McConkey (2014) foreground the pivotal role of teachers as key role players and the main resources for the realisation of inclusive education and call for mandatory and regular in-service training. There is an abundance of literature, e.g. Mariga & McConkey, (2014); McKenzie et al. (2018); McKenzie et al. (2020); Miyauchi, (2020), on the pivotal role of teachers in the education of all students including those with support needs that arise from their impairments, such as vision disabled students. Therefore, the need to give them good quality and targeted training is dire. For good inclusionary practices, education stakeholders such as the school administration, the teachers and parents need to continuously convene to review their actions and activities in order to improve on their practices. Unfortunately, while these meetings were held every term, matters relating to the education of students with vision disability were not always on the agenda.

### *7.7.2 School Meetings and School Action Plan*

Meetings such as the PTA, staff, and administrative meetings are avenues where matters concerning the education of students are discussed and key decisions which affect the lives of the students at school are taken. Although the students, including those with vision disability, do not participate in these meetings, the discussion and decisions arrived at, affect them. A review of minutes of staff and administrative meetings revealed that hardly were there any discussions about the vision disabled students. Even the school action plan did not intentionally plan any actions targeted at improving the schooling experience of students with vision disability. This signals their invisibility in the school and echoes the idea that the education of vision disabled students does not matter and so they are not welcome. This is an unusual finding because it is not reported in the literature reviewed for the current study. The focus of inclusive education is to ensure that the whole school

community and the activities which take place are designed to include everyone and not to segregate or discriminate against some people. Such deafening silence about the welfare and education of some students because they are perceived to be different, points to a denial of their right to quality inclusive education as prescribed by UNESCO and articulated in Article 24 of the CRPD and sustainable goal 4.

### **7.8 The Macro-System**

In BEST, the macro-system is the most distant away from the students such as the 2010 Law (see key finding 1) but affects all the other systems. While the factors in the micro- and meso-systems which interact directly with the students are more than those found in the other systems, this study revealed the powerful influence of the outermost systems such as the macro-system and exo-system on influencing the education of students with vision disability. This points to the fact that it is at these levels that reforms are needed the most as they will have a ripple effect on the other systems.

In a nutshell, the environment in which education takes place has a significant influence on how students learn. This includes the activities, the interactions and relationships and how these, play out. If careful thought and planning which involve all the stakeholders including the learners are not invested in education provision, the environment will erect barriers to access, participation and achievement for students with the most support needs. Role players need to be constantly reminded that ensuring equity in the education of students with disabilities in general and vision disabilities in particular is a matter of human rights and social justice.

### **7.9 The Chrono-system**

The chronosystem is the last system in BEST and focuses on the role of time in shaping an individual's development. This includes personal experiences that occur over the course of life, various life transitions that people go through, societal changes and historical events (Hannaway et al., 2014). Historical events play a pivotal role in the light of this study in that the contexts in which education is happening at this point in the Global South, are still much impacted by postcolonial frameworks which push development in certain directions and make other directions more difficult. Within this study, the schooling experiences of vision disabled students are characterised by disparities between the quality of education they receive in comparison to that received by their sighted peers. PCT links this to the prescriptions of an educational system that is framed by Euro-American values and

believes while ignoring the believes, values and contexts of countries of the South (Walton, 2018) such as Cameroon. This has resulted in vision disabled students receiving an inferior quality of education when compared to their peers. Relics of the special school as practised in America in the 20<sup>th</sup> Century (Yell et al., 1998), can be seen in the resource room model of schooling for vision disabled students in Mabingo Secondary School. This can be described as some of the “mechanisms for inclusive schooling which are contributing directly to exclusion” (Slee, 2013, p. 2), rather than the inclusion of vision disabled students. Fish and Syed (2018), posit that, the legacy of colonialism has resulted in longstanding incongruences between education systems in the Global South and those of the Global North which shapes their experiences in present day and is often overlooked in the enactment of inclusive education. This can be seen in how role players of Mabingo Secondary School struggle to include vision disabled students because the prescriptions of inclusive education from the Global North have little or no considerations of the culture and context of the students. There is therefore, the need for role players to leverage historical, cultural and contextual factors in the transformation of education provision for all learners including vision disabled students. I therefore suggest that any considerations of inclusive education should be grounded in the past.

### **7.10 A Postcolonial Perspective**

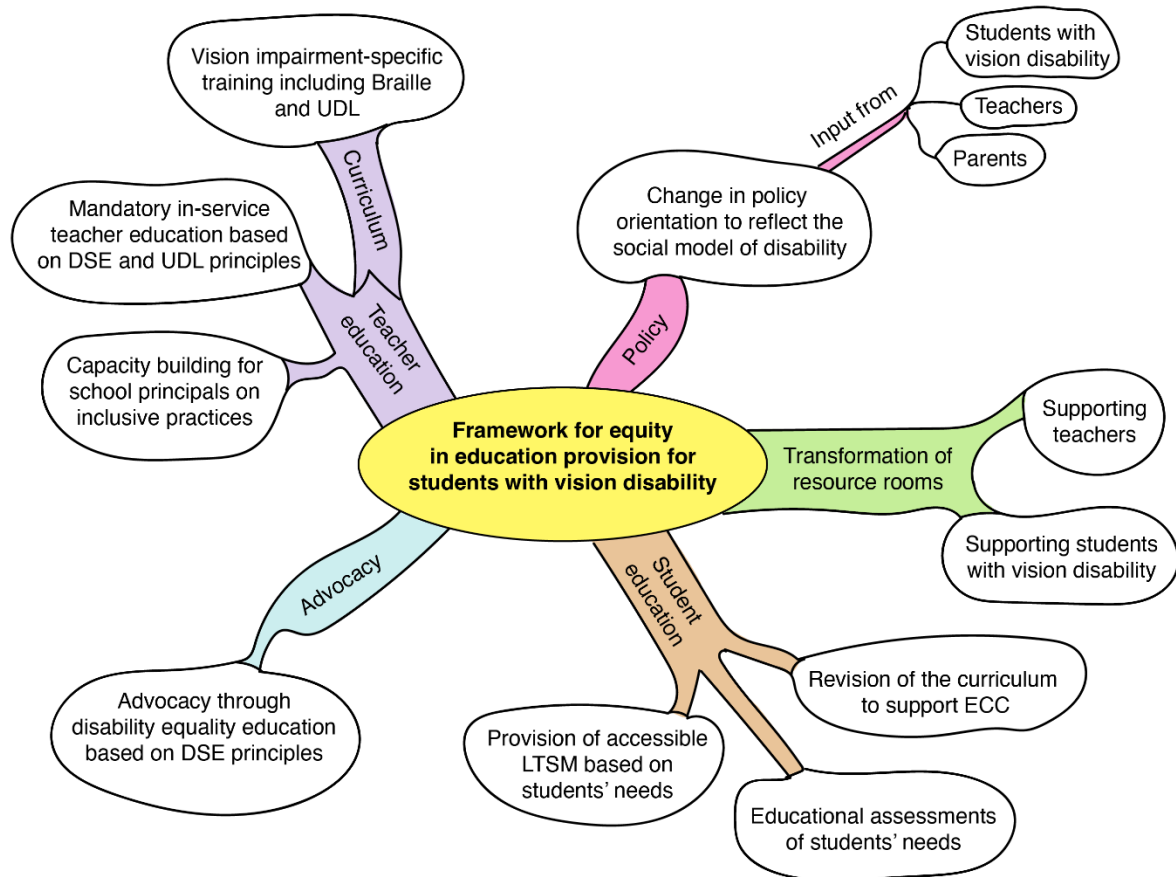
This study, like those conducted in other postcolonial contexts, has revealed that vision disabled students receive an inferior quality of education in comparison to their peers. At surface level, it would appear that policy and systemic issues as well as pedagogic practices could be blamed for this. Meaning therefore that if policy could be revised to reflect the voices of the role players as I have suggested, systems changed and pedagogic practices improved upon, vision disabled learners would experience better inclusionary practices. However, there is a dire need to examine why the inclusion of learners with disabilities in general is not yielding the expected fruit the Global South. Abdulrahman et al. (2021), assert that education in postcolonial societies is complex and steeped in past and present exercises of Western hegemony by the North over the South. This is evident in laws or policies on inclusive education such as the 2010 Law in Cameroon and its 2018 Text of Application which have deep roots in international Euro-centric policies such as the Salamanca Statement, the CRPD, General Comment 4 and the Sustainable Development Goals (Walton, 2018). These international instruments have not only ignored indigenous

forms of education but have turned a blind eye on the colonial legacies of poverty and its ripple effects, discrimination against and exclusion of “non-normative” individuals which continue to permeate the education space in Africa (Muthukrishna & Engelbrecht, 2018).

In prescribing an inclusive education roadmap for the world, the North has failed to recognise the extent to which colonial legacies have brought about challenges in implementing inclusive education in postcolonial societies (Abdulrahman et al., 2021). Walton (2018) echoes this stance by raising the concern of putting pressure on countries to adopt inclusive education without paying attention to the ways in which colonialism and underdevelopment in these countries exacerbate problems of educational exclusion. As such, there is “the potential for inclusive education spaces to be harmful because they are fundamentally designed to be exclusionary in various ways” (Abdulraman et al., 2021, p. 52). For instance, the physical environment of Mabingo Secondary School, the inadequate training of teachers to meet the learning needs of vision disabled students and the pre-determined high stakes curriculum are indications that the school was originally designed to exclude students who do not fit the “norm”. This explains why some teachers question their *raison d’être* in school and even wish them dead.

One may be tempted to ask whether the whole idea of inclusive education should then be abandoned. To this, Muthukrishna and Engelbrecht (2018), welcome inclusive education as an opportunity to disrupt existing processes and structures by shaping a new architecture for a postcolonial world. In the same vein, Abdulrahman et al. (2021), point to the dire need for countries to question who decides how inclusion happens and which voices get heard in the process. Slee (2011), ratifies this by emphasising on the need to “confront the power relations articulated through the structures, processes and culture of schooling” (p. 157). There is the need to interrogate why schools such as Mabingo Secondary School exclude some students. If this fails to happen, there is the risk of including these learners in unchanged spaces where they continue to be perceived as burdensome; into spaces that historically were meant to exclude them, thereby compromising their safety and fundamental right to quality education. Slee (2011), cautions that if role players in education fail to interrogate the exclusion of some learners such as those perceived to be subaltern, such as vision disabled students, they will continue to remain as “tenants on the margins of unchanging institutions” where “their presence is tolerated, their stay is precarious and their outcomes are uncertain” (p84). I therefore propose a framework for

ensuring equity in education for vision disabled students which, in implementation should consider the culture and context of Cameroon as well as the colonial legacies bequeathed to her and her citizens.



**Figure 11: Ensuring equity in education provision for students with vision disability (Jes Graham)**

### 7.10 Conclusion

In this chapter, I discussed two key findings which emanated from the study viz: the policy on the education of children and young people with disabilities is located within a medical model framework and this influences how teachers conceptualise and respond to the learning needs of students with vision disability. Although students with vision disability are present in Mabingo Secondary School, the learning environment posed significant barriers to access, participation and achievement. The discussion of these findings has

uncovered the interwoven nature of factors that influence the education of students with disabilities such as perspectives on disability and the nature of the learning environment.

## CHAPTER 8: WRAPPING UP

### **8.1 Introduction**

This study highlighted the influence of the medical model view of disability on education provision for vision disabled students in a mainstream secondary school. It also uncovered the impact of the environment in the education of these students. The medical model provisions for persons with disabilities including those with vision disability in the 2010 Law and its Text of Application and the government's failure to honour the provisions as stipulated in these decrees, leave the role players such as teachers, parents and students thinking that the education of students with vision disability is largely dependent on material provisions and the interventions of specialist teachers. This therefore makes them not to feel responsible for the education of vision disabled students. These feelings are compounded by the fact that, they have not been capacitated with the knowledge, skills and attitudes that are needed to ensure access and meaningful participation of these students. Hence, factors in the micro, meso, exo and macro-systems of the students with vision disability pose significant barriers to learning for them.

With Cameroon having recently ratified the CRPD, it is incumbent on the government and the Ministry of Secondary Education to put structures in place which will ensure a good quality education system which promotes justice and equity in which students with disabilities and those from other minority and disadvantaged groups have access to the curriculum, pedagogy and LTSM, and participate on a par with their non-disabled peers; an education system which creates the space for all students, including those with vision disability to attain their full academic potentials. I thus present the recommendation of this study in relation to policy and practice below. Following this, I present the limitations of the study and the recommendations for future research before presenting my final conclusion.

### **8.2. Policy and Practice Recommendations**

#### *8.2.1 Article 8 of the CRPD: Awareness Raising*

##### *8.2.1.1 Area of Intervention: Awareness and Sensitisation*

## **Policy Recommendations**

Awareness raising and sensitisation campaigns targeting students with vision disability, their sighted peers, their teachers and their parents. These should be based on the DSE principles and should involve the development of guidelines on disability equality which should be disseminated in all schools throughout the national territory.

- The state should compel each school which admits students with disabilities to develop an inclusion policy which should guide all stakeholders.

## **Practice Recommendations**

- The state should enforce the rolling out of the module on disability equality in this school and other schools which have students with vision disability in particular and disability in general.
- The school, in collaboration with all stakeholders, i.e. students with disabilities, parents, teachers and non-disabled students, should develop an inclusion policy which is adhered to by all members of the school community.

### *8.2.2 Article 24: Education*

#### *8.2.2.1 Area of Intervention: Curriculum for Initial and in-service Teacher Education*

## **Policy Recommendations**

Make pre-service and in-service trainings on inclusive education mandatory for all teachers, staff, administrators, and related support staff. The State should revise the curriculum for initial teacher education to include modules on braille, alternative and augmentative communication means and devices, vision impairment-specific knowledge, impairment-specific curriculum and pedagogy including the adaptation of LTSM, skills in the selection and use of relevant assistive devices and the Universal design for learning.

## **Practice Recommendations**

The state should:

- Develop a curriculum for continuous professional development in the area of inclusive education and make it mandatory for all in-service teachers. This

curriculum should include modules on braille, alternative and augmentative communication means and devices, vision impairment-specific knowledge, impairment-specific curriculum and pedagogy including the adaptation of LTSM, skills in the selection and use of relevant assistive devices and the Universal design for learning.

- Allow preservice teachers to engage and work with students with disabilities as part of their preservice training.
- Hire teachers with disabilities so that their unique insight can be used in the classroom and they can serve as role models.

#### *8.2.2.2 Area of Intervention - Revision of the Core Curriculum*

##### **Policy Recommendations**

- The state should revise the core curriculum to include the expanded core curriculum for vision disabled students.
- The state should develop a curriculum for braille which should form part of the teacher education curriculum.
- The state should make provision for the teaching of braille in mainstream primary schools so that children with vision disability don't have to attend special schools to acquire this skill.
- Braille should continue to be taught to students with severe to profound vision disability throughout their primary and secondary school years.
- Electronic supports and digital libraries should be considered for schools which enrol students with vision disability.

##### **Practice Recommendations**

- The state should train some teachers on the expanded core curriculum. These teachers could serve as itinerant teachers who will provide regular training on the ECC to students with vision disability.
- The state should honour the provisions in the 2010 Law by training a considerable number of teachers in braille and ensure that these teachers are sent to schools which enrol students with vision disability.
- Time tables for schools which enrol students with vision disability should include slots for braille and the ECC.

### *8.2.2.3 Area of Intervention - Class Sizes*

#### **Policy Recommendations**

The state should enforce the existing regulation on maintaining class sizes to a maximum of 60 students, especially classes with vision disabled students.

#### **Practice Recommendations**

This state should make it mandatory for students to attend their neighbourhood schools except there are no government-run schools in their neighbourhood.

### *8.2.2.4 Area of Intervention - Learning and Teaching Support Materials*

#### **Policy Recommendations**

- The CBCHS has in place an identification, screening, referral and support pathway for promoting inclusive education. The government could build on this and standardise it for use in the entire country in order to promote the attendance and meaningful participation of all students with disabilities, including those with vision disabilities and those from other marginalised groups.
- The state should make use of teachers in resource rooms, while ensuring parity with the mainstream teacher, whose role could be to provide one-on-one support to students in need but be available to support struggling students in general. They could also serve as resources for building mainstream teachers' capacity in braille, sign language and intellectual disabilities.
- The state should work in synergy with textbook publishers to make braille or audio copies available on demand.
- The state could work in collaboration with NGOs such as the CBCHS, Sightsavers and others, to make available braille or audio copies of all official textbooks to all students with vision disability.
- The state should provide all relevant assistive devices for students with vision disability depending on their needs.

#### **Practice Recommendations**

- Schools should use the identification, screening and assessment tool to assess the support needs of each student with a vision or other disability.
- The school should use the assessment report to develop a support plan for each student and this should be regularly monitored and evaluated.

- The state should equip the library of schools with students with vision disability with learning resource materials in braille and audio formats.
- The state should ensure that each student with a vision disability has the appropriate assistive device or technology that is needed for their education.

#### *8.2.2.5 Area of Intervention - Support to Schools*

##### **Policy Recommendations**

- The state should increase the running credits, as discussed in the study context, for schools with vision disabled students, to enable such schools to provide the necessary support to these students.
- In guiding schools on the development and execution of their school annual plans, the government could borrow a page from the “School Improvement Plans” (SIPs) in Malawi that provide some money through School Improvement Grants (SIGs). In order for schools to receive SIGs, SIPs have to have elements of IE in them that target learners with disabilities or other additional needs.
- The state should coordinate the support provided by individuals and NGOs to ensure that the students’ interests are foregrounded.

##### **Practice Recommendations**

- The school should have direct contact with parents of students with vision impairments and intentionally invite them to attend PTA meetings to defend the interests of their children.
- The state should develop guidelines for the provision of support by good will ambassadors and monitor how such support enables curriculum and pedagogic access for students with vision disability.

#### *8.2.2.6 Area of Intervention - Physical and Infrastructural Access*

##### **Policy Recommendations**

The CBCHS in collaboration with PTAs of selected schools, developed an accessibility audit checklist which guides infrastructural constructions such as water hygiene and sanitation, (WASH) facilities, toilets, ramps and buildings in the schools. This could be further elaborated upon in collaboration with the Ministry of Urban Development for use by the PTAs of all schools in the national territory.

### **Practice Recommendations**

- The school should carry out an accessibility audit and include the remodelling of inaccessible spaces in the school's annual plan.
- The PTA of the school should construct more toilets which are accessible for students with vision disability.
- The PTA of the school and other schools should be compelled to respect the accessibility checklist in all infrastructural constructions.

As earlier mentioned, the conceptualisations of vision disability and the learning needs of vision disabled students are shaped by the 2010 Law which is located within a medical model view. This has led to education provision which has failed to address the learning needs of students with vision disability thus putting them in a disadvantaged position when compared with their sighted peers. There is, consequently, a pressing need for the policy on the education of learners with disabilities to be reviewed to reflect the social model of disability which foregrounds the role of the environment in facilitating or erecting barriers to learning for these students. The voices of students with disabilities and their parents must be listened to.

Disability is still shrouded by myths which lead to stereotyping and stigma. Advocacy through disability equality education, based on the principles of DSE will encourage all role players to see disability as a difference, rather than a problem, which should enrich educational spaces, providing opportunities for teachers to be more proactive and ingenious in the ways in which they respond to the needs of all learners, especially those with vision disability.

Lamichhane (2017) posits that students with vision disability are a heterogeneous group, each with peculiar needs which are informed by a multiplicity of factors including but not limited to the degree of vision loss, onset of the impairment and age. Assessing the educational needs of students with vision disability will give insight into what vision loss is and how it impacts learning. It will also reveal the various identities which the learner has and how they intersect to create barriers or facilitate access to learning. Such assessments are intended to enable the school and the teachers to design tailor-made interventions which will provide relevant and meaningful support, informed by the learners' needs.

Mariga & McConkey, (2014) and McKenzie et al. (2018) underscore the need for teacher education curricula to contain impairment-specific knowledge and be such that they equip teachers with teaching methods which enable them to respond to learner diversity and address additional barriers to learning. There is an urgent need to review the curriculum for initial teacher education founded on the tenets of DSE to additionally include the ECC and UDL principles. Mandatory in-service education through seminars and workshops or short courses should imbibe these principles as well.

Learning and teaching support materials are pivotal in the educational trajectories of any learner and more so for students who are print disabled, yet find themselves in educational spaces where LTSM are, in the main, visual and inaccessible. There is an urgent need for these to be made available in accessible formats for vision disabled students in order that they have access to lesson content and pedagogy. This will pave the way for meaningful participation leading to achievement.

Presently, the resource room plays a central and indispensable role in the education of students with sensory impairments such as vision disability. However, there are no guidelines on what services they should offer and how. If Cameroon is to adopt the resource room model, it must contextualise it and not copy and paste from the Global North leading to segregation rather than inclusion. The Ministry of Secondary Education needs to work collaboratively with organisations and individuals who are willing to support the education of students with vision disability to provide services that are well thought out and address the learning needs of these students in meaningful ways, enabling them to attain their education potentials to the best of their abilities.

### **8.3. Limitations of the Study**

Although this study will hopefully inform policy and practice on the education of students with severe to profound vision disability in Cameroon and similar contexts, it had a number of limitations. Firstly, for literature pertaining to the education of students with vision disability in Cameroon, I reviewed only literature published in the English Language although Cameroon has both French and English as official languages. I may therefore have missed out on critical information which would have further illuminated the study. All the same, I reviewed literature from African contexts which are likely to present similar scenarios. Secondly, data collection for this study took place during the period when

COVID-19 was wreaking havoc in the world. Consequently, when barrier measures put in place were relaxed, schools were allowed to function on condition that there were no more than 50 students per class, sitting one metre apart from each other. Students were also required to wear face masks at all times and to remove them only when they were asking questions or interacting with one another. These restrictions created an artificial ambience by limiting classroom interactions. Again, due to the reduction in class sizes, the school was forced to operate a shift system where one set of students started school at 7:30am and closed at 12:00 while the other set started at 12:30 pm and closed at 5 pm. However, students in examination classes attended school for the whole day. The shift system put an enormous strain on the teachers who were now putting in more hours than they normally would, since they had to teach both sets of students. Also, on the one hand, the reduction in class size from the usual 70 and above to 50, may have caused some teachers to pay attention to students with vision disability when they would normally not do so and, on the other hand, the shift system may have caused some teachers to rush over their lessons, thus not providing students with disabilities with much needed support. However, the interviews with students with vision disability and the focus group discussion with their sighted peers served to either endorse or refute what was observed.

Secondly, this study was qualitative in nature thus dealing with a small sample size - one mainstream secondary school which admits students with vision disability - and so does not lend itself to empirical generalisations although theoretical generalisations may be possible. Additionally, some of the study participants such as parents of students with vision disability were referred to me by the hostel owner who, although adhered to the inclusion criteria, may have intentionally referred parents who would echo his thoughts and feelings rather than theirs. Nonetheless, collecting data from multiple sources thwarted the threat of artificial responses from the parents. A further limitation is that the interviews and focus group discussion were largely conducted in French and then translated into English and this may have resulted in the loss of some vital information in the process. However, the different methods of data collection filled in any missing gaps. I now turn to recommendations for future research which could address some of the aforementioned limitations.

#### **8.4 Recommendations for Future Research**

This study was a single case study in one mainstream school pursuing the Francophone sub-system of education. Similar studies may be carried out in different contexts which could result in either theoretical generalisation or theoretical falsification. Again, most of the students with vision disability in the study lived in a hostel where their parents virtually do not have a say in their education and attend the mainstream school. Other studies could focus on students living with their parents or guardians who have direct contact with the school authorities and teachers, which may reveal the impact of parental support in the education of students with vision disability. Additionally, further research involving teachers who have received adequate training on teaching learners with vision disability could reveal other ways of accommodating the learning needs of vision disabled students. Furthermore, a similar study could be conducted involving students with different disabilities which will throw more light on the education of students with disabilities in general.

#### **8.5. Conclusion**

This study was triggered by many years of observing vision disabled students struggling to navigate mainstream secondary educational spaces which were designed for sighted students and operated on the premise that everyone can see. While many studies had been conducted on the education of students with vision disability in the African context prior to the current one, few of these sought to investigate **how** the learning needs of students are **understood** and **accommodated** within mainstream secondary schools. This study has proven that the way people conceptualise disability shapes how they respond to it in educational spaces and elsewhere. Moreover, research on the education of students with vision disability in Cameroon has been, hitherto, limited. Hence, this study makes a weighty contribution to the body of knowledge, by illuminating how policy can shape conceptualisations of disability, thus influencing how role players understand the needs of students with vision disability and accommodate them within mainstream schools. It has also highlighted the role of the environment in creating barriers to learning for students with vision disability. Through engaging stakeholders such as vision disabled students, their sighted peers, teachers, parents and the school administration in the discourse on how the learning needs of students with vision disability are understood and responded to within mainstream schools, this study has given the opportunity for these stakeholders to

contribute to ways in which education for students with vision disability should be designed and implemented.

While the teachers and the administration of Mabingo Secondary School may be patting themselves on the back for “including” learners with vision disability, these students are aware, in their own words, that they have been left to ‘fend’ for themselves. The students in this study, want their impairment-specific needs to be factored into the curriculum; they want their teachers to teach in ways that enable them to participate and achieve; they want the school administration to be supportive; they want LTSM to be available and accessible; they want school action plans to take their learning needs into consideration; they want their learning needs to be considered in PTA projects; they want their teachers and sighted peers to see beyond their impairments and treat them with the respect they deserve, as human beings who have dreams and aspirations, like all young people; they want to pursue an education that is inclusive and of good quality and they want their voices and those of their parents to be heard in matters of their education.

If the learning needs of students with vision disability are to be accommodated in meaningful ways, then the school needs to re-examine how it responds to these students’ needs by intentionally developing and scrupulously adhering to a blueprint for their inclusion.

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## LIST OF APPENDICES

Appendix 1: Ethical Clearance from the University of Cape Town .....	221
Appendix 2: Letter to Request for Approval to Conduct Research at the School .....	222
Appendix 3: Approval from Regional Delegate of Secondary Education.....	223
Appendix 4: Permission from Principal of Mabingo Secondary School.....	224
Appendix 5: Letter of Information/Invitation for Parents/Caregivers of Learners with Vision Disability .....	225
Appendix 6: Letter of Information/Invitation for Teachers of Learners with Vision Disability.....	229
Appendix 7: Letter of Information/Invitation for Resource Teachers of Learners with Vision Disability .....	233
Appendix 8: Letter of Information/Assent Form for Students with Vision Disability ...	237
Appendix 9: Letter of Information/Assent Form for Sighted Peers of Students with Vision Disability.....	240
Appendix 10: Consent form for Parents/Caregivers .....	243
Appendix 11: Consent form for Teachers/Parents/Caregivers/Students .....	244
Appendix 12: Letter of Information/invitation for Key Informant .....	246
Appendix 13: Consent form for Key Informant.....	249
<b>Appendix 14: Parents/Caregivers Interview Guide .....</b>	<b>250</b>
Appendix 15: Teachers' Interview Guide .....	252
Appendix 16: Vision Disabled Students' Interview Guide .....	255

Appendix 17:	Resource Teachers' Interview Guide .....	258
Appendix 18:	Sighted Students' FGD Guide .....	260
Appendix 19:	Key Informant Interview Guide .....	262
Appendix 20:	Observation Data Capture Form for Teachers.....	264
Appendix 21:	Research Assistant Confidentiality Agreement.....	267
Appendix 22:	French Letter of information/Invitation for Parents/Care Givers of students with Vision Disability .....	268
Appendix 23:	French Letter of information/Invitation for Teachers of students with Vision Disability	272
Appendix 24:	French Letter of invitation/Information for Resource Teachers of Students with Vision Disability .....	276
Appendix 25:	French Letter of information/Assent Form for Students with Vision Disability.....	280
Appendix 26:	Appendix 26: French Letter of information/Invitation for Sighted Peers of Students with Vision Disability .....	284
Appendix 27:	French Consent Form for Teachers/Parents/Care givers/Students .....	288
Appendix 28:	French Letter of Information/Invitation for Key Informant.....	290
Appendix 29:	French Consent Form for Key Informant .....	293
French Interview Guide for Mainstream Teachers	Appendix 30: French Interview Guide for Mainstream Teachers .....	295
Appendix 31:	French Interview Guide for Students with Vision Disability .....	298
Appendix 32:	French Request for Conducting Research at Lycee Classique .....	301
Appendix 33:	French Focus Group Guide for Parents and Caregivers .....	303
Appendix 34:	French Interview Guide for Resource Teachers .....	305

Appendix 35: French interview Guide for Students with Vision Disability ..... 308

Appendix 36: French Focus Group Discussion Guide for Sighted Peers of Students with  
Vision Disability ..... 310

Appendix 37: French Key Informant Interview Guide..... 312

## Appendix 1: Ethical Clearance from the University of Cape Town



UNIVERSITY OF CAPE TOWN  
Faculty of Health Sciences  
Human Research Ethics Committee



Room G50- Old Main Building  
Grootte Schuur Hospital  
Observatory 7925  
Telephone [021] 406 6492  
Email: [hrec-enquiries@uct.ac.za](mailto:hrec-enquiries@uct.ac.za)

Website: [www.health.uct.ac.za/fhs/research/humanethics/forms](http://www.health.uct.ac.za/fhs/research/humanethics/forms)

24 July 2020

**HREC REF: 106/2020**

**A/Prof J McKenzie**  
Division of Disability Studies  
F-45 Health & Rehab Sciences, OMB  
Email: [judith.mckenzie@uct.ac.za](mailto:judith.mckenzie@uct.ac.za)  
Student: [bridgetfobuzie@yahoo.com](mailto:bridgetfobuzie@yahoo.com)

Dear A/Prof McKenzie

**PROJECT TITLE: INVESTIGATING HOW THE LEARNING NEEDS OF VISION DISABLED LEARNERS ARE UNDERSTOOD AND ACCOMMODATED IN MAINSTREAM SECONDARY SCHOOL IN CAMEROON: A CASE STUDY (PhD- MRS BL FOBUZIE)**

Thank you for your response letter addressing the issues raised by the Faculty of Health Sciences Human Research Ethics Committee (HREC).

It is a pleasure to inform you that the HREC has **formally approved** the above-mentioned study.

**This approval is subject to strict adherence to the HREC recommendations regarding research involving human participants during COVID -19, dated 17 March 2020 and 06 July 2020.**

**Approval is granted for one year until the 30 July 2021.**

Please submit a progress form, using the standardised Annual Report Form if the study continues beyond the approval period. Please submit a Standard Closure form if the study is completed within the approval period.  
(Forms can be found on our website: [www.health.uct.ac.za/fhs/research/humanethics/forms](http://www.health.uct.ac.za/fhs/research/humanethics/forms))

**We acknowledge that the student: Mrs Bridget Fobuzie will also be involved in this study.**

**Please quote the HREC REF in all your correspondence.**

Please note that the ongoing ethical conduct of the study remains the responsibility of the principal investigator.

Please note that for all studies approved by the HREC, the principal investigator **must** obtain appropriate Institutional approval, where necessary, before the research may occur.

HREC 106/2020sa

## Appendix 2: Letter to Request for Approval to Conduct Research at the School

Bridget Ateh Longla Fobuzie  
University of Cape Town  
South Africa  
Tel: 677 985 850  
26<sup>th</sup> August, 2020

The Regional Delegate of Secondary Education  
West Region, Cameroon

Dear Sir/Madam,

### **REQUEST FOR APPROVAL TO CONDUCT RESEARCH AT** [REDACTED]

My name is Bridget Ateh Longla Fobuzie, a Cameroonian and a PhD student at the University of Cape Town in South Africa. I am conducting a research entitled. *Investigating the How the Learning Needs of Learners with Vision Disability are Understood and Accommodated within Mainstream Schools in Cameroon: A Case Study of One Secondary School*, to fulfil the requirements of my studies towards a PhD in Disability Studies. The study is under the supervision of Associate Professor Judith McKenzie of the University of Cape Town, Faculty of Health Sciences.

I am hereby seeking your **approval to approach** [REDACTED] in the West Region, so that I can access the principal, six teachers, six students with vision disability, six sighted students, two resource teachers and school documents and observe 18 lessons to provide me with data for this project. The principal will participate in one interview for a maximum of one hour while each of the six students with vision disability and six mainstream teacher and two resource teachers will also take part in individual interviews each lasting for one hour. The six sighted students and six parents will participate in separate focus group discussions (one each) for a maximum of one hour. They will only participate if they give informed consent. All data collection will take place at [REDACTED]

Here attached, is a copy of my permission to conduct the research from the University of Cape Town Faculty of Health Sciences Human Research Ethics Committee. For further questions, please contact me on +237 677 985 850.

Thank you for your time and consideration in this matter.

Yours sincerely,



### Appendix 3: Approval from Regional Delegate of Secondary Education

REPUBLIQUE DU CAMEROUN  
Paix - Travail - Patrie  
.....  
REGION DE L'OUEST  
.....  
CABINET  
.....  
DELEGATION REGIONALE  
DES ENSEIGNEMENTS SECONDAIRES  
.....  
BP 1061 BAFOUSSAM Tél. /Fax : 233 44 67 88  
E-mail : dreso2017@gmail.com

REPUBLIC OF CAMEROON  
Peace - Work - Fatherland  
.....  
WEST REGION  
.....  
CABINET  
.....  
REGIONAL DELEGATION  
OF SECONDARY EDUCATION  
.....  
P.O. Box 1061 BAFOUSSAM Tel/Fax : 233 44 67 88  
E-mail: dreso2017@gmail.com

N° 0813/L/F/DRES/2020

The Regional Delegate of Secondary Education  
West Region  
To.  
**To whom, it may concern**

Subject: Research authorization  
Bridget ATEH LONGLA FOBUZIE

The above-named student of University of Cape Town, South Africa, is authorized to carry out research on: investigating how the learning needs of students with vision disability are understood and accommodated within mainstream secondary school in Cameroon: a case study of one secondary school, in the west Region of Cameroon for the period ending 31<sup>st</sup> of July 2021.

Any assistance accorded her will be highly appreciated.

Bafoussam, le 28 AOUT 2020

*Le Délégué Régional*



*Docteur François Ngabnyo*  
Professeur des Lycées d'Enseignement Général  
Docteur de l'Université de Bordeaux 3 France

**Appendix 4: Permission from Principal of Mabingo Secondary School**

REPUBLIQUE DU CAMEROUN  
Paix - Travail - Patrie  
REGION DE L'OUEST  
DELEGATION REGIONALE DES ENSEIGNEMENTS  
SECONDAIRE DE L'OUEST  
DELEGATION DEPARTEMENTALE DE LA MIFI  
[Redacted]  
BP 947 Tel. 233-44-11-69/743-89-20-32  
C.I. 44C1G5FD11J471069  
E-mail: lycdabafous@yahoo.com



REPUBLIC OF CAMEROON  
Paix - Travail - Patrie  
WEST REGION  
REGIONAL DELEGATION OF SECONDARY  
EDUCATION OF WEST  
DIVISIONAL DELEGATION OF MIFI  
[Redacted]  
P.O. BOX 947 Tel. 233-44-11-69/743-89-20-32  
C.I. 44C1G5FD11J471069  
E-mail: lycdabafous@yahoo.com

5<sup>th</sup> September, 2020

Bridget Ateh Longla Fobuzie  
Department of Health and Rehabilitation Sciences  
Division of Disability Studies  
University of Cape Town

Dear Mrs. Fobuzie,

**Subject: REQUEST TO CONDUCT RESEARCH AT [Redacted]**

I am pleased to inform you that following your request to conduct research on: investigating how the learning needs of students with vision disability are understood and accommodated within mainstream secondary schools in Cameroon: a case study of one secondary school in the west Region of Cameroon, for the period ending 31st of July 2021, you have been granted permission to conduct your research.

You are authorized to work with the students and staff of this school in compliance with the school's rules and regulations.

Should you require further assistance, do not hesitate to let me know.

Sincerely,



## **Appendix 5: Letter of Information/Invitation for Parents/Caregivers of Learners with Vision Disability**

### **Research title: Investigating how the Learning Needs of Learners with Vision Disability are Assessed and Accommodated within Mainstream Schools in Cameroon: A Case Study of one Secondary School**

Dear Participant

My name is Bridget Longla Fobuzie, a PhD student at the University of Cape Town (UCT). I am conducting a study on how the learning needs of learners with vision disability are understood and accommodated within mainstream secondary schools in Cameroon. This letter is to invite you to take part in the study and to tell you about the study so that you can decide whether or not you will participate. Before you decide, you can discuss this letter with any of your family members or friends or anyone else you choose.

#### **(1) Who is doing the research?**

I am doing the research under the supervision of Associate Prof Judith McKenzie of Cape Town University Faculty of Health Sciences, Department of Health and Rehabilitation Sciences.

#### **(2) Who is taking part in this study?**

Participation in this study is meant for students with vision disability, parents and caregivers of learners with vision disability, sighted students, teachers and resource teachers of Lycee Classique de Bafoussam, and the principal of the school. We have chosen these groups as we believe they have the information that will help us to answer our research questions.

#### **(3) What is the study about?**

**The study investigates how the learning needs of learners with vision disability are understood and accommodated within mainstream secondary schools in Cameroon. There isn't enough information on the subject in Africa and your contribution will help us understand it more and make recommendations that will assist in addressing the issues.**

#### **(4) How will I participate in the study?**

You will participate in You will participate in an individual in-depth semi-structured interview. Three other parents or caregivers of vision disabled students will be interviewed. I will ask you to say how you understand the learning needs of learners with vision

disability and how you think these needs are being addressed within Lycee Classique de Bafoussam. You will also tell us how you support your children's education.

The interview will take place at Lycee Classique de Bafoussam or a venue of your choice. I will be responsible for asking the questions and moderating the session. My colleague will translate the questions in French if you do not understand them in English. I will take notes and audio-record the interview using digital recorders so as to capture accurately all information that will be shared.

**(5) How much time will the study take?**

The interview will take approximately **one hour**.

**(6) What language will I use?**

You will use either French or English.

**(7) Where and how will the information be kept?**

The information shared during the focus group discussion will be kept confidential according to an agreement and code of conduct within the group. The information gathered will be used for academic purposes, advocacy and to influence policy only. I will not mention your name in the reports arising from the focus group discussion. After the study, I will lock up the recordings in a place only accessible by me. I will destroy them after a period of five years after the research is completed.

**(8) Can anything good happen to me?**

There are no direct benefits that you will get. However, the information that is gathered from this research may help you, the teachers and the Ministry of Secondary Education to meet the learning needs of your child/children.

If you will have to come from a distance of more than two kilometres to the meeting venue, I will reimburse your transport cost using the local transport rates. I will give you 2000CFA lunch allowance in appreciation for your time. You will receive the feedback of the study in summary form through the school.

**(9) Can anything bad happen to me?**

**(10) Can I tell other people about the study?**

You are free to discuss this study with your relatives or friends or other people of your choice.

**(11) Should I take part in this study?**

It is up to you to decide whether you should take part in this study or not. Completing and signing the consent form means you are interested in participating. If you are not interested in participating, you do not have to complete or sign the consent form and there will be no problem.

**(12) Am I allowed to stop participating if I do not like to continue after I have started?**

Participation in the study is optional so you may withdraw from the study anytime without providing any reasons for your withdrawal. However, if you decide to withdraw from the focus group discussion after it has started, the information you will have already given will be kept.

**(13) Mandatory reporting obligation**

*The researcher may not be able to maintain as confidential, information about known or reasonably suspected incidents of abuse or neglect of a child, including, but not limited to, physical, sexual, emotional, and financial abuse or neglect. If the researcher is given such information, he may report it to the authorities.*

**(14) Do you have questions about the study?**

If you have any questions about the study, you can contact the researcher on the address, telephone number or email address given below.

**(15) What if I have a complaint or any concerns?**

**The UCT's Faculty of Health Sciences Human Research Ethics Committee can be contacted on (+27) 21 406 6338 in case you have any ethical concerns or questions about your rights or welfare as a participant on this research study.**

You can contact me or my supervisor using the contact details given below.

*Thank you for taking time to read this letter or to have this letter read to you.*

**Contact Details of the Researcher**

Name: Bridget Ateh Longla Fobuzie

Address: P.O.Box 426

Bamenda, North-West Region,

Cameroon

Telephone: +237 677985850

Email: bridgetfobuzie@yahoo.com

**Contact Details of the Supervisor**

Name: A/Prof. Judith McKenzie

Email Address: Judith.mckenzie@uct.ac.za

Phone: +27 (0)214066318

**Contact details of the Chairperson of HREC**

Name: Professor Marc Blockman

Email address: [hrecenquiries@uct.ac.za](mailto:hrecenquiries@uct.ac.za)

Phone: +27 (0) 216501236

## **Appendix 6: Letter of Information/Invitation for Teachers of Learners with Vision Disability**

### **Research title: Investigating how the Learning Needs of Learners with Vision Disability are Understood and Accommodated within Mainstream Schools in Cameroon: A Case Study of one Secondary School**

Dear Participant

My name is Bridget Longla Fobuzie, a PhD student at the University of Cape Town (UCT). I am conducting a study on the How the Learning Needs of Learners with Vision Disability are Understood and Accommodated within Mainstream Schools in Cameroon. This letter is to invite you to take part in the study and to tell you about the study so that you can decide whether or not you will participate. Before you decide, you can discuss this letter with any of your family members or friends or anyone else you choose.

#### **(1) Who is doing the research?**

I am doing the research under the supervision of Associate Prof Judith McKenzie of Cape Town University Faculty of Health Sciences, Department of Health and Rehabilitation Sciences.

#### **(2) Who is taking part in this study?**

Participation in this study is meant for students with vision disability, parents and caregivers of learners with vision disability, sighted students, teachers and resource teachers of Lycee Classique de Bafoussam, and the principal of the school. We have chosen these groups as we believe they have the information that will help us to answer our research questions.

#### **(3) What is the study about?**

**The study investigates how the learning needs of learners with vision disability are understood and accommodated within mainstream secondary schools in Cameroon. There isn't enough information on the subject in Africa and your contribution will help us understand it more and make recommendations that will assist in addressing the issues**

#### **(4) How will I participate in the study?**

You will participate in an individual in-depth semi-structured interview. Five other teachers, the two resource teachers and the principal will also be interviewed individually. I will ask you to say how you understand the learning needs of vision disabled learners and also share with me the strategies you use to accommodate their learning needs in the

teaching and learning process. I will also observe any three of your lessons to see how you address their learning needs.

The interview will take place at Lycee Classique de Bafoussam. I will be responsible for asking the questions. My colleague will translate the questions in French if you do not understand them in English. I will take notes and audio-record the interview using digital recorders so as to capture accurately all information that will be shared.

**(5) How much time will the study take?**

The interview will take approximately **one hour**.

**(6) What language will I use?**

You will use either French or English

**(7) Where and how will the information be kept?**

The information shared during the interview will be kept confidential according to an agreement and code of conduct within the group. The information gathered will be used for academic purposes, advocacy and to influence policy only. I will not mention your name in the reports arising from the FGD. After the study, I will lock up the recordings in a place only accessible by me. I will destroy them after a period of five years after the research is completed.

**(8) Will I benefit from the research??**

There are no direct benefits that you will get. However, the information that is gathered from this research will help you, the resource teachers, the principal and the parents and the ministry of secondary education to meet the learning needs of your children. I will give you 5000CFA lunch allowance in appreciation for your time. You will receive the feedback of the study in summary form through the school.

**(9) Can anything bad happen to me?**

There are no known bad or negative things that will happen to you by participating in the study. If you find the conversation difficult or upsetting, I will refer you to the counselling services at the CBC Health Centre for counselling. You are free to discuss this study with your relatives, friends or other people of your choice.

**(11) Should I take part in this study?**

It is up to you to decide whether you should take part in this study or not. Completing and signing the consent form means you are interested in participating. If you are not interested in participating, you do not have to complete or sign the consent form and there will be no problem.

**(12) Am I allowed to stop participating if I do not like to continue after I have started?**

Participation in the study is optional so you may withdraw from the study anytime without providing any reasons for your withdrawal. However, if you decide to withdraw from the focus group discussion after it has started, the information you will have already given will be kept.

**(13) Mandatory reporting obligation**

*The researcher may not be able to maintain as confidential, information about known or reasonably suspected incidents of abuse or neglect of a child, including, but not limited to, physical, sexual, emotional, and financial abuse or neglect. If the researcher is given such information, he may report it to the authorities.*

**(14) Do you have questions about the study?**

If you have any questions about the study, you can contact the researcher on the address, telephone number or email address given below.

**(15) What if I have a complaint or any concerns?**

**The UCT's Faculty of Health Sciences Human Research Ethics Committee can be contacted on (+27) 021 406 6338 in case you have any ethical concerns or questions about your rights or welfare as a participant on this research study.**

You can contact me or my supervisor using the contact details given below.

*Thank you for taking time to read this letter or to have this letter read to you.*

**Contact Details of the Researcher**

Name: Bridget Ateh Longla Fobuzie

Address: P.O.Box 426

Bamenda, North-West Region,

Cameroon

Telephone: +237 677985850

Email: [bridgetfobuzie@yahoo.com](mailto:bridgetfobuzie@yahoo.com)

**Contact Details of the Supervisor**

Name: A/Prof. Judith McKenzie

Email Address: [Judith.mckenzie@uct.ac.za](mailto:Judith.mckenzie@uct.ac.za)

Phone: +27 (0)214066318

**Contact details of the Chairperson of HREC**

Name: Professor Marc Blockman

Email address: [hrecenquiries@uct.ac.za](mailto:hrecenquiries@uct.ac.za)

Phone: +27 (0) 216501236

## **Appendix 7: Letter of Information/Invitation for Resource Teachers of Learners with Vision Disability**

### **Research title: Investigating how the Learning Needs of Learners with Vision Disability are Understood and Accommodated within Mainstream Schools in Cameroon: A Case Study of one Secondary School**

Dear Parent

My name is Bridget Longla Fobuzie, a PhD student at the University of Cape Town (UCT). I am conducting a study on how the learning needs of students with vision disability are understood and accommodated within mainstream secondary schools in Cameroon. This letter is to invite you to take part in the study and to tell you about the study so that you can decide whether or not you will participate. Before you decide, you can discuss this letter with any of your family members or friends or anyone else you choose.

#### **(1) Who is doing the research?**

I am doing the research under the supervision of Associate Prof Judith McKenzie of Cape Town University Faculty of Health Sciences, Department of Health and Rehabilitation Sciences.

#### **(2) Who is taking part in this study?**

Participation in this study is meant for students with vision disability, parents and caregivers of learners with vision disability, sighted students, teachers and resource teachers of Lycee Classique de Bafoussam, and the principal of the school. We have chosen these groups as we believe they have the information that will help us to answer our research questions.

#### **(3) What is the study about?**

**The study investigates how the learning needs of students with vision disability are understood and accommodated in mainstream secondary schools in Cameroon. There isn't enough information on the subject in Africa and your contribution will help us understand it more and make recommendations that will assist in addressing the issues**

#### **(4) How will I participate in the study?**

You will participate in an interview with one other resource teacher of vision disabled students. I will ask you to say how you understand the learning needs of students with

vision disability and the role you play in accommodating these needs in Lycee Classique de Bafoussam.

The interview will take place at Lycee Classique de Bafoussam. I will be responsible for asking the questions. My colleague will translate the questions in French if you do not understand them in English. I will take notes and audio-record the interview group discussions using digital recorders so as to capture accurately all information that will be shared.

**(5) How much time will the study take?**

The interview will take approximately **one hour**.

**(6) What language will I use?**

You will agree with the other participant on a common language to use; either French or English

**(7) Where and how will the information be kept?**

The information shared during the interview will be kept confidential according to an agreement and code of conduct within the group. The information gathered will be used for academic purposes, advocacy and to influence policy only. I will not mention your name in the reports arising from the focus group discussion. After the study, I will lock up the recordings in a place only accessible by me. I will destroy them after a period of five years after the research is completed.

**(8) Can anything good happen to me?**

There are no direct benefits that you will get. However, the information that is gathered from this research will help you, the teachers and the ministry of secondary education to meet the learning needs of your children. I will give you 3000CFA lunch allowance in appreciation for your time. You will receive the feedback of the study in summary form through the school.

**(9) Can anything bad happen to me?**

There are no known bad or negative things that will happen to you by participating in the study. If you find the conversation difficult or upsetting, I will refer you to the guidance and counselling team of the school for counselling.

**(10) Can I tell other people about the study?**

You are free to discuss this study with your relatives or friends or other people of your choice.

**(11) Should I take part in this study?**

It is up to you to decide whether you should take part in this study or not. Completing and signing the consent form means you are interested in participating. If you are not interested in participating, you do not have to complete or sign the consent form and there will be no problem.

**(12) Am I allowed to stop participating if I do not like to continue after I have started?**

Participation in the study is optional so you may withdraw from the study anytime without providing any reasons for your withdrawal. However, if you decide to withdraw from the focus group discussion after it has started, the information you will have already given will be kept.

**(13) Mandatory reporting obligation**

*The researcher may not be able to maintain as confidential, information about known or reasonably suspected incidents of abuse or neglect of a child, including, but not limited to, physical, sexual, emotional, and financial abuse or neglect. If the researcher is given such information, he may report it to the authorities.*

**(14) Do you have questions about the study?**

If you have any questions about the study, you can contact the researcher on the address, telephone number or email address given below.

**(15) What if I have a complaint or any concerns?**

**The UCT's Faculty of Health Sciences Human Research Ethics Committee can be contacted on (+27) 021 406 6338 in case you have any ethical concerns or questions about your rights or welfare as a participant on this research study.**

You can contact me or my supervisor using the contact details given below.

*Thank you for taking time to read this letter or to have this letter read to you.*

**Contact Details of the Researcher**

Name: Bridget Ateh Longla Fobuzie

Address: P.O.Box 426

Bamenda, North-West Region,

Cameroon

Telephone: +237 677985850

Email: [bridgetfobuzie@yahoo.com](mailto:bridgetfobuzie@yahoo.com)

**Contact Details of the Supervisor**

Name: A/Prof. Judith McKenzie

Email Address: [Judith.mckenzie@uct.ac.za](mailto:Judith.mckenzie@uct.ac.za)

Phone: +27 (0)214066318

**Contact details of the Chairperson of HREC**

Name: Professor Marc Blockman

Email address: [hrecenquiries@uct.ac.za](mailto:hrecenquiries@uct.ac.za)

Phone: +27 (0) 216501236

## **Appendix 8: Letter of Information/Assent Form for Students with Vision Disability**

**RESEARCH Title: Investigating how the Learning Needs of Learners with Vision Disability are Understood and Accommodated within Mainstream Schools in Cameroon: A Case Study of one Secondary School**

**RESEARCHERS NAME(S): Bridget Longla Fobuzie**

**ADDRESS: P.O. Box 426, Bamenda, North-West Region**

**CONTACT NUMBER: +237 677 98.58 50**

### **(1) What is research?**

Research is something we do to find new **information** about the way things (and people) work. We use **research** to help us find better ways of helping people.

### **(2) What is this research project all about?**

The study investigates how the learning needs of learners with vision disability are understood and accommodated within mainstream schools in Cameroon

### **(3) Why have I been invited to take part in this research project?**

Your views will help us to understand more about your learning needs as vision disabled students in a mainstream classroom.

and how these are being addressed

### **(4) Who is doing the research?**

I am doing the research as a requirement for my PhD studies at Cape Town University. I am under the supervision of Associate Professor Judith McKenzie of Cape Town University.

### **(5) How will I participate in the study?**

I will conduct individual interviews with you and five other students with vision disability. I will ask you to talk about your experience of schooling in Lycee Classique de Bafoussam. I will also ask you what you consider to be your learning needs and how your needs are addressed by your parents, teachers and peers.

The discussion will take place at your school for about **one hour** and you will decide whether to speak in French or English. You **can** ask questions at any time. I will take notes and record your voices so as to get all that you will say.

### **(6) Can anything bad happen to me?**

You might experience sad feelings during the discussion because of the topic. If that happens, I will **take** you to the counselling services at the CBC Health Centre for counselling. You should also **tell** your parents if you are not happy as a result of being in the study.

**(7) Can anything good happen to me?**

There are no direct good things that you will get. However, the information that is got from this research will help to support your teachers and parents to better attend to your needs as students with vision disabilities in mainstream schools. The information will also support parents and teachers in other schools to better respond to the needs of other students like yourselves.

You will get **a soft drink and some cake** during the interview period. At the end of the discussion, I will give each of you, twenty sheets of Braille paper as an appreciation of your time. You will receive the results of the research in a summary form through the school.

**(8) Will anyone know I am in the study?**

Your participation in the research will be kept secret according to an agreement within the discussion participants. I will not mention your name in the reports arising from the discussion.

**(9) Reporting of abuse**

*I will not tell anyone what you tell me without your permission unless there is something that could cause harm to you or someone else. If you tell me that someone is or has been hurting you, I may have to tell that to people who are responsible for protecting young people so they can make sure you are safe.*

You are free to refuse to take part in the study even if your parents have agreed to your participation; and there will be no problem. You can stop being in the study at any time and there will be no trouble.

**(10) Do you understand the research and are you willing to take part in it?**

YES

NO

**(11) Who can I talk to about the study?**

If you have any ethical concerns or questions about your rights, or welfare as a participant in this research, you can contact UCT's Human Resource and Ethics Committee on: (+27)021 406 6338. You can also contact me or my supervisor on the contact details given below.

(12) **Do you understand this research study and are you willing to take part in it?**

YES

NO

(13) **Has the researcher answered all your questions?**

YES

NO

(14) **Do you understand that you can withdraw from the study at any time?**

YES

NO

**Contact Details of the Researcher**

Name: Bridget Ateh Longla Fobuzie

Address: P.O.Box 426

Bamenda, North-West Region,

Cameroon

Telephone: +237 677985850

Email: [bridgetfobuzie@yahoo.com](mailto:bridgetfobuzie@yahoo.com)

**Contact Details of the Supervisor**

Name: A/Prof. Judith McKenzie

Email Address: [Judith.mckenzie@uct.ac.za](mailto:Judith.mckenzie@uct.ac.za)

Phone: +27 (0)214066318

**Contact details of the Chairperson of HREC**

Name: Professor Marc Blockman

Email address: [hrecenquiries@uct.ac.za](mailto:hrecenquiries@uct.ac.za)

Phone: +27 (0) 216501236

## **Appendix 9: Letter of Information/Assent Form for Sighted Peers of Students with Vision Disability**

**RESEARCH Title: Investigating how the Learning Needs of Learners with Vision Disability are Understood and Accommodated within Mainstream Schools in Cameroon: A Case Study of one Secondary School**

**RESEARCHERS NAME(S): Bridget Longla Fobuzie**

**ADDRESS: P.O. Box 426, Bamenda, North-West Region**

**CONTACT NUMBER: +237 677 98.58 50**

### **(1) What is research?**

Research is something we do to find new **information** about the way things (and people) work. We use **research** to help us find better ways of helping people.

### **(2) What is this research project all about?**

The study investigates how the learning needs of vision disabled students are understood and accommodated within mainstream secondary schools.

### **(3) Why have I been invited to take part in this research project?**

Your views will help us to understand more about the issues.

### **(3) Who is doing the research?**

I am doing the research as a requirement for my PhD studies at Cape Town University. I am under the supervision of Associate Professor Judith McKenzie of Cape Town University.

### **(4) How will I participate in the study?**

You will take part in a discussion that will have five other students with without vision disability. I will ask you to talk about what you consider to be the learning needs of vision disabled students in a mainstream classroom and how you and your teachers are meeting the needs of vision disabled students in your class, or how you think you and teachers, should meet the learning needs of student with vision disability in you school

The discussion will take place at your school for about **one hour**. You will agree with the other students in the discussion whether to talk in English, or French. You **can** ask questions at any time. I will take notes and record your voices so as to get all that you will say.

### **(5) Can anything bad happen to me?**

You might experience sad feelings during the discussion because of the topic. If that happens, I will **take** you to the counselling services at the CBC Health Centre for counselling. You should also **tell** your parents if you are not happy as a result of being in the study.

**(6) Can anything good happen to me?**

There are no direct good things that you will get. However, the information that is got from this research will help to support your teachers and parents to better attend to the learning needs of your peers with vision disabilities in mainstream schools. The information will also support parents and teachers in other schools to better respond to the needs of other students in other schools.

You will get **a soft drink and some cake** during the discussion period. At the end of the discussion, I will give each of you, an exercise book and a pen as an appreciation of your time. You will receive the results of the research in a summary form through the school.

**(7) Will anyone know I am in the study?**

Your participation in the research will be kept secret according to an agreement within the discussion participants. I will not mention your name in the reports arising from the discussion.

**(8) Reporting of abuse**

*I will not tell anyone what you tell me without your permission unless there is something that could cause harm to you or someone else. If you tell me that someone is or has been hurting you, I may have to tell that to people who are responsible for protecting young people so they can make sure you are safe.* 10. Who can I talk to about the study? If you have any ethical concerns or questions about your rights, or welfare as a participant in this research, you can contact UCT's Human Resource and Ethics Committee on: (+27)021 406 6338. You can also contact me or my supervisor on the contact details given below.

**(9) What if I do not want to take part?**

You are free to refuse to take part in the study even if your parents have agreed to your participation; and there will be no problem. You can stop being in the study at any time and there will be no trouble.

**(10) Do you understand this research study and are you willing to take part in it?**

YES

NO

**(11) Has the researcher answered all your questions?**

YES

NO

(12) Do you understand that you can withdraw from the study at any time?

YES

NO

**Contact Details of the Researcher**

Name: Bridget Ateh Longla Fobuzie

Address: P.O.Box 426

Bamenda, North-West Region,

Cameroon

Telephone: +237 677985850

Email: [bridgetfobuzie@yahoo.com](mailto:bridgetfobuzie@yahoo.com)

**Contact Details of the Supervisor**

Name: A/Prof. Judith McKenzie

Email Address: [Judith.mckenzie@uct.ac.za](mailto:Judith.mckenzie@uct.ac.za)

Phone: +27 (0)214066318

**Contact details of the Chairperson of HREC**

Name: Professor Marc Blockman

Email address: [hrecenquiries@uct.ac.za](mailto:hrecenquiries@uct.ac.za)

Phone: +27 (0) 216501236

## Appendix 10: Consent form for Parents/Caregivers

**Research Title: Investigating how the Learning Needs of Learners with Vision Disability are Understood and Accommodated within Mainstream Schools in Cameroon: A Case Study of one Secondary School**

### Parent/ Guardian Consent Form

I .....give consent for my child's participation in this study. I confirm that the research procedures that my child will participate in in the study have been explained to me through a written letter. I understand that my child may ask questions at any time during the research procedures. I realise that my child is free to withdraw from the study without any problem at any time, should he/she choose to do so; **and that my child's education and care will not be negatively affected in any way if he/she chooses not to participate.** I have been informed that the personal information required by the researcher will be **recorded using digital recorders** and held according to an agreement and code of conduct with the researcher. I hereby agree that my child takes part in this research project by participating in one interview for a maximum of one hour. I have carefully read this form. I understand the nature, purpose and procedure of this study. I agree that my child participates in this research project.

Parent's/Guardian's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Researcher's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Appendix 11: Consent form for Teachers/Parents/Caregivers/Students**

**Research title:** Investigating how the Learning Needs of Learners with Vision Disability are Understood and Accommodated within Mainstream Schools in Cameroon: A Case Study of one Secondary School.

I .....[PRINT NAME], give consent to my participation in the individual interview.

In giving my consent I acknowledge that: **(Please tick)**

1. The procedures required for the interview and the time involved have been explained to me, and any questions I have about the project have been answered to my satisfaction [ ].
2. I have read the Participant Information Letter and have been given the opportunity to discuss the information and my involvement in the project with the researcher [ ].
3. I understand that being in this study is completely voluntary – I am not under any obligation to consent [ ].
4. I understand that my involvement is strictly confidential. I understand that any research data gathered from the results of the study may be published; however, no information about me will be used in any way that is identifiable [ ].
5. I understand that I can withdraw from the study at any time, without affecting my relationship with the researcher(s) or the University of Cape Town now or in the future [ ].
6. I understand that I can stop the interview at any time if I do not wish to continue, the audio recording will be erased and the information provided will not be included in the study [ ].
7. I consent to audio-recording YES  NO  (Please tick one)

Signature (participant): .....

Date and place: .....

Signature ..... (researcher):

Date and place:

.....

## **Appendix 12: Letter of Information/invitation for Key Informant**

Research title: **Investigating how the Learning Needs of Learners with Vision Disability are Understood and Accommodated within Mainstream Schools in Cameroon: A Case Study of one Secondary School**

Dear Participant

My name is Bridget Longla Fobuzie, a PhD student at the University of Cape Town (UCT). I am conducting a study on how the learning needs of learners with vision disability are understood and accommodated within mainstream schools in Cameroon. This letter is to invite you to take part in the study and to tell you about the study so that you can decide whether or not you will participate. Before you decide, you can discuss this letter with any of your family members or friends or anyone else you choose.

### **(1) Who is doing the research?**

I am doing the research under the supervision of Associate Prof Judith McKenzie of Cape Town University Faculty of Health Sciences, Department of Health and Rehabilitation Sciences.

### **(2) Who is taking part in this study?**

Participation in this study is meant for students with vision disability, parents and caregivers of learners with vision disability, sighted students, teachers and resource teachers of Lycee Classique de Bafoussam, and the principal of the school. We have chosen these groups as we believe they have the information that will help us to answer our research questions.

### **(3) What is the study about?**

**I am investigating how the learning needs of learners with vision disability are understood and accommodated within mainstream schools in Cameroon. There isn't enough information on the subject in Africa and your contribution will help us understand it more and make recommendations that will assist in addressing the learning needs of students with vision disability.**

### **(4) How will I participate in the study?**

You will participate in a one-on-one interview as a key informant. I will ask you to talk about your perspectives on the learning needs of students with vision disability. I will be responsible for asking the questions and moderating the session. My colleague will translate back and forth between you and I if need be. I will take notes and audio-record

the interview using digital recorders so as to capture accurately all information that will be shared.

**(5) How much time will the study take?**

The interview will take approximately **one hour**.

**(6) What language will I use?**

You will use either French or English

**(7) Where and how will the information be kept?**

I cannot guarantee the confidentiality of the information you will share as the principal. The information can be traced back to you as an individual because the school has only one principal. However, I will not mention your name in the reports arising from the interview. The information gathered will be used for academic purposes, advocacy and to influence policy only. After the study, I will lock up the recording in a place only accessible by me. I will destroy it after a period of five years after the research is completed.

**(8) Will I benefit from the research?**

There are no direct benefits that you will get. However, the information that is gathered from this research will help you, the teachers, the parents, the resource and the ministry of secondary education to meet the learning needs of your students. I will give you the feedback of the study in summary form.

**(9) Can anything bad happen to me?**

There are no known bad or negative things that will happen to you by participating in the study. If you find the conversation difficult or upsetting, I will refer you to the guidance and counselling team of the school for counselling.

**(10) Can I tell other people about the study?**

You are free to discuss this study with your relatives or friends or other people of your choice.

**(11) Should I take part in this study?**

It is up to you to decide whether you should take part in this study or not. Completing and signing the consent form means you are interested in participating. If you are not interested in participating, you do not have to complete or sign the consent form and there will be no problem.

**(12) Am I allowed to stop participating if I do not like to continue after I have started?**

Participation in the study is optional so you may withdraw from the study anytime without providing any reasons for your withdrawal. However, if you decide to withdraw from the

focus group discussion after it has started, the information you will have already given will be kept.

**(13) Mandatory reporting obligation**

*The researcher may not be able to maintain as confidential, information about known or reasonably suspected incidents of abuse or neglect of a child, including, but not limited to, physical, sexual, emotional, and financial abuse or neglect. If the researcher is given such information, he may report it to the authorities.*

**(14) Do you have questions about the study?**

If you have any questions about the study, you can contact the researcher on the address, telephone number or email address given below.

**(15) What if I have a complaint or any concerns?**

**The UCT's Faculty of Health Sciences Human Research Ethics Committee can be contacted on (+27) 021 406 6338 in case you have any ethical concerns or questions about your rights or welfare as a participant on this research study.**

You can contact me or my supervisor using the contact details given below.

*Thank you for taking time to read this letter or to have this letter read to you.*

**Contact Details of the Researcher**

Name: Bridget Ateh Longla Fobuzie

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**Appendix 13: Consent form for Key Informant**

**Research title:** Investigating how the Learning Needs of Learners with Vision Disability are Understood and Accommodated within Mainstream Schools in Cameroon: A Case Study of one Secondary School.

I .....[PRINT NAME], give consent to my participation in the individual interview.

In giving my consent I acknowledge that: **(Please tick)**

1. The procedures required for the interview and the time involved have been explained to me, and any questions I have about the project have been answered to my satisfaction [ ].
2. I have read the Participant Information Letter and have been given the opportunity to discuss the information and my involvement in the project with the researcher [ ].
3. I understand that being in this study is completely voluntary – I am not under any obligation to consent [ ].
4. I understand that my involvement is strictly confidential. I understand that any research data gathered from the results of the study may be published however no information about me will be used in any way that is identifiable [ ].
5. I understand that I can withdraw from the study at any time, without affecting my relationship with the researcher(s) or the University of Cape Town now or in the future [ ].
6. I understand that I can stop the interview at any time if I do not wish to continue, the audio recording will be erased and the information provided will not be included in the study [ ].
7. I consent to audio-recording YES  NO  (Please tick one)

Signature (participant): .....

Date and place: .....

Signature (researcher):

.....

Date and place:

.....

**Appendix 14: Parents/Caregivers Interview Guide**

**A. Basic Information**

Time: \_\_\_\_\_ Date: \_\_\_\_\_ Place:

\_\_\_\_\_

Name of Facilitator:

\_\_\_\_\_

Name of Parent:

\_\_\_\_\_

—

Audio Record Name:

\_\_\_\_\_

**B. Introduction**

1. Introduce myself as the researcher.
2. Give the aim of the study - to investigate how the learning needs of vision disabled learners are understood and accommodated in mainstream secondary schools in Cameroon (Probe: Ensure you have informed consent signature).
3. Provide the structure of the interview (no right or wrong answer, audio recording, taking notes, one hour, agree on language to be used).
4. Assure confidentiality.
5. Ask if the parents have questions.

6. Fill in the following details of the parents or caregivers: Age, sex, religion, number of children, disability and sex of the child or children, geographical location, level of education, ethnicity, marriage status and type, type of family (extended or nuclear), disability, employment status, type of employment and income per month.

### **C. Interview Questions**

1. Tell me your experience of being a parent of a vision disabled child? (Probes: please explain. Please tell me more)
2. Tell me about the schooling experience of your vision disabled child. (Probes: please explain. Please tell me more)
3. How do you understand the learning needs of your child with a vision disability at school? Probes: Tell me more, please explain, how are these needs different from his needs at home and in the community? Please explain.
4. How is the school addressing these needs?
5. How are his/her needs different from those of your non-disabled children? (Probes: please explain. Please tell me more)
6. How do you meet the learning needs of your child with a disability? (Probes: material psychosocial needs, tell me more, please explain, how is this support different from that provided by the teachers?)
7. What are the factors that contribute, or that you think contribute, to the way you support your child's learning? (Probe: enablers, challenges, at home, at school, could you explain your response more? What are the other enablers/challenges? How are these challenges different from those faced by teachers?)
8. Is there anything more you want to add about your involvement in meeting the learning needs of your child?

### **D. Closing Remarks**

1. Ask if the interviewees have questions/anything to add.
2. Sort out any logistical issues.
3. Thank the interviewees

## Appendix 15:

## Teachers' Interview Guide

### A. Basic Information

Time: \_\_\_\_\_ Date: \_\_\_\_\_ Place:

\_\_\_\_\_  
Name of Facilitator:

\_\_\_\_\_  
Name

of Group:

\_\_\_\_\_

—  
Classes Taught:

\_\_\_\_\_

—  
Number of Students on Roll: \_\_\_\_\_ Boys: \_\_\_\_\_ Girls:

\_\_\_\_\_

Number of Students with Vision Disability: \_\_\_\_\_ Boys: \_\_\_\_\_ Girls:

\_\_\_\_\_

Audio Record Name:

\_\_\_\_\_

### B. Introduction

1. Introduce myself: My name is Bridget Longla Fobuzie, a PhD student at the University of Cape Town (UCT). I am conducting a study how the learning needs of vision disabled learners are understood and accommodated in mainstream secondary schools in Cameroon.
2. The aim of the study is to investigate how the learning needs of vision disabled learners are understood and accommodated in mainstream secondary schools in Cameroon. (Probe: Ensure you have informed consent signature).
3. There are no right or wrong answers. You may choose to respond in English or French. I will audio-record the interview in order to capture all your responses. I will also take down notes as you talk. The interview will last for about an hour.

4. Assure confidentiality: The information shared during the interview will be kept confidential according to an agreement and code of conduct within the group. The information gathered will be used for academic purposes, advocacy and to influence policy only. I will not mention your name in the reports arising from the FGD. After the study, I will lock up the recordings in a place only accessible by me. I will destroy them after a period of five years after the research is completed.
5. Do you have any questions?

### **C. Interview Questions**

1. Tell me what you understand by vision disability? (Probes: tell me more, please explain)
2. Tell me about your experience of teaching students with vision disability. (Probes: tell me more, please explain. Planning and preparing your lessons, engaging them during your lessons, assessing or evaluating their work)
3. What challenges, if any, do you face in teaching students with vision disability alongside sighted students? (Probes: tell me more, please explain)
4. How do you understand the learning needs of students with vision disabilities? (Probes: tell me more, please explain)
5. How do you assess or identify the learning needs of students with vision disability in your class? (Probes: Please tell me more, explain please).
6. What strategies do you use in meeting these learning needs? (Probes: tell me more, please explain)
7. What factors influence or what factors do you think influence the way in which you meet the needs of learners with vision disability? (Probes: availability of teaching/learning resources in accessible formats, support from the resource room, support from the school administration, flexibility of school curriculum, availability of time, capacity development for teaching learners with vision disability)
8. What are the enablers/challenges that influence or that you think influence the way you meet the learning needs of students with vision disability? (Probes: please tell me more, please explain, attitude of students towards learning, parental involvement)
9. Have you received any training on how to meet the learning needs of students with vision disability? {Probe: please tell me more about it)

10. Do you think that you require training on how to meet the learning needs of vision disabled students in mainstream schools? (Probe: Please name specific areas in which you may require capacity enhancement)
11. Is there anything more you want to add about your strategy of meeting the learning needs of your students with vision disability?

#### **D. Closing Remarks**

1. Ask if the interviewees have questions/anything to add.
2. Sort out any logistical issues.
3. Thank the interviewees

**Appendix 16:**

**Vision Disabled Students' Interview Guide**

**A. Basic Information**

Time: \_\_\_\_\_ Date: \_\_\_\_\_ Place:

\_\_\_\_\_  
Name of Facilitator:

\_\_\_\_\_  
Name of Student:

\_\_\_\_\_  
Audio Record Name:

**B. Introduction**

6. Introduce myself as the researcher.
7. Give the aim of the study - to investigate how the learning needs of vision disabled learners are understood and accommodated in mainstream secondary schools in Cameroon. (Probe: Ensure you have informed consent signature).
8. Provide the structure of the interview (no right or wrong answer, audio recording, taking notes, one hour, agree on language to be used).
9. Assure confidentiality.
10. Ask if the students have questions.
11. Fill in the following details of the students: age, sex, religion, geographical location, type of disability, number of siblings, disability and sex of the sibling or siblings, ethnicity, type of family (extended or nuclear), class and years in the school, type of vision loss i.e. congenital or acquired

**C. Interview Questions**

1. Tell me about your experience of schooling in Lycee Classique de Bafoussam.  
(Probes: tell me more, please explain)  
Tell me about your typical day in school. (Probes: tell me more, please explain)

2. What challenges, if any, do you face in a mainstream school like this? (Probes: tell me more, please explain, attitudes of teachers and other students, walking around the school? Taking part in all school activities, break time)
3. What are your learning needs or what do you consider to be your learning needs? (Probes:
  - Accessibility of teaching/learning materials
  - Accessibility of teaching and learning practices.
  - Accessibility of assessment and evaluation items and processes
  - Availability of teaching/learning materials in Braille and other accessible formats)
4. How are your learning needs different or similar to those of your sighted peers?
5. How do your teachers meet your learning needs (Probes:
  - Accommodations
  - Modifications
  - Extra time
  - Classroom management
  - Student engagement
  - Peer to peer interactions
  - Teacher/student interactions
  - Assessments
  - Evaluations)
6. What are the factors that contribute or that you think contribute to the way your teachers meet your learning needs? (Probes: enablers, challenges. Could you please explain your response further? What are the other challenges?)
7. How do your parents meet your learning needs or how do you think your parents should meet your learning needs? (Probes:
  - Provision of scholastic materials
  - Involvement in PTA meetings
8. Who else can or who else do you think can contribute to meeting your learning needs and how? (Probes: tell me more, please explain)
9. Is there anything more you want to add about the learning needs of students with vision disability?

#### **D. Closing Remarks**

1. Ask if the students have questions.
2. Thank them and reiterate group code of conduct on confidentiality.
3. Sort out any logistical issues.

**Appendix 17: Resource Teachers' Interview Guide**

**A. Basic Information**

Time: \_\_\_\_\_ Date: \_\_\_\_\_ Place: \_\_\_\_\_  
\_\_\_\_\_  
Name \_\_\_\_\_ of \_\_\_\_\_ Facilitator: \_\_\_\_\_  
\_\_\_\_\_  
Name \_\_\_\_\_ of \_\_\_\_\_ Group: \_\_\_\_\_  
\_\_\_\_\_  
Audio \_\_\_\_\_ Record \_\_\_\_\_ Name: \_\_\_\_\_  
\_\_\_\_\_

**B. Introduction**

1. Introduce myself as the researcher.
2. Give the aim of the study— how the learning needs of vision disabled learners are assessed and accommodated in mainstream secondary schools in Cameroon. (Probe: Ensure you have informed consent signature).
3. Provide the structure of the interview (no right or wrong answer, audio recording, taking
  - a. notes, one hour, agree on language to be used).
4. Assure confidentiality.
5. Ask if the resource teachers have questions.
6. Fill in the following details of the resource teachers: Age, sex, religion, number of children, disability and sex of the child or children, geographical location, level of education, ethnicity, marriage status and type, type of family (extended or nuclear), disability, employment status, type of employment and income per month.

**C. Interview Questions**

1. Please tell me about your experience of working with students and teachers of Lycee Classique de Bafoussam. (Probes: tell me more, please explain)
2. Tell me about the activities that you carry out. (Probes: tell me more, please explain)

3. What do you consider to be the learning needs of students with vision disability? (Probes: tell me more, please explain. Student performance, availability of learning materials in accessible formats, independent learning, availability of scholastic materials, psychosocial support, involvement of parents in the students' education).
4. How do you understand the learning needs of students with vision disabilities? (Probes: tell me more, please explain)
5. How do you support in meeting the learning needs of students with vision disability? (Probes: Please tell me more, explain please.
6. What factors influence or what factors do you think influence the way in which you support in meeting the needs of learners with vision disability? (Probes: please tell me more, please explain, availability of teaching/learning resources, collaboration with mainstream teachers, support from the school administration, availability of time, capacity development for supporting students with vision disability)
7. What are the enablers/challenges that influence or that you think influence the way you meet the learning needs of students with vision disability? (Probes: please tell me more, please explain, attitude of students towards learning, collaboration with mainstream teachers, parental involvement)
8. What capacity development have you received in addressing the learning needs of students with vision disability? (Probes: tell me more, please explain)
9. Do you think you require further capacity development? (probes: please list specific areas.)
10. What can the school do?
11. What can the ministry do?
12. Is there anything more you want to add about your strategy of meeting the learning needs of your students with vision disability?

#### **D. Closing Remarks**

1. Ask if the interviewees have questions/anything to add.
2. Sort out any logistical issues.
3. Thank the interviewees

## Appendix 18:

## Sighted Students' FGD Guide

### A. Basic Information

Time: \_\_\_\_\_ Date: \_\_\_\_\_ Place: \_\_\_\_\_

\_\_\_\_\_  
Name of Facilitator:

\_\_\_\_\_  
Group of Participants:

\_\_\_\_\_  
Audio Record Name:

### B. Introduction

1. Introduce myself as the researcher.
2. Give the purpose of the study - to investigate how the learning needs of vision disabled learners are assessed and accommodated in mainstream secondary schools in Cameroon. (Probe: Ensure you have informed consent signature).
3. Provide the structure of the FGD (no right or wrong answer, audio recording, taking notes, one hour).
4. Agree on a group code of conduct (Probe: confidentiality, common language to be used for the FGD).
5. Ask if the students have questions.
6. Fill in the following details of the students: age, sex, religion, geographical location, type of disability, number of siblings, disability and sex of the sibling or siblings, ethnicity, type of family (extended or nuclear), class and years in the school.

### C. FGD Questions

1. Please tell me your experience of learning together with vision disabled students. (Probes: tell me more, please explain)
2. What are the learning needs or what do you consider to be the learning needs of students with vision disability? (Probes: fees, food, access to the school curriculum,

access to teaching/learning materials, availability of scholastic materials, support from teachers, resource teachers, school administration, psychosocial support, parents)

3. How are their needs different from yours? (Probes: tell me more, please explain)
4. How are these needs met by their parents? (Probes: please explain, please tell me more.)
5. How are these needs met by their teachers and support teachers? (Probes: including them in learning activities, presenting lessons in accessible ways, modifying their evaluation and assessment items and giving them these in accessible formats, one-to-one support in class. Please tell me more, please explain)
6. What do you think are the things that lead to the way the teachers meet their learning needs? (Probes: enablers, challenges. Could you please explain your response more?)
7. What more do you think the teachers could do to meet their learning needs? (Probes: academic, psychosocial, please explain your response, please tell me more)
8. How do you meet the learning needs of your peers with vision disability? (Probes: attitudes, psychosocial support, willingness to be learning buddies, seamless classroom interactions, what is an example of that? Please tell me more)
9. Is there anything more you want to add about how you could meet the learning needs of your peers who are vision disabled?

#### **D. Closing Remarks**

1. Ask if the students have questions.
2. Thank them and reiterate the group code of conduct on confidentiality.
3. Sort out any logistical issues.

Researcher's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## Appendix 19:

## Key Informant Interview Guide

### A. Basic Information

Time: \_\_\_\_\_ Date: \_\_\_\_\_ Place:

\_\_\_\_\_  
Name \_\_\_\_\_ of \_\_\_\_\_ Interviewer:

Participant  
\_\_\_\_\_  
\_\_\_\_\_

Audio \_\_\_\_\_ Record \_\_\_\_\_ Name:  
\_\_\_\_\_

### B. Introduction

1. Give the aim of the study— to investigate how the learning needs of vision disabled learners are understood and accommodated in mainstream secondary schools in Cameroon. (Probe: Ensure you have informed consent signature).
2. Provide the structure of the interview (no right or wrong answer, audio recording, taking notes, one hour).
3. Ask if the interviewee has questions.
4. Fill in the following details of the interviewee: age, sex, religion, number of children, disability and sex of the child or children, geographical location, ethnicity, marriage status and type, type of family (extended or nuclear), disability, level of education, special needs education training received, type of special education services offered to the school, class taught, years in the A/Profession, and years in the school.

### C. Interview Questions

1. Tell me about your experience of being the head of an inclusive school. (Probes: please explain. Please tell me more)
2. Tell me about your experience of accommodating students with vision disabilities in Lycee Classique de Bafoussam. . (Probes: please explain. Please tell me more)

3. Do you support their learning in any way? (Probes: tell me more, please explain)
4. What are the learning needs or what do you consider to be the learning needs of students with vision disability in your school? (Probe: How are the needs of vision disabled students different or similar to those of their sighted peers?)
5. How do you identify the learning needs of students with vision disability in Lycee Classique de Bafoussam? (Probes: please explain. Please tell me more)
10. How do parents and teachers meet the learning needs or how do you think teachers and parents should meet the learning needs of vision disabled students?
11. How do you meet the learning needs of students with vision disability?
12. What are the factors that contribute or that you think contribute to the way you meet the learning needs of students with vision disability? (Probes: enablers, challenges. Could you please explain your response further? What are the other challenges? How different are your challenges to those of the teachers and resource teachers?)
13. Is there anything more you want to add about the learning needs of students with vision disability?

#### **D. Closing Remarks**

1. Ask if the interviewees have questions/anything to add.
2. Sort out any logistical issues.
3. Thank the interviewees

**Appendix 20:**

**Observation Data Capture Form for Teachers**

Time: \_\_\_\_\_ Date: \_\_\_\_\_ Place:

\_\_\_\_\_

Name of Interviewer:

\_\_\_\_\_

Name of Teacher

\_\_\_\_\_

Audio Record Name:

\_\_\_\_\_

School:

\_\_\_\_\_

\_\_\_\_\_

Class: \_\_\_\_\_ Subject:

\_\_\_\_\_

Name of Teacher:

\_\_\_\_\_

Time of the Lesson: \_\_\_\_\_ Duration of the Lesson:

\_\_\_\_\_

Number of students: Female: \_\_\_\_\_ Male: \_\_\_\_\_ Age range:

\_\_\_\_\_

**Lesson Objective(s):**

-----  
-----  
-----  
-----  
-----  
-----  
-----

<b>Key Observation Points/areas</b>	<b>Specific Examples/Comments</b>
<p><b>Accessibility to Classroom and Classroom Organisation</b></p> <p><input type="checkbox"/> Classroom is accessible.</p> <p><input type="checkbox"/> Seats are well arranged.</p> <p><input type="checkbox"/> Students with VI are sitting in convenient positions.</p> <p><input type="checkbox"/> Students with VI are sitting with at least one sighted peer for support.</p> <p><input type="checkbox"/> Desks are wide enough to take all the learning resources of students with vision disability.</p>	
<p><b>Student Resources Including Assistive Devices</b></p> <p><input type="checkbox"/> Students with vision disability have all necessary learning resources in accessible formats.</p> <p><input type="checkbox"/> Students with vision disability have assistive devices e.g. Mobility cane, writing frames, etc.</p>	
<p><b>Instructional Delivery</b></p> <p><b>Teacher:</b></p> <p><input type="checkbox"/> Engages students.</p> <p><input type="checkbox"/> Differentiates instruction.</p> <p><input type="checkbox"/> Intentionally calls out students with vision disability to answer and or ask questions.</p> <p><input type="checkbox"/> Uses a variety of strategies.</p> <p><input type="checkbox"/> Uses a variety of resources which are accessible for students with vision disability.</p> <p><input type="checkbox"/> Presents lesson content in different modes.</p>	

<input type="checkbox"/>	
<p><b>Student Interaction and cooperative learning</b></p> <p><input type="checkbox"/> Students with vision disability interact freely with their peers.</p> <p><input type="checkbox"/> students with vision disability and sighted students work in pairs and groups.</p> <p><input type="checkbox"/> Sighted students do not dominate pair and group discussions</p>	
<p><b>Classroom Support</b></p> <p><input type="checkbox"/> Students with vision disability have learning buddies.</p> <p><input type="checkbox"/> Students with vision disability get support from the teacher when they need help.</p> <p><input type="checkbox"/> Students with vision disability are oriented in O&amp;M skills and can navigate the classroom independently.</p>	
<p><b>Assessment Methods</b></p> <p><input type="checkbox"/> Teacher gives students choice during assessments.</p> <p><input type="checkbox"/> Assessment items are in accessible formats for students with vision disability</p> <p><input type="checkbox"/> Students with vision disability are given extra time to complete assessment items.</p>	

**Appendix 21:**

**Research Assistant Confidentiality Agreement**

Research Assistant Confidentiality Agreement

I, \_\_\_\_\_ have been engaged as a research assistant on the project, how the learning needs of students with vision disability are understood and accommodated within mainstream schools in Cameroon: a case study of one secondary school, and may be required to conduct, interpret, translate or transcribe interviews in this role. In carrying out these activities, I undertake to communicate information fully and faithfully to the best of my abilities.

I understand that all information provided by interview participants is confidential, and I agree not to use or disclose this information except as required in the course of my duties as a research assistant. I also undertake to store any records of interviews securely as directed by the researcher, and to destroy any copies of these records remaining in my possession once my involvement in the project ends.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## **Appendix 22: French Letter of information/Invitation for Parents/Care Givers of students with Vision Disability**

### **Lettre d'information / Invitation pour les Parents / Assistants d'Apprenants avec Déficience Visuelle**

**Titre de la recherche:** Étudier les Besoins d'Apprentissage des Apprenants avec Déficience Visuelle dans les Ecoles Ordinaires au Cameroun:  
Etude de cas d'une Ecole Secondaire.

Cher participant,

Je m'appelle Bridget Longla Fobuzie, Doctorante à l'Université de Cape Town (UCT). Je réalise une étude sur les besoins d'apprentissage des étudiants avec déficience visuelle et sur la formation nécessaire des enseignants pour répondre à ces besoins. Cette lettre vous invite à prendre part à l'étude et à vous en parler afin que vous puissiez décider de votre participation ou non. Avant de vous décider, vous pouvez en discuter avec l'un des membres de votre famille ou vos amis, ou avec toute autre personne de votre choix.

#### **(1) Qui mène la recherche?**

Je mène la recherche sous la supervision de la professeure associée Judith McKenzie de la Faculté des Sciences de la Santé, Département des Sciences de la Santé et de la Réadaptation de l'Université de Cape Town.

#### **(2) Qui participe à cette étude?**

La participation à cette étude est réservée aux élèves ayant une déficience visuelle, aux parents et aux aides/assistants des apprenants ayant une déficience visuelle, aux élèves voyants, aux enseignants du Lycée Classique de Bafoussam et au Proviseur du Lycée. Nous avons choisi ces groupes car nous pensons qu'ils disposent des informations nécessaires pour nous aider à répondre à nos questions de recherche.

#### **(3) Sur quoi l'étude porte-t-elle ?**

L'étude examine les besoins d'apprentissage des élèves ayant une déficience visuelle dans les collèges d'enseignement secondaire ordinaire au Cameroun et la formation nécessaire des enseignants pour répondre à ces besoins. Il n'y a pas assez d'informations sur le sujet en Afrique et votre contribution nous aidera à mieux la comprendre et à faire des

recommandations qui aideront à répondre aux besoins d'apprentissage des élèves ayant une déficience visuelle.

**(4) Comment vais-je participer à l'étude?**

Vous participerez à un groupe de discussion auquel prendront part cinq autres parents ou aides/assistants d'élèves ayant une déficience visuelle. Je vous demanderai de donner votre point de vue sur les besoins d'apprentissage des élèves avec déficience visuelle dans une école ordinaire.

La discussion de groupe aura lieu au CISPAM. Je poserai les questions et modérerai la session. Mon collègue traduira les questions en Français si vous ne les comprenez pas en Anglais. Je prendrai des notes et enregistrerai les discussions du groupe à l'aide d'enregistreurs numériques afin de saisir avec précision toutes les informations qui seront partagées.

**(5) Combien de temps l'étude prendra-t-elle?**

La discussion de groupe prendra environ **une heure**.

**(6) Quelle langue vais-je utiliser?**

Vous vous entendrez avec les autres participants sur une langue commune à utiliser; Français ou Anglais

**(7) Où et comment l'information sera-t-elle conservée?**

Les informations partagées lors de la discussion de groupe seront tenues confidentielles conformément à un accord et à un code de conduite au sein du groupe. Les informations recueillies seront utilisées à des fins académiques, de plaidoyer et uniquement pour influencer les politiques. Je ne mentionnerai pas votre nom dans les rapports issus de la discussion de groupe. Après l'étude, je garderai les enregistrements dans un endroit uniquement accessible par moi. Je les détruirai au bout de cinq ans après la fin de la recherche.

**(8) Qu'est-ce je gagne ?**

Vous n'obtiendrez aucun gain direct. Cependant, les informations recueillies grâce à cette recherche vous aideront, ainsi que les enseignants et le Ministère de l'Enseignement Secondaire, à répondre aux besoins d'apprentissage de vos enfants.

Si vous devez vous rendre à plus de deux kilomètres du lieu de la réunion, je vous rembourserai vos frais de transport en utilisant les tarifs de transport locaux. Je vous fournirai des rafraîchissements pendant la réunion. Je vous donnerai une indemnité de

déjeuner de 3000 francs CFA en guise de remerciement pour votre temps. Vous recevrez les réactions sur l'étude sous forme de résumé à travers l'école.

**(9) Peut-il m'arriver quelque chose de mal?**

Il n'y a rien de connu de mauvais ou négatif qui puisse vous arriver en raison de votre participation à l'étude. Si vous trouvez la conversation difficile ou bouleversante, je vous dirigerai vers l'équipe d'orientation et de conseil du Lycée pour obtenir des conseils.

**(10) Puis-je parler de l'étude à d'autres personnes?**

Vous êtes libre de discuter de cette étude avec vos proches, vos amis ou d'autres personnes de votre choix.

**(11) Devrais-je participer à cette étude?**

C'est à vous de décider si vous devez ou non participer à cette étude. Remplir et signer le formulaire de consentement signifie que vous êtes intéressé à participer. Si vous ne l'êtes pas, vous n'êtes pas obligé de remplir ou de signer le formulaire de consentement ; et il n'y aura pas de problème.

**(12) Suis-je autorisé à arrêter ma participation si je n'aimerais pas continuer après avoir commencé?**

La participation à l'étude étant facultative, vous pouvez vous retirer de l'étude à tout moment sans indiquer les raisons de votre retrait. Toutefois, si vous décidez de vous retirer du groupe de discussion après le début de la discussion, les informations que vous aurez fournies seront conservées.

**(13) Déclaration/signalement obligatoire**

*Le/la chercheur(e) peut ne pas être en mesure de conserver de manière confidentielle des informations sur des incidents de maltraitance ou de négligence connus ou raisonnablement soupçonnés, y compris, mais sans s'y limiter, de maltraitance ou de négligence physique, sexuelle, émotionnelle et financière. Si de telles informations sont fournies au chercheur, il/elle peut en informer les autorités.*

**(14) Avez-vous des questions sur l'étude?**

Si vous avez des questions sur l'étude, vous pouvez contacter le/la chercheur(e) à l'adresse, au numéro de téléphone ou à l'adresse électronique indiquée ci-dessous.

**(15) Que faire si j'ai une plainte ou des préoccupations?**

Le Comité d'éthique sur la recherche humaine de la Faculté des sciences de la santé de l'UCT peut être contacté au (+27) 021 406 6338 si vous avez des préoccupations éthiques

ou des questions concernant vos droits ou votre bien-être en tant que participant à cette étude de recherche. Vous pouvez me contacter ou contacter mon superviseur en utilisant les coordonnées ci-dessous.

*Merci d'avoir pris le temps de lire cette lettre ou de vous l'avoir fait lire.*

**Coordonnées du Chercheur**

**Nom:** Bridget Ateh Longla Fobuzie

**Adresse:** P.O.Box 426 Bamenda, région du Nord-ouest, Cameroun

**Téléphone:** +237 677985850

**Courriel:** [bridgetfobuzie@yahoo.com](mailto:bridgetfobuzie@yahoo.com)

**Coordonnées du Superviseuse**

**Nom:** A/Prof. Judith McKenzie

**Courriel:** [Judith.mckenzie@uct.ac.za](mailto:Judith.mckenzie@uct.ac.za)

**Téléphone:** +27 (0)214066318

**Coordonnées du Président du Conseil de Comité D'Ethique des Ressources Humaines**

**Nom:** Professor Marc Blockman

**Courriel:** [hrecenquiries@uct.ac.za](mailto:hrecenquiries@uct.ac.za)

**Téléphone:** +27 (0) 216501236

**Appendix 23: French Letter of information/Invitation for Teachers of students with Vision Disability**

**Lettre d'Information / Invitation pour les Enseignants d'Apprenants avec Déficience Visuelle**

**Titre de la recherche:** Étudier les Besoins d'Apprentissage des Apprenants avec Déficience Visuelle dans les Ecoles Ordinaires au Cameroun:  
Etude de cas d'une Ecole Secondaire.

Cher participant,

Je m'appelle Bridget Longla Fobuzie, Doctorante à l'Université de Cape Town (UCT). Je réalise une étude sur les besoins d'apprentissage des étudiants avec déficience visuelle et sur la formation nécessaire des enseignants pour répondre à ces besoins. Cette lettre vous invite à prendre part à l'étude et à vous en parler afin que vous puissiez décider de votre participation ou non. Avant de vous décider, vous pouvez discuter de cette lettre avec l'un des membres de votre famille ou vos amis, ou avec toute autre personne de votre choix.

**(1) Qui mène la recherche?**

Je mène la recherche sous la supervision de la professeure associée Judith McKenzie de la Faculté des Sciences de la Santé, Département des Sciences de la Santé et de la Réadaptation de l'Université de Cape Town.

**(2) Qui participe à cette étude?**

La participation à cette étude est réservée aux élèves ayant une déficience visuelle, aux parents et aux aides/assistants des apprenants ayant une déficience visuelle, aux élèves voyants, aux enseignants du Lycée Classique de Bafoussam et au Proviseur du Lycée. Nous avons choisi ces groupes car nous pensons qu'ils disposent des informations nécessaires pour nous aider à répondre à nos questions de recherche.

**(3) Sur quoi l'étude porte-t-elle ?**

L'étude examine les besoins d'apprentissage des élèves ayant une déficience visuelle dans les collèges d'enseignement secondaire ordinaire au Cameroun et la formation nécessaire des enseignants pour répondre à ces besoins. Il n'y a pas assez d'informations sur le sujet en Afrique et votre contribution nous aidera à mieux la comprendre et à faire des recommandations qui aideront à répondre aux besoins d'apprentissage des élèves ayant une déficience visuelle.

**(4) Comment vais-je participer à l'étude?**

Vous participerez à un entretien individuel parce que vous êtes enseignant d'élèves ayant une déficience visuelle. Je vous demanderai de donner votre point de vue sur les besoins d'apprentissage des élèves avec déficience visuelle dans une école ordinaire.

L'entretien aura lieu au Lycée Classique de Bafoussam. Je poserai les questions et modérerai la session. Mon collègue traduira les questions en Français si vous ne les comprenez pas en Anglais. Je prendrai des notes et enregistrerai l'entretien à l'aide d'enregistreurs numériques afin de saisir avec précision toutes les informations qui seront partagées.

**(5) Combien de temps l'étude prendra-t-elle?**

L'entretien prendra environ **une heure**.

**(6) Quelle langue vais-je utiliser?**

Français ou Anglais comme vous le souhaitez

**(7) Où et comment l'information sera-t-elle conservée?**

Les informations partagées lors de la discussion de groupe seront tenues confidentielles conformément à un accord et à un code de conduite au sein du groupe. Les informations recueillies seront utilisées à des fins académiques, de plaidoyer et uniquement pour influencer les politiques. Je ne mentionnerai pas votre nom dans les rapports issus de la discussion de groupe. Après l'étude, je garderai les enregistrements dans un endroit uniquement accessible par moi. Je les détruirai au bout de cinq ans après la fin de la recherche.

**(8) Qu'est-ce que je gagne?**

Vous n'obtiendrez aucun gain direct. Cependant, les informations recueillies grâce à cette recherche vous aideront, ainsi que les parents et le Ministère de l'Enseignement Secondaire, à répondre aux besoins d'apprentissage de vos enfants.

Je vous fournirai des rafraîchissements pendant la réunion. Je vous donnerai une indemnité de déjeuner de 2000 francs CFA en guise de remerciement pour votre temps. Vous recevrez les réactions sur l'étude sous forme de résumé à travers l'école.

**(9) Peut-il m'arriver quelque chose de mal?**

Il n'y a rien de connu de mauvais ou négatif qui puisse vous arriver en raison de votre participation à l'étude. Si vous trouvez la conversation difficile ou bouleversante, je vous dirigerai vers l'équipe d'orientation et de conseil du Lycée pour obtenir des conseils.

**(10) Puis-je parler de l'étude à d'autres personnes?**

Vous êtes libre de discuter de cette étude avec vos proches, vos amis ou d'autres personnes de votre choix.

**(11) Devrais-je participer à cette étude?**

C'est à vous de décider si vous devez ou non participer à cette étude. Remplir et signer le formulaire de consentement signifie que vous êtes intéressé à participer. Si vous ne l'êtes pas, vous n'êtes pas obligé de remplir ou de signer le formulaire de consentement ; et il n'y aura pas de problème.

**(12) Suis-je autorisé à arrêter ma participation si je n'aimerai pas continuer après avoir commencé?**

La participation à l'étude étant facultative, vous pouvez vous retirer de l'étude à tout moment sans indiquer les raisons de votre retrait. Toutefois, si vous décidez de vous retirer du groupe de discussion après le début de la discussion, les informations que vous aurez fournies seront conservées.

**(13) Déclaration/signalement obligatoire**

*Le/la chercheur(e) peut ne pas être en mesure de conserver de manière confidentielle des informations sur des incidents de maltraitance ou de négligence connus ou raisonnablement soupçonnés, y compris, mais sans s'y limiter, de maltraitance ou de négligence physique, sexuelle, émotionnelle et financière. Si de telles informations sont fournies au chercheur, il/elle peut en informer les autorités.*

**(14) Avez-vous des questions sur l'étude?**

Si vous avez des questions sur l'étude, vous pouvez contacter le/la chercheur(e) à l'adresse, au numéro de téléphone ou à l'adresse électronique indiquée ci-dessous.

**(15) Que faire si j'ai une plainte ou des préoccupations?**

Le Comité d'éthique sur la recherche humaine de la Faculté des sciences de la santé de l'UCT peut être contacté au (+27) 021 406 6338 si vous avez des préoccupations éthiques ou des questions concernant vos droits ou votre bien-être en tant que participant à cette étude de recherche. Vous pouvez me contacter ou contacter mon superviseur en utilisant les coordonnées ci-dessous.

*Merci d'avoir pris le temps de lire cette lettre ou de vous l'avoir fait lire.*

**Coordonnées du Chercheur**

**Nom:** Bridget Ateh Longla Fobuzie

**Adresse:** P.O.Box 426 Bamenda, région du Nord-ouest, Cameroun

**Téléphone:** +237 677985850

**Courriel:** bridgetfobuzie@yahoo.com

**Coordonnées du Superviseuse**

**Nom:** A/Prof. Judith McKenzie

**Courriel:** Judith.mckenzie@uct.ac.za

**Téléphone:** +27 (0)214066318

**Coordonnées du President du Conseil de Comite D'Ethique des Ressources  
Humaines**

**Nom:** Professor Marc Blockman

**Courriel:** [hrecenquiries@uct.ac.za](mailto:hrecenquiries@uct.ac.za)

**Téléphone:** +27 (0) 216501236

## **Appendix 24: French Letter of invitation/Information for Resource Teachers of Students with Vision Disability**

### **Lettre d'information / Invitation pour les Enseignants Ressource d'Apprenants avec Déficience Visuelle**

**Titre de la recherche:** Étudier les Besoins d'Apprentissage des Apprenants avec Déficience Visuelle dans les Ecoles Ordinaires au Cameroun: Etude de cas d'une Ecole Secondaire.

Cher Participant,

Je m'appelle Bridget Longla Fobuzie, Doctorante à l'Université de Cape Town (UCT). Je réalise une étude sur les besoins d'apprentissage des étudiants avec déficience visuelle et sur la formation nécessaire des enseignants pour répondre à ces besoins. Cette lettre vous invite à prendre part à l'étude et à vous en parler afin que vous puissiez décider de votre participation ou non. Avant de vous décider, vous pouvez discuter de cette lettre avec l'un des membres de votre famille ou vos amis, ou avec toute autre personne de votre choix.

#### **(1) Qui mène la recherche?**

Je mène la recherche sous la supervision de la professeure associée Judith McKenzie de la Faculté des Sciences de la Santé, Département des Sciences de la Santé et de la Réadaptation de l'Université de Cape Town.

#### **(2) Qui participe à cette étude?**

La participation à cette étude est réservée aux élèves ayant une déficience visuelle, aux parents et aux aides/assistants des apprenants ayant une déficience visuelle, aux élèves voyants, aux enseignants du Lycée Classique de Bafoussam et au Proviseur du Lycée. Nous avons choisi ces groupes car nous pensons qu'ils disposent des informations nécessaires pour nous aider à répondre à nos questions de recherche.

#### **(3) Sur quoi l'étude porte-t-elle ?**

L'étude examine les besoins d'apprentissage des élèves ayant une déficience visuelle dans les collèges d'enseignement secondaire ordinaire au Cameroun et la formation nécessaire des enseignants pour répondre à ces besoins. Il n'y'a pas assez d'informations sur le sujet en Afrique et votre contribution nous aidera à mieux la comprendre et à faire des

recommandations qui aideront à répondre aux besoins d'apprentissage des élèves ayant une déficience visuelle.

**(4) Comment vais-je participer à l'étude?**

Vous participerez à un entretien avec un autre enseignants ressource d'élèves ayant une déficience visuelle. Je vous demanderai de donner votre point de vue sur les besoins d'apprentissage des élèves avec déficience visuelle dans une école ordinaire.

L'entretien aura lieu au Lycée Classique de Bafoussam. Je poserai les questions et modérerai la session. Mon collègue traduira les questions en Français si vous ne les comprenez pas en Anglais. Je prendrai des notes et enregistrerai les discussions du groupe à l'aide d'enregistreurs numériques afin de saisir avec précision toutes les informations qui seront partagées.

**(5) Combien de temps l'étude prendra-t-elle?**

La discussion de groupe prendra environ **une heure**.

**(6) Quelle langue vais-je utiliser?**

Vous vous entendrez avec les autres participants sur une langue commune à utiliser; Français ou Anglais

**(7) Où et comment l'information sera-t-elle conservée?**

Les informations partagées lors de la discussion de groupe seront tenues confidentielles conformément à un accord et à un code de conduite au sein du groupe. Les informations recueillies seront utilisées à des fins académiques, de plaidoyer et uniquement pour influencer les politiques. Je ne mentionnerai pas votre nom dans les rapports issus de la discussion de groupe. Après l'étude, je garderai les enregistrements dans un endroit uniquement accessible par moi. Je les détruirai au bout de cinq ans après la fin de la recherche.

**(8) Qu'est-ce que je gagne?**

Vous n'obtiendrez aucun gain direct. Cependant, les informations recueillies grâce à cette recherche vous aideront, ainsi que les parents et le Ministère de l'Enseignement Secondaire, à répondre aux besoins d'apprentissage de vos enfants.

Si vous devez vous rendre à plus de deux kilomètres du lieu de la réunion, je vous rembourserai vos frais de transport en utilisant les tarifs de transport locaux. Je vous fournirai des rafraîchissements pendant la réunion. Je vous donnerai une indemnité de

déjeuner de 5000 francs CFA en guise de remerciement pour votre temps. Vous recevrez les réactions sur l'étude sous forme de résumé à travers l'école.

**(9) Peut-il m'arriver quelque chose de mal?**

Il n'y a rien de connu de mauvais ou négatif qui puisse vous arriver en raison de votre participation à l'étude. Si vous trouvez la conversation difficile ou bouleversante, je vous dirigerai vers l'équipe d'orientation et de conseil du Lycée pour obtenir des conseils.

**(10) Puis-je parler de l'étude à d'autres personnes?**

Vous êtes libre de discuter de cette étude avec vos proches, vos amis ou d'autres personnes de votre choix.

**(11) Devrais-je participer à cette étude?**

C'est à vous de décider si vous devez ou non participer à cette étude. Remplir et signer le formulaire de consentement signifie que vous êtes intéressé à participer. Si vous ne l'êtes pas, vous n'êtes pas obligé de remplir ou de signer le formulaire de consentement ; et il n'y aura pas de problème.

**(12) Suis-je autorisé à arrêter ma participation si je n'aimerai pas continuer après avoir commencé?**

La participation à l'étude étant facultative, vous pouvez vous retirer de l'étude à tout moment sans indiquer les raisons de votre retrait. Toutefois, si vous décidez de vous retirer de l'entretien après le début de l'entretien, les informations que vous aurez fournies seront conservées.

**(13) Déclaration/signalement obligatoire**

*Le/la chercheur(e) peut ne pas être en mesure de conserver de manière confidentielle des informations sur des incidents de maltraitance ou de négligence connus ou raisonnablement soupçonnés, y compris, mais sans s'y limiter, de maltraitance ou de négligence physique, sexuelle, émotionnelle et financière. Si de telles informations sont fournies au chercheur, il/elle peut en informer les autorités.*

**(14) Avez-vous des questions sur l'étude?**

Si vous avez des questions sur l'étude, vous pouvez contacter le/la chercheur(e) à l'adresse, au numéro de téléphone ou à l'adresse électronique indiquée ci-dessous.

**(15) Que faire si j'ai une plainte ou des préoccupations?**

Le Comité d'éthique sur la recherche humaine de la Faculté des sciences de la santé de l'UCT peut être contacté au (+27) 021 406 6338 si vous avez des préoccupations éthiques

ou des questions concernant vos droits ou votre bien-être en tant que participant à cette étude de recherche. Vous pouvez me contacter ou contacter mon superviseur en utilisant les coordonnées ci-dessous.

*Merci d'avoir pris le temps de lire cette lettre ou de vous l'avoir fait lire.*

**Coordonnées du Chercheur**

**Nom:** Bridget Ateh Longla Fobuzie

**Adresse:** P.O.Box 426 Bamenda, région du Nord-ouest, Cameroun

**Téléphone:** +237 677985850

**Courriel:** bridgetfobuzie@yahoo.com

**Coordonnées du Superviseuse**

**Nom:** A/Prof. Judith McKenzie

**Courriel:** Judith.mckenzie@uct.ac.za

**Téléphone:** +27 (0)214066318

**Coordonnées du Président du Conseil de Comite D'Ethique des Ressources Humaines**

**Nom:** Professor Marc Blockman

**Courriel:** [hrecenquiries@uct.ac.za](mailto:hrecenquiries@uct.ac.za)

**Téléphone:** +27 (0) 216501236

## **Appendix 25: French Letter of information/Assent Form for Students with Vision Disability**

### **French Letter of information/Assent Form for Students with Vision Disability**

**Titre de la recherche:** Étudier les Besoins d'Apprentissage des Apprenants avec Déficience Visuelle dans les Ecoles Ordinaires au Cameroun: Etude de cas d'une Ecole Secondaire.

Cher Participant,

Je m'appelle Bridget Longla Fobuzie, Doctorante à l'Université de Cape Town (UCT). Je réalise une étude sur les besoins d'apprentissage des étudiants avec déficience visuelle et sur la formation nécessaire des enseignants pour répondre à ces besoins. Cette lettre vous invite à prendre part à l'étude et à vous en parler afin que vous puissiez décider de votre participation ou non. Avant de vous décider, vous pouvez discuter de cette lettre avec l'un des membres de votre famille ou vos amis, ou avec toute autre personne de votre choix.

#### **(1) Qui mène la recherche?**

Je mène la recherche sous la supervision de la professeure associée Judith McKenzie de la Faculté des Sciences de la Santé, Département des Sciences de la Santé et de la Réadaptation de l'Université de Cape Town.

#### **(2) Qui participe à cette étude?**

La participation à cette étude est réservée aux élèves ayant une déficience visuelle, aux parents et aux aides/assistants des apprenants ayant une déficience visuelle, aux élèves voyants, aux enseignants du Lycée Classique de Bafoussam et au Proviseur du Lycée. Nous avons choisi ces groupes car nous pensons qu'ils disposent des informations nécessaires pour nous aider à répondre à nos questions de recherche.

#### **(3) Sur quoi l'étude porte-t-elle ?**

L'étude examine les besoins d'apprentissage des élèves ayant une déficience visuelle dans les collèges d'enseignement secondaire ordinaire au Cameroun et la formation nécessaire des enseignants pour répondre à ces besoins. Il n'y a pas assez d'informations sur le sujet en Afrique et votre contribution nous aidera à mieux la comprendre et à faire des

recommandations qui aideront à répondre aux besoins d'apprentissage des élèves ayant une déficience visuelle.

**(4) Comment vais-je participer à l'étude?**

Vous participerez à un entretien comme cinq autre élève avec une déficience visuelle. Je vous demanderai de donner votre point de vue sur les besoins d'apprentissage des élèves avec déficience visuelle dans une école ordinaire.

L'entretien aura lieu au Lycée Classique de Bafoussam. Je poserai les questions et modérerai la session. Mon collègue traduira les questions en Français si vous ne les comprenez pas en Anglais. Je prendrai des notes et enregistrerai les discussions du groupe à l'aide d'enregistreurs numériques afin de saisir avec précision toutes les informations qui seront partagées.

**(5) Combien de temps l'étude prendra-t-elle?**

La discussion de groupe prendra environ **une heure**.

**(6) Quelle langue vais-je utiliser?**

Vous vous entendrez avec les autres participants sur une langue commune à utiliser; Français ou Anglais

**(7) Où et comment l'information sera-t-elle conservée?**

Les informations partagées lors de la discussion de groupe seront tenues confidentielles conformément à un accord et à un code de conduite au sein du groupe. Les informations recueillies seront utilisées à des fins académiques, de plaidoyer et uniquement pour influencer les politiques. Je ne mentionnerai pas votre nom dans les rapports issus de la discussion de groupe. Après l'étude, je garderai les enregistrements dans un endroit uniquement accessible par moi. Je les détruirai au bout de cinq ans après la fin de la recherche.

**(8) Qu'est-ce que je gagne?**

Vous n'obtiendrez aucun gain direct. Cependant, les informations recueillies grâce à cette recherche vous aideront, ainsi que les parents et le Ministère de l'Enseignement Secondaire, à répondre aux besoins d'apprentissage de vos enfants.

Si vous devez vous rendre à plus de deux kilomètres du lieu de la réunion, je vous rembourserai vos frais de transport en utilisant les tarifs de transport locaux. Je vous fournirai des rafraîchissements pendant la réunion. Je vous donnerai une indemnité de

déjeuner de 5000 francs CFA en guise de remerciement pour votre temps. Vous recevrez les réactions sur l'étude sous forme de résumé à travers l'école.

**(9) Peut-il m'arriver quelque chose de mal?**

Il n'y a rien de connu de mauvais ou négatif qui puisse vous arriver en raison de votre participation à l'étude. Si vous trouvez la conversation difficile ou bouleversante, je vous dirigerai vers l'équipe d'orientation et de conseil du Lycée pour obtenir des conseils.

**(10) Puis-je parler de l'étude à d'autres personnes?**

Vous êtes libre de discuter de cette étude avec vos proches, vos amis ou d'autres personnes de votre choix.

**(11) Devrais-je participer à cette étude?**

C'est à vous de décider si vous devez ou non participer à cette étude. Remplir et signer le formulaire de consentement signifie que vous êtes intéressé à participer. Si vous ne l'êtes pas, vous n'êtes pas obligé de remplir ou de signer le formulaire de consentement ; et il n'y aura pas de problème.

**(12) Suis-je autorisé à arrêter ma participation si je n'aimerai pas continuer après avoir commencé?**

La participation à l'étude étant facultative, vous pouvez vous retirer de l'étude à tout moment sans indiquer les raisons de votre retrait. Toutefois, si vous décidez de vous retirer de l'entretien après le début de l'entretien, les informations que vous aurez fournies seront conservées.

**(13) Déclaration/signalement obligatoire**

*Le/la chercheur(e) peut ne pas être en mesure de conserver de manière confidentielle des informations sur des incidents de maltraitance ou de négligence connus ou raisonnablement soupçonnés, y compris, mais sans s'y limiter, de maltraitance ou de négligence physique, sexuelle, émotionnelle et financière. Si de telles informations sont fournies au chercheur, il/elle peut en informer les autorités.*

**(14) Avez-vous des questions sur l'étude?**

Si vous avez des questions sur l'étude, vous pouvez contacter le/la chercheur(e) à l'adresse, au numéro de téléphone ou à l'adresse électronique indiquée ci-dessous.

**(15) Que faire si j'ai une plainte ou des préoccupations?**

Le Comité d'éthique sur la recherche humaine de la Faculté des sciences de la santé de l'UCT peut être contacté au (+27) 021 406 6338 si vous avez des préoccupations éthiques

ou des questions concernant vos droits ou votre bien-être en tant que participant à cette étude de recherche. Vous pouvez me contacter ou contacter mon superviseur en utilisant les coordonnées ci-dessous.

*Merci d'avoir pris le temps de lire cette lettre ou de vous l'avoir fait lire.*

**Coordonnées du Chercheur**

**Nom:** Bridget Ateh Longla Fobuzie

**Adresse:** P.O.Box 426 Bamenda, région du Nord-ouest, Cameroun

**Téléphone:** +237 677985850

**Courriel:** bridgetfobuzie@yahoo.com

**Coordonnées du Superviseuse**

**Nom:** A/Prof. Judith McKenzie

**Courriel:** Judith.mckenzie@uct.ac.za

**Téléphone:** +27 (0)214066318

**Coordonnées du Président du Conseil de Comite D'Ethique des Ressources Humaines**

**Nom:** Professor Marc Blockman

**Courriel:** [hrecenquiries@uct.ac.za](mailto:hrecenquiries@uct.ac.za)

**Téléphone:** +27 (0) 216501236

## **Appendix 26: Appendix 26: French Letter of information/Invitation for Sighted Peers of Students with Vision Disability**

### **Lettre d'information / Invitation pour les Pairs Voyants des Apprenants avec Déficience Visuelle.**

**Titre de la recherche:** Étudier les Besoins d'Apprentissage des Apprenants avec Déficience Visuelle dans les Ecoles Ordinaires au Cameroun: Etude de cas d'une Ecole Secondaire.

Cher Participant,

Je m'appelle Bridget Longla Fobuzie, Doctorante à l'Université de Cape Town (UCT). Je réalise une étude sur les besoins d'apprentissage des étudiants avec déficience visuelle et sur la formation nécessaire des enseignants pour répondre à ces besoins. Cette lettre vous invite à prendre part à l'étude et à vous en parler afin que vous puissiez décider de votre participation ou non. Avant de vous décider, vous pouvez discuter de cette lettre avec l'un des membres de votre famille ou vos amis, ou avec toute autre personne de votre choix.

#### **(1) Qui mène la recherche?**

Je mène la recherche sous la supervision de la professeure associée Judith McKenzie de la Faculté des Sciences de la Santé, Département des Sciences de la Santé et de la Réadaptation de l'Université de Cape Town.

#### **(2) Qui participe à cette étude?**

La participation à cette étude est réservée aux élèves ayant une déficience visuelle, aux parents et aux aides/assistants des apprenants ayant une déficience visuelle, aux élèves voyants, aux enseignants du Lycée Classique de Bafoussam et au Proviseur du Lycée. Nous avons choisi ces groupes car nous pensons qu'ils disposent des informations nécessaires pour nous aider à répondre à nos questions de recherche.

#### **(3) Sur quoi l'étude porte-t-elle ?**

L'étude examine les besoins d'apprentissage des élèves ayant une déficience visuelle dans les collèges d'enseignement secondaire ordinaire au Cameroun et la formation nécessaire des enseignants pour répondre à ces besoins. Il n'y a pas assez d'informations sur le sujet en Afrique et votre contribution nous aidera à mieux la comprendre et à faire des

recommandations qui aideront à répondre aux besoins d'apprentissage des élèves ayant une déficience visuelle.

**(4) Comment vais-je participer à l'étude?**

Vous participerez à un entretien comme cinq autre élève avec une déficience visuelle. Je vous demanderai de donner votre point de vue sur les besoins d'apprentissage des élèves avec déficience visuelle dans une école ordinaire.

L'entretien aura lieu au Lycée Classique de Bafoussam. Je poserai les questions et modérerai la session. Mon collègue traduira les questions en Français si vous ne les comprenez pas en Anglais. Je prendrai des notes et enregistrerai les discussions du groupe à l'aide d'enregistreurs numériques afin de saisir avec précision toutes les informations qui seront partagées.

**(5) Combien de temps l'étude prendra-t-elle?**

La discussion de groupe prendra environ **une heure**.

**(6) Quelle langue vais-je utiliser?**

Vous vous entendrez avec les autres participants sur une langue commune à utiliser; Français ou Anglais

**(7) Où et comment l'information sera-t-elle conservée?**

Les informations partagées lors de la discussion de groupe seront tenues confidentielles conformément à un accord et à un code de conduite au sein du groupe. Les informations recueillies seront utilisées à des fins académiques, de plaidoyer et uniquement pour influencer les politiques. Je ne mentionnerai pas votre nom dans les rapports issus de la discussion de groupe. Après l'étude, je garderai les enregistrements dans un endroit uniquement accessible par moi. Je les détruirai au bout de cinq ans après la fin de la recherche.

**(8) Qu'est-ce que je gagne?**

Vous n'obtiendrez aucun gain direct. Cependant, les informations recueillies grâce à cette recherche vous aideront, ainsi que les parents et le Ministère de l'Enseignement Secondaire, à répondre aux besoins d'apprentissage de vos enfants.

Si vous devez vous rendre à plus de deux kilomètres du lieu de la réunion, je vous rembourserai vos frais de transport en utilisant les tarifs de transport locaux. Je vous fournirai des rafraîchissements pendant la réunion. Je vous donnerai une indemnité de

déjeuner de 5000 francs CFA en guise de remerciement pour votre temps. Vous recevrez les réactions sur l'étude sous forme de résumé à travers l'école.

**(9) Peut-il m'arriver quelque chose de mal?**

Il n'y a rien de connu de mauvais ou négatif qui puisse vous arriver en raison de votre participation à l'étude. Si vous trouvez la conversation difficile ou bouleversante, je vous dirigerai vers l'équipe d'orientation et de conseil du Lycée pour obtenir des conseils.

**(10) Puis-je parler de l'étude à d'autres personnes?**

Vous êtes libre de discuter de cette étude avec vos proches, vos amis ou d'autres personnes de votre choix.

**(11) Devrais-je participer à cette étude?**

C'est à vous de décider si vous devez ou non participer à cette étude. Remplir et signer le formulaire de consentement signifie que vous êtes intéressé à participer. Si vous ne l'êtes pas, vous n'êtes pas obligé de remplir ou de signer le formulaire de consentement ; et il n'y aura pas de problème.

**(12) Suis-je autorisé à arrêter ma participation si je n'aimerai pas continuer après avoir commencé?**

La participation à l'étude étant facultative, vous pouvez vous retirer de l'étude à tout moment sans indiquer les raisons de votre retrait. Toutefois, si vous décidez de vous retirer de l'entretien après le début de l'entretien, les informations que vous aurez fournies seront conservées.

**(13) Déclaration/signalement obligatoire**

*Le/la chercheur(e) peut ne pas être en mesure de conserver de manière confidentielle des informations sur des incidents de maltraitance ou de négligence connus ou raisonnablement soupçonnés, y compris, mais sans s'y limiter, de maltraitance ou de négligence physique, sexuelle, émotionnelle et financière. Si de telles informations sont fournies au chercheur, il/elle peut en informer les autorités.*

**(14) Avez-vous des questions sur l'étude?**

Si vous avez des questions sur l'étude, vous pouvez contacter le/la chercheur(e) à l'adresse, au numéro de téléphone ou à l'adresse électronique indiquée ci-dessous.

(15) **Que faire si j'ai une plainte ou des préoccupations?**

Le Comité d'éthique sur la recherche humaine de la Faculté des sciences de la santé de l'UCT peut être contacté au (+27) 021 406 6338 si vous avez des préoccupations éthiques ou des questions concernant vos droits ou votre bien-être en tant que participant à cette étude de recherche. Vous pouvez me contacter ou contacter mon superviseur en utilisant les coordonnées ci-dessous.

*Merci d'avoir pris le temps de lire cette lettre ou de vous l'avoir fait lire.*

**Coordonnées du Chercheur**

**Nom:** Bridget Ateh Longla Fobuzie

**Adresse:** P.O.Box 426 Bamenda, région du Nord-ouest, Cameroun

**Téléphone:** +237 677985850

**Courriel:** [bridgetfobuzie@yahoo.com](mailto:bridgetfobuzie@yahoo.com)

**Coordonnées du Superviseuse**

**Nom:** A/Prof. Judith McKenzie

**Courriel:** [Judith.mckenzie@uct.ac.za](mailto:Judith.mckenzie@uct.ac.za)

**Téléphone:** +27 (0)214066318

**Coordonnées du Président du Conseil de Comité D'Éthique des Ressources Humaines**

**Nom:** Professor Marc Blockman

**Courriel:** [hrecenquiries@uct.ac.za](mailto:hrecenquiries@uct.ac.za)

**Téléphone:** +27 (0) 216501236

## Appendix 27: French Consent Form for Teachers/Parents/Care givers/Students

### Formulaire de consentement pour les Enseignants / Parents / Assistants / Elèves

**Titre de la recherche:** Étudier Comment les Besoins d'Apprentissage des Apprenants Ayant une Déficience Visuelle Sont-ils Compris et Pris en Compte dans les Ecoles Secondaires Ordinaires au Cameroun: Etude de cas d'une Ecole Secondaire.

Je..... [IMPRIMER NOM],  
donne mon consentement pour ma participation à l'entretien individuel

En donnant mon consentement, je reconnais que: (veuillez cocher)

1. Les procédures requises pour l'entretien et le temps requis m'ont été expliqués et toutes les questions que j'ai sur le projet ont reçu une réponse satisfaisante. [ ]
2. J'ai lu la Lettre d'Information du Participant et j'ai eu la possibilité d'en discuter et de mon implication dans le projet avec le chercheur [ ].
3. Je comprends que participer à cette étude est totalement volontaire - je n'ai aucune obligation d'y consentir [ ].
4. Je comprends que mon implication est strictement confidentielle. Je comprends que toutes les données de recherche recueillies à partir des résultats de l'étude peuvent être publiées, mais aucune information sur moi ne sera utilisée de manière identifiable [ ].
5. Je comprends que je peux me retirer de l'étude à tout moment, sans affecter mes relations avec le ou les chercheurs, ni avec l'Université du Cap, maintenant ou à l'avenir. [ ].
6. Je comprends que je peux arrêter l'entretien à tout moment si je ne souhaite pas continuer, l'enregistrement audio sera effacé et les informations fournies ne seront pas incluses dans l'étude. [ ].
7. J'accepte l'enregistrement audio OUI  NON  (veuillez cocher une case)

Signature (participant) : .....

Date et lieu : .....

Signature

(chercheure) :

.....

Date

et

lieu :

.....

## **Appendix 28: French Letter of Information/Invitation for Key Informant**

### **Lettre d'information / Invitation pour Informateur Clé**

**Titre de la recherche:** Étudier les Besoins d'Apprentissage des Apprenants avec Déficience Visuelle dans les Ecoles Ordinaires au Cameroun: Etude de cas d'une Ecole Secondaire.

Cher Participant,

Je m'appelle Bridget Longla Fobuzie, Doctorante à l'Université de Cape Town (UCT). Je réalise une étude sur les besoins d'apprentissage des étudiants avec déficience visuelle et sur la formation nécessaire des enseignants pour répondre à ces besoins. Cette lettre vous invite à prendre part à l'étude et à vous en parler afin que vous puissiez décider de votre participation ou non. Avant de vous décider, vous pouvez discuter de cette lettre avec l'un des membres de votre famille ou vos amis, ou avec toute autre personne de votre choix.

#### **(1) Qui mène la recherche?**

Je mène la recherche sous la supervision de la professeure associée Judith McKenzie de la Faculté des Sciences de la Santé, Département des Sciences de la Santé et de la Réadaptation de l'Université de Cape Town.

#### **(2) Qui participe à cette étude?**

La participation à cette étude est réservée aux élèves ayant une déficience visuelle, aux parents et aux aides/assistants des apprenants ayant une déficience visuelle, aux élèves voyants, aux enseignants du Lycée Classique de Bafoussam et au Proviseur du Lycée. Nous avons choisi ces groupes car nous pensons qu'ils disposent des informations nécessaires pour nous aider à répondre à nos questions de recherche.

#### **(3) Sur quoi l'étude porte-t-elle ?**

L'étude examine les besoins d'apprentissage des élèves ayant une déficience visuelle dans les collèges d'enseignement secondaire ordinaire au Cameroun et la formation nécessaire des enseignants pour répondre à ces besoins. Il n'y a pas assez d'informations sur le sujet en Afrique et votre contribution nous aidera à mieux la comprendre et à faire des recommandations qui aideront à répondre aux besoins d'apprentissage des élèves ayant une déficience visuelle.

#### **(4) Comment vais-je participer à l'étude?**

Vous participerez à un entretien individuel en tant qu'informateur clé. Je vais vous demander de parler de vos points de vue sur les besoins d'apprentissage des élèves ayant une déficience visuelle.

Je poserai les questions et modérerai la session. Mon collègue fera la traduction entre vous et moi si besoin est. Je prendrai des notes et enregistrerai l'entretien avec des enregistreurs numériques afin de saisir avec précision toutes les informations qui seront partagées.

**(5) Combien de temps l'étude prendra-t-elle?**

L'entretien prendra environ une heure.

**(6) Quelle langue vais-je utiliser?**

You use either French or English

Vous utilisez le Français ou l'Anglais

**(7) Où et comment l'information sera-t-elle conservée?**

L'information partagée lors de l'entretien restera confidentielle conformément à un accord et à un code de conduite au sein du groupe. L'information recueillie sera utilisée à des fins académiques, de plaidoyer et uniquement pour influencer les politiques. Je ne mentionnerai pas votre nom dans les rapports issus de l'entretien. Après l'étude, je garderai les enregistrements dans un endroit uniquement accessible par moi. Je les détruirai au bout de cinq ans après la fin de la recherche.

**(8) Qu'est-ce que je gagne?**

Vous n'obtiendrez aucun gain direct. Cependant, les informations recueillies grâce à cette recherche vous aideront, les enseignants et le Ministère de l'Enseignement Secondaire, à répondre aux besoins d'apprentissage de vos élèves. Je vous donnerai les résultats de l'étude sous forme de résumé.

**(9) Peut-il m'arriver quelque chose de mal?**

Il n'y a rien de connu de mauvais ou négatif qui puisse vous arriver en raison de votre participation à l'étude. Si vous trouvez la conversation difficile ou bouleversante, je vous dirigerai vers l'équipe d'orientation et de conseil du Lycée pour obtenir des conseils.

**(10) Puis-je parler de l'étude à d'autres personnes?**

Vous êtes libre de discuter de cette étude avec vos proches, vos amis ou d'autres personnes de votre choix.

**(11) Devrais-je participer à cette étude?**

C'est à vous de décider si vous devez ou non participer à cette étude. Remplir et signer le formulaire de consentement signifie que vous êtes intéressé à participer. Si vous ne l'êtes pas, vous n'êtes pas obligé de remplir ou de signer le formulaire de consentement ; et il n'y aura pas de problème.

**(12) Suis-je autorisé à arrêter ma participation si je n'aimerais pas continuer après avoir commencé**

La participation à l'étude étant facultative, vous pouvez vous retirer de l'étude à tout moment sans indiquer les raisons de votre retrait. Toutefois, si vous décidez de vous retirer du groupe de discussion après le début de la discussion, les informations que vous aurez fournies seront conservées.

**(13) Déclaration/signalement obligatoire**

*Le/la chercheur(e) peut ne pas être en mesure de conserver de manière confidentielle des informations sur des incidents de maltraitance ou de négligence connus ou raisonnablement soupçonnés, y compris, mais sans s'y limiter, de maltraitance ou de négligence physique, sexuelle, émotionnelle et financière. Si de telles informations sont fournies au chercheur, il/elle peut en informer les autorités.*

**(14) Avez-vous des questions sur l'étude?**

Si vous avez des questions sur l'étude, vous pouvez contacter le/la chercheur(e) à l'adresse, au numéro de téléphone ou à l'adresse électronique indiquée ci-dessous.

**(15) Que faire si j'ai une plainte ou des préoccupations?**

Le Comité d'éthique sur la recherche humaine de la Faculté des sciences de la santé de l'UCT peut être contacté au (+27) 021 406 6338 si vous avez des préoccupations éthiques ou des questions concernant vos droits ou votre bien-être en tant que participant à cette étude de recherche. Vous pouvez me contacter ou contacter mon superviseur en utilisant les coordonnées ci-dessous.

*Merci d'avoir pris le temps de lire cette lettre ou de vous l'avoir fait lire.*

**Coordonnées du Chercheur**

**Nom:** Bridget Ateh Longla Fobuzie

**Adresse:** P.O.Box 426 Bamenda, région du Nord-ouest, Cameroun

**Téléphone:** +237 677985850

**Courriel:** bridgetfobuzie@yahoo.com

**Coordonnées du Superviseuse**

**Nom:** A/Prof. Judith McKenzie

**Courriel:** Judith.mckenzie@uct.ac.za

**Téléphone:** +27 (0)214066318

**Coordonnées du President du Conseil de Comite D’Ethique des Ressources Humaines**

**Nom:** Professor Marc Blockman

**Courriel:** [hrecenquiries@uct.ac.za](mailto:hrecenquiries@uct.ac.za)

**Téléphone:** +27 (0) 216501236

**Appendix 29: French Consent Form for Key Informant**

**Formulaire de Consentement pour Informateur Clé**

**Titre de la recherche:** Étudier les Besoins d’Apprentissage des Apprenants avec Déficience Visuelle dans les Ecoles Ordinaires au Cameroun: Etude de cas d’une Ecole Secondaire.

Je..... [IMPRIMER NOM], donne mon consentement pour ma participation à l’entretien individuel

En donnant mon consentement, je reconnais que: (veuillez cocher)

1. Les procédures requises pour l'entretien et le temps requis m'ont été expliqués et toutes les questions que j'ai sur le projet ont reçu une réponse satisfaisante. [ ].
2. J'ai lu la Lettre d'Information du Participant et j'ai eu la possibilité d'en discuter et de mon implication dans le projet avec le chercheur [ ].
3. Je comprends que participer à cette étude est totalement volontaire - je n'ai aucune obligation d'y consentir [ ].
4. Je comprends que mon implication est strictement confidentielle. Je comprends que toutes les données de recherche recueillies à partir des résultats de l'étude peuvent être publiées, mais aucune information sur moi ne sera utilisée de manière identifiable [ ].
5. Je comprends que je peux me retirer de l'étude à tout moment, sans affecter mes relations avec le ou les chercheurs, ni avec l'Université du Cap, maintenant ou à l'avenir. [ ].
6. Je comprends que je peux arrêter l'entretien à tout moment si je ne souhaite pas continuer, l'enregistrement audio sera effacé et les informations fournies ne seront pas incluses dans l'étude. [ ].
7. J'accepte l'enregistrement audio      OUI         NON         (veuillez cocher une case)

Signature (participant) :.....

Date et lieu : .....

Signature (chercheur) : .....

Date et lieu : .....

**French Interview Guide for Mainstream Teachers Appendix 30: French Interview Guide for Mainstream Teachers**  
**Guide d'Entretien pour les Enseignants**

**A. Informations de Base**

Heure: \_\_\_\_\_ Date: \_\_\_\_\_ lieu: \_\_\_\_\_

\_\_\_\_\_  
Nom \_\_\_\_\_ du \_\_\_\_\_ Facilitateur: \_\_\_\_\_

\_\_\_\_\_  
Nom \_\_\_\_\_ du \_\_\_\_\_ Groupe: \_\_\_\_\_

\_\_\_\_\_  
Classes \_\_\_\_\_ Enseignées: \_\_\_\_\_

\_\_\_\_\_  
Nombre d'élèves inscrits : \_\_\_\_\_ Garçons: \_\_\_\_\_ Filles: \_\_\_\_\_

\_\_\_\_\_  
Nombre d'élèves ayant une déficience visuelle : \_\_\_\_\_ Garçons : \_\_\_\_\_ Filles : \_\_\_\_\_

\_\_\_\_\_  
Nom \_\_\_\_\_ de \_\_\_\_\_ l'enregistrement \_\_\_\_\_ audio \_\_\_\_\_

**B. Introduction**

1. Me présenter: Je m'appelle Bridget Longla Fobuzie, doctorante à l'Université de Cape Town (UCT). Je mène une étude sur la manière dont les besoins d'apprentissage des apprenants avec handicaps visuels sont compris et pris en compte dans les écoles secondaires ordinaires au Cameroun.
2. Le but de l'étude est de rechercher comment les besoins d'apprentissage des apprenants ayant une déficience visuelle sont compris et pris en compte dans les écoles secondaires ordinaires au Cameroun. (Sonder: assurez-vous d'avoir une signature de consentement éclairé).
3. Il n'y a pas de bonnes ou de mauvaises réponses. Vous pouvez choisir de répondre en Anglais ou en Français. J'enregistrerai l'entretien afin de saisir toutes vos réponses. Je prendrai également des notes pendant que vous parlez. L'entretien durera environ une heure.
4. Assurer la confidentialité: Les informations partagées lors de l'entretien resteront confidentielles selon un accord et un code de conduite au sein du groupe. Les

informations recueillies seront utilisées à des fins académiques, de plaider et pour influencer la politique uniquement. Je ne mentionnerai pas votre nom dans les rapports issus du Groupe de Discussion. Après l'étude, je verrouillerai les enregistrements dans un endroit uniquement accessible par moi. Je les détruirai cinq ans après la fin de la recherche.

5. Avez-vous des questions?

### C. Questions de l'entretien

6. Dites-moi ce que vous entendez par déficience visuelle? (Approfondir: dites-m'en plus, veuillez expliquer)
7. Parlez-moi de votre expérience d'enseignement des élèves ayant une déficience visuelle. (Approfondir: dites-m'en plus, veuillez expliquer. Planification et préparation de vos cours, les faire participer pendant vos cours, juger et évaluer leur travail)
8. Quels défis, s'il y en a, rencontrez-vous dans l'enseignement des élèves ayant une déficience visuelle aux côtés des élèves voyants? (Approfondir: dites-m'en plus, veuillez expliquer)
9. Comment comprenez-vous les besoins d'apprentissage des élèves ayant une déficience visuelle? (Approfondir: dites-m'en plus, veuillez expliquer)
10. Comment évaluez-vous ou identifiez-vous les besoins d'apprentissage des élèves ayant une déficience visuelle dans votre classe? (Approfondir: veuillez m'en dire plus, expliquer s'il vous plaît).
11. Quelles stratégies utilisez-vous pour répondre à ces besoins d'apprentissage? (Approfondir: dites-m'en plus, veuillez expliquer)
12. Quels facteurs influencent ou selon vous quels facteurs influencent la façon dont vous répondez aux besoins des apprenants ayant une déficience visuelle? (Approfondir: disponibilité de ressources d'enseignement / d'apprentissage dans des formats accessibles, soutien de la salle des ressources, soutien de l'administration de l'école, flexibilité du programme scolaire, disponibilité du temps, renforcement des capacités pour enseigner les apprenants ayant une déficience visuelle)
13. Quels sont les catalyseurs / défis qui influencent ou qui, selon vous, influencent la façon dont vous répondez aux besoins d'apprentissage des élèves ayant une

déficience visuelle? (Approfondir: veuillez m'en dire plus, veuillez expliquer, attitude des élèves envers l'apprentissage, implication des parents)

14. Avez-vous reçu une formation sur la façon de répondre aux besoins d'apprentissage des élèves ayant une déficience visuelle? {Approfondir: veuillez m'en dire plus)
15. Pensez-vous avoir besoin d'une formation sur la manière de répondre aux besoins d'apprentissage des élèves ayant une déficience visuelle dans les écoles ordinaires? (Approfondir: veuillez nommer les domaines spécifiques dans lesquels vous pourriez avoir besoin d'une amélioration de la capacité)
16. Souhaitez-vous ajouter quelque chose au sujet de votre stratégie visant à répondre aux besoins d'apprentissage de vos élèves ayant une déficience visuelle?

#### **D. Remarques de clôture**

1. Demandez si les enseignants ont des questions.
2. Remerciez-les et réitérez le code de conduite du groupe sur la confidentialité.
3. Régler les questions logistiques.

## Appendix 31: French Interview Guide for Students with Vision Disability

### Guide d'entretien pour les élèves ayant une déficience visuelle

#### A. Informations de Base

Heure: \_\_\_\_\_ Date: \_\_\_\_\_ Lieu: \_\_\_\_\_

Nom \_\_\_\_\_ du \_\_\_\_\_ Facilitateur: \_\_\_\_\_

Nom \_\_\_\_\_ de \_\_\_\_\_ l'élève: \_\_\_\_\_

—

Nom \_\_\_\_\_ de \_\_\_\_\_ l'enregistrement \_\_\_\_\_ audio \_\_\_\_\_ :

#### B. Introduction

1. Me présenter en tant que chercheur.
2. Donner le but de l'étude – rechercher comment les besoins d'apprentissage des apprenants ayant une déficience visuelle sont compris et pris en compte dans les écoles secondaires ordinaires au Cameroun. (Approfondir: assurez-vous d'avoir une signature de consentement éclairé).
3. Donner la structure de l'entretien (pas de bonne ou mauvaise réponse, enregistrement audio, prise de notes, une heure, accord sur la langue à utiliser).
4. Assurer la confidentialité.
5. Demander si les élèves ont des questions.
6. Remplissez les informations suivantes concernant les élèves: âge, sexe, religion, situation géographique, type de handicap, nombre de frères et sœurs, handicap et sexe du frère ou des frères et sœurs, origine ethnique, type de famille (élargie ou nucléaire), classe et nombre d'années à l'école, type de perte de vision c.-à-d. congénitale ou acquise

#### C. Questions de l'entretien

7. Parlez-moi de votre expérience de scolarité au Lycée Classique de Bafoussam. (Approfondir: dites-m'en plus, veuillez expliquer)

- Parlez-moi de votre journée typique à l'école. (Approfondir: dites-m'en plus, veuillez expliquer)
8. Quels défis, s'il y en a, rencontrez-vous dans une école ordinaire comme celle-ci? (Approfondir: dites-m'en plus, veuillez expliquer, attitudes des enseignants et des autres élèves, se promener dans l'école? Participer à toutes les activités de l'école, temps de pause)
  9. Quels sont vos besoins d'apprentissage ou que considérez-vous comme vos besoins d'apprentissage? (Approfondir:
    - Accessibilité du matériel d'enseignement / d'apprentissage
    - Accessibilité des pratiques d'enseignement et d'apprentissage.
    - Accessibilité des éléments et processus d'évaluation.
    - Disponibilité du matériel d'enseignement / d'apprentissage en braille et dans d'autres formats accessibles)
  10. En quoi vos besoins d'apprentissage sont-ils différents ou similaires à ceux de vos pairs voyants?
  11. Comment vos enseignants répondent-ils à vos besoins d'apprentissage (questions)
    - Inclusion/prise en compte
    - Modifications
    - Temps supplémentaire
    - Gestion de la salle de classe
    - Participation des élèves
    - Interactions entre pairs
    - Interactions enseignant / élève
    - Évaluations
  12. Quels sont les facteurs qui contribuent ou qui, selon vous, contribuent à la manière dont vos enseignants répondent à vos besoins d'apprentissage? (Questions: catalyseurs, défis. Pourriez-vous s'il vous plaît expliquer votre réponse? Quels sont les autres défis?)
  13. Comment vos parents répondent-ils à vos besoins d'apprentissage ou comment pensez-vous que vos parents devraient répondre à vos besoins d'apprentissage? (Approfondir:  
Fourniture de matériel scolaire  
Participation aux réunions APE)

14. Qui d'autre peut ou qui, selon vous, peut contribuer à répondre à vos besoins d'apprentissage et comment? (Approfondir: dites-m'en plus, veuillez expliquer)
15. Souhaitez-vous ajouter quelque chose au sujet des besoins d'apprentissage des élèves ayant une déficience visuelle?

#### **D. Remarques de clôture**

1. Demander si les élèves ont des questions.
2. Remerciez-les et réitérez le code de conduite du groupe sur la confidentialité.
3. Régler les problèmes logistiques.

## **Appendix 32: French Request for Conducting Research at Lycee Classique**

### **Demande d'Approbation pour Mener une Recherche dans une Ecole**

Bridget Ateh Longla Fobuzie  
Faculte des Sciences de la Sante  
Universite du Cap  
Afrque du Sud  
Le Délégué Régional de l'Enseignement Secondaire  
Région de l'Ouest  
Cameroun

Cher Monsieur / Madame,

#### **DEMANDE D'APPROBATION POUR MENER UNE RECHERCHE AU LYCEE CLASSIQUE DE BAFOUSSAM**

Je m'appelle Bridget Ateh Longla Fobuzie, Camerounaise et doctorante à l'université de Cape Town en Afrique du Sud. Je mène une recherche intitulée 'Étudier les Besoins d'Apprentissage des Apprenants avec Déficience Visuelle dans les Ecoles Ordinaires au Cameroun: Etude de cas d'une Ecole Secondaire, pour répondre aux exigences de mes études en vue d'obtenir un doctorat en études sur le handicap. L'étude est placée sous la supervision de la professeure agrégée Judith McKenzie de la Faculté des Sciences de la Santé de l'Université du Cap.

Je viens par la présente solliciter votre approbation pour contacter le Lycée Classique de Bafoussam dans la Région de l'Ouest. Votre approbation me permettra de rentrer en contact avec le Proviseur, six enseignants, six élèves avec déficience visuelle, six élèves voyants, six enseignants ressources, des documents scolaires, et observer la dispensation de six leçons afin de recueillir les données pour ce projet. Le Proviseur participera à un entretien d'une durée maximale d'une heure, tandis que chacun des six enseignants participera également à des entretiens individuels d'une heure. Les enseignants-ressources et les élèves participeront à des discussions de groupe distinctes (une pour chaque groupe) pendant une heure au maximum. Ils ne participeront que s'ils donnent leur consentement

éclairé. La réunion avec les élèves avec déficience visuelle lieu au CISPAM, tandis que les autres réunions auront lieu au Lycée Classique de Bafoussam.

Ci-joint, une copie de l'autorisation qui m'a été octroyée par le Comité d'Ethique sur la recherche Humaine de la Faculté des Sciences de la Santé de l'Université du Cap me permettant de mener la recherche.

Pour plus d'informations, veuillez me contacter au +237677985850.

Merci pour votre temps et votre considération dans cette affaire.

Cordialement,

Bridget Ateh Longla Fobuzie  
Université du Cap.

## Appendix 33: French Focus Group Guide for Parents and Caregivers

### Guide de la discussion de groupe pour les parents / assistants

#### A. Informations de base

Heure: \_\_\_\_\_ Date: \_\_\_\_\_ Lieu: \_\_\_\_\_

\_\_\_\_\_  
Nom du facilitateur/Animateur

\_\_\_\_\_  
Nom du Groupe:

\_\_\_\_\_  
Désignation enregistrement audio:

#### B. Présentation

1. Je me présente: je m'appelle Bridget Longla Fobuzie, doctorante à l'Université du Cap (UCT). Je réalise une étude sur les besoins d'apprentissage des élèves avec déficience visuelle et sur la formation des enseignants nécessaire pour répondre à ces besoins.
2. Le but de cette étude est d'enquêter sur les besoins d'apprentissage des apprenants avec déficience visuelle dans les écoles secondaires ordinaires au Cameroun (Question d'exploration: assurez-vous d'obtenir le consentement signé après avoir éclairé le participant).
3. Il n'y a pas de bonne ou de mauvaise réponse. Vous pouvez choisir de répondre en Anglais ou en Français. Je vais enregistrer l'entretien afin de saisir toutes vos réponses. Je vais aussi prendre des notes pendant que vous parlez. L'entretien va durer environ une heure.
4. Assurer la confidentialité: les informations partagées au cours de la discussion resteront confidentielles conformément à un accord et à un code de conduite au sein du groupe. Les informations recueillies seront utilisées à des fins académiques, de plaidoyer et uniquement pour influencer les politiques. Je ne mentionnerai pas votre nom dans les rapports issus de la discussion. Après l'étude, je garderai les enregistrements dans un endroit uniquement accessible par moi. Je les détruirai au bout de cinq ans après la fin de la recherche.
5. Avez-vous des questions?

### **C. Questions du Groupe de discussion**

9. Selon vous, quels sont les besoins d'apprentissage de votre enfant vivant avec handicap à l'école? Approfondir: Dites m'en plus, expliquez s'il vous plaît, en quoi ces besoins sont différents de ses besoins à la maison et dans la communauté? S'il vous plaît, expliquez.
10. Comment répondez-vous aux besoins d'apprentissage de votre enfant vivant avec handicap? (Explorer: besoins psychosociaux matériels, dites m'en plus, expliquez s'il vous plaît, en quoi ce soutien est-il différent de celui fourni par les enseignants?)
11. Quels sont les facteurs qui contribuent, ou qui selon vous, contribuent à la manière dont vous soutenez l'apprentissage de votre enfant? (explorer: catalyseurs, défis, à la maison, à l'école, pourriez-vous expliquer davantage votre réponse? Quels sont les autres catalyseurs / défis? En quoi ces défis diffèrent-ils de ceux auxquels font face les enseignants?)
12. Voulez-vous ajouter quelque chose à propos de votre implication dans la satisfaction des besoins d'apprentissage de votre enfant?

## Appendix 34: French Interview Guide for Resource Teachers

### Guide d'entretien des Enseignants-ressources

#### A. Informations de base

Heure: \_\_\_\_\_ Date: \_\_\_\_\_ Lieu: \_\_\_\_\_

\_\_\_\_\_  
Nom du Facilitateur:

\_\_\_\_\_  
Nom du Groupe:

\_\_\_\_\_  
Désignation enregistrement audio:

#### B. Présentation

1. Je me présente: je m'appelle Bridget Longla Fobuzie, doctorante à l'Université du Cap (UCT). Je réalise une étude sur les besoins d'apprentissage des élèves avec déficience visuelle et sur la formation des enseignants nécessaire pour répondre à ces besoins.
2. Le but de cette étude est d'enquêter sur les besoins d'apprentissage des apprenants avec déficience visuelle dans les écoles secondaires ordinaires au Cameroun (Question d'exploration: assurez-vous d'obtenir le consentement signé après avoir éclairé le participant).
3. Il n'y a pas de bonne ou de mauvaise réponse. Vous pouvez choisir de répondre en Anglais ou en Français. Je vais enregistrer l'entretien afin de saisir toutes vos réponses. Je vais aussi prendre des notes pendant que vous parlez. L'entretien va durer environ une heure.
4. Assurer la confidentialité: les informations partagées lors de la discussion seront gardées confidentielles conformément à un accord et à un code de conduite au sein du groupe. Les informations recueillies seront utilisées à des fins académiques, de plaidoyer et uniquement pour influencer les politiques. Je ne mentionnerai pas votre nom dans les rapports issus du groupe de discussion. Après l'étude, je garderai les enregistrements dans un endroit uniquement accessible par moi. Je les détruirai au bout de cinq ans après la fin de la recherche.

5. Avez-vous des questions?
6. Me présenter en tant que chercheur.
7. Indiquez le but de l'étude – Etudier les besoins d'apprentissage des apprenants avec déficience visuelle dans les écoles secondaires ordinaires au Cameroun (Question d'exploration: assurez-vous d'obtenir le consentement signé après avoir éclairé le participant).
8. Indiquez la structure de la discussion de groupe (pas de bonne ou mauvaise réponse, enregistrement audio, prise de notes, une heure, s'accorder sur la langue à utiliser).
9. Assurer la confidentialité.
10. Demander si les enseignants-ressources ont des questions.
11. Remplissez les informations suivantes sur les enseignants ressources: âge, sexe, religion, nombre d'enfants, type de handicap et sexe de l'enfant ou des enfants, localisation géographique, niveau d'éducation, origine ethnique, statut et type de mariage, type de famille (élargi ou nucléaire), invalidité, statut professionnel, type d'emploi et revenu mensuel.

### **C. Questions du Groupe de Discussion**

1. Quels sont, selon vous, les besoins d'apprentissage des élèves ayant une déficience visuelle? (Explorer: dites-m 'en plus, veuillez expliquer. Performance des élèves, interaction en classe, apprentissage autonome, disponibilité du matériel scolaire, implication des parents dans l'éducation des élèves)
2. Comment répondez-vous aux besoins d'apprentissage des élèves avec déficience visuelle dans votre classe? (Approfondir : S'il vous plaît dites-moi plus, expliquez s'il vous plaît).
3. Quels facteurs influencent ou quels facteurs selon vous influent la manière dont vous répondez aux besoins des apprenants avec déficience visuelle? (Approfondir: disponibilité des ressources d'enseignement / d'apprentissage dans des formats accessibles, soutien de la salle des ressources, soutien de la direction de l'école, flexibilité du programme scolaire, temps disponible, développement des capacités pour enseigner les apprenants avec déficience visuelle)
4. Quels sont les catalyseurs / défis qui influencent ou qui, selon vous, influent sur la manière dont vous répondez aux besoins d'apprentissage des élèves ayant une

déficience visuelle? (Approfondir: dites-m 'en plus, expliquez s'il vous plaît, attitude des élèves vis-à-vis de l'apprentissage, implication des parents)

16. Voulez-vous ajouter quelque chose à propos de votre stratégie visant à répondre aux besoins d'apprentissage de vos élèves ayant une déficience visuelle?

**Appendix 35: French interview Guide for Students with Vision Disability**  
**Guide de l'entretien individuelle des élèves avec déficience visuelle**

**A. Information de Base**

Heure \_\_\_\_\_ Date: \_\_\_\_\_ Lieu:  
\_\_\_\_\_  
Nom \_\_\_\_\_ du \_\_\_\_\_ Facilitateur:  
\_\_\_\_\_  
Groupe \_\_\_\_\_ de \_\_\_\_\_ Participants  
\_\_\_\_\_  
Désignation \_\_\_\_\_ enregistrement \_\_\_\_\_ audio:  
\_\_\_\_\_

**B Présentation**

1. Je me présente: je m'appelle Bridget Longla Fobuzie, doctorante à l'Université du Cap (UCT). Je réalise une étude sur les besoins d'apprentissage des élèves avec déficience visuelle et sur la formation des enseignants nécessaire pour répondre à ces besoins.
2. Le but de cette étude est d'enquêter sur les besoins d'apprentissage des apprenants avec déficience visuelle dans les écoles secondaires ordinaires au Cameroun (Question d'exploration: assurez-vous d'obtenir le consentement signé après avoir éclairé le participant).
3. Il n'y a pas de bonne ou de mauvaise réponse. Vous pouvez choisir de répondre en Anglais ou en Français. Je vais enregistrer l'entretien afin de saisir toutes vos réponses. Je vais aussi prendre des notes pendant que vous parlez. L'entretien va durer environ une heure.
4. Assurer la confidentialité: les informations partagées lors de la discussion seront gardées confidentielles conformément à un accord et à un code de conduite au sein du groupe. Les informations recueillies seront utilisées à des fins académiques, de plaidoyer et uniquement pour influencer les politiques. Je ne mentionnerai pas votre nom dans les rapports issus du groupe de discussion. Après l'étude, je garderai les

enregistrements dans un endroit uniquement accessible par moi. Je les détruirai au bout de cinq ans après la fin de la recherche.

5. Avez-vous des questions?

## **B. Questions du Groupe de Discussion**

1. Quels sont vos besoins d'apprentissage ou quels sont, selon vous, vos besoins d'apprentissage? (Explorer: frais de scolarité, nourriture, accès au programme scolaire, accès au matériel d'enseignement / d'apprentissage, disponibilité du matériel scolaire, soutien des enseignants, enseignants-ressources, administration de l'école, soutien psychosocial, parents)
2. Comment ces besoins sont-ils satisfaits par vos parents? (Explorer: s'il vous plaît expliquer, s'il vous plaît dites-moi plus)
3. Comment ces besoins sont-ils satisfaits par vos enseignants et les enseignants de soutien? (Explorer: vous incluant à des activités d'apprentissage, présentant des leçons de manière accessible, modifiant votre évaluation et vos éléments d'évaluation pour vous les présenter dans des formats accessibles, une aide personnalisée en classe. Veuillez m'en dire plus, veuillez expliquer.)
4. Selon vous, quels sont les facteurs qui permettent à vos enseignants de répondre à vos besoins d'apprentissage? (Explorer: catalyseurs, défis. Pourriez-vous s'il vous plaît expliquer davantage votre réponse?)
5. Que voudriez-vous que vos professeurs fassent de plus pour répondre à vos besoins d'apprentissage? (Explorer: académiques, psychosociaux, expliquez votre réponse, dites m'en plus)
6. Comment vos besoins d'apprentissage sont-ils satisfaits par vos pairs voyants? (Explorer: attitudes, soutien psychosocial, volonté d'être des amis d'apprentissage, interactions continue en classe, donner un exemple? Dites-m 'en plus?)
7. Que voudriez-vous que vos pairs fassent de plus pour répondre à vos besoins d'apprentissage? (Explorer: en classe, à la récréation, merci de m'en dire plus)
8. Voulez-vous ajouter quelque chose à propos de la manière dont vous souhaiteriez que vos besoins en matière d'apprentissage soient satisfaits?

## Appendix 36: French Focus Group Discussion Guide for Sighted Peers of Students with Vision Disability

### Guide de la Discussion de Groupe pour les Elèves Voyants

#### A. Information de Base

Heure: \_\_\_\_\_ Date: \_\_\_\_\_ Lieu: \_\_\_\_\_

Nom \_\_\_\_\_ du \_\_\_\_\_ Facilitateur: \_\_\_\_\_

Groupe \_\_\_\_\_ de \_\_\_\_\_ Participants \_\_\_\_\_

Désignation \_\_\_\_\_ enregistrement \_\_\_\_\_ audio: \_\_\_\_\_

#### B. Présentation

1. Je me présente: je m'appelle Bridget Longla Fobuzie, doctorante à l'Université du Cap (UCT). Je réalise une étude sur les besoins d'apprentissage des élèves avec déficience visuelle et sur la formation des enseignants nécessaire pour répondre à ces besoins.
2. Le but de cette étude est d'enquêter sur les besoins d'apprentissage des apprenants avec déficience visuelle dans les écoles secondaires ordinaires au Cameroun (Question d'exploration: assurez-vous d'obtenir le consentement signé après avoir éclairé le participant).
3. Il n'y a pas de bonne ou de mauvaise réponse. Vous pouvez choisir de répondre en Anglais ou en Français. Je vais enregistrer l'entretien afin de saisir toutes vos réponses. Je vais aussi prendre des notes pendant que vous parlez. L'entretien va durer environ une heure.
4. Assurer la confidentialité: les informations partagées lors de la discussion seront gardées confidentielles conformément à un accord et à un code de conduite au sein du groupe. Les informations recueillies seront utilisées à des fins académiques, de plaidoyer et uniquement pour influencer les politiques. Je ne mentionnerai pas votre nom dans les rapports issus du groupe de discussion. Après l'étude, je garderai les

enregistrements dans un endroit uniquement accessible par moi. Je les détruirai au bout de cinq ans après la fin de la recherche.

5. Avez-vous des questions?

### **C. Questions du Groupe de Discussion**

10. Quels sont les besoins d'apprentissage ou quels sont, selon vous, les besoins d'apprentissage des élèves ayant une déficience visuelle? (Explorer: frais de scolarité, nourriture, accès au programme scolaire, accès au matériel d'enseignement / d'apprentissage, disponibilité du matériel scolaire, soutien des enseignants, enseignants-ressources, administration de l'école, soutien psychosocial, parents)
11. Comment ces besoins sont-ils satisfaits par leurs parents? (Explorer: s'il vous plaît expliquer, s'il vous plaît dites-moi plus)
12. Comment ces besoins sont-ils satisfaits par les enseignants et les enseignants de soutien? (Explorer: les inclure dans les activités d'apprentissage, présenter les leçons de manière accessible, modifier leur évaluation et les éléments d'évaluation et les leur présenter sous une forme accessible, un soutien personnalisé en classe. Dites-m 'en plus, expliquez.)
13. Selon vous, quels sont les facteurs qui permettent aux enseignants de répondre à leurs besoins d'apprentissage? (Explorer: catalyseurs, défis. Pourriez-vous s'il vous plaît expliquer davantage votre réponse?)
14. Que pensez-vous que les enseignants pourraient faire de plus pour répondre à leurs besoins d'apprentissage? (Explorer: académiques, psychosociaux, expliquez votre réponse, dites m'en plus)
15. Comment répondez-vous aux besoins d'apprentissage de vos pairs ayant une déficience visuelle? (Explorer: attitudes, soutien psychosocial, volonté d'être des amis d'apprentissage, interactions continue en classe, un exemple de cela? Dites-m 'en plus?)
16. Voulez-vous ajouter quelque chose à propos de la manière dont vous pourriez répondre aux besoins d'apprentissage de vos pairs ayant une déficience visuelle?

## Appendix 37: French Key Informant Interview Guide

### Guide d'entretien avec les informateurs clés

#### A. Information de Base

Heure: \_\_\_\_\_ Date: \_\_\_\_\_ Lieu: \_\_\_\_\_

Nom \_\_\_\_\_ de \_\_\_\_\_ l'intervieweur:

Nom \_\_\_\_\_ de \_\_\_\_\_ l'Interviewee

Désignation \_\_\_\_\_ enregistrement \_\_\_\_\_ audio: \_\_\_\_\_

#### B. Présentation

1. Je me présente: je m'appelle Bridget Longla Fobuzie, doctorante à l'Université du Cap (UCT). Je réalise une étude sur les besoins d'apprentissage des élèves avec déficience visuelle et sur la formation des enseignants nécessaire pour répondre à ces besoins.
2. Le but de cette étude est d'enquêter sur les besoins d'apprentissage des apprenants avec déficience visuelle dans les écoles secondaires ordinaires au Cameroun (Question d'exploration: assurez-vous d'obtenir le consentement signé après avoir éclairé le participant).
3. Il n'y a pas de bonne ou de mauvaise réponse. Vous pouvez choisir de répondre en Anglais ou en Français. Je vais enregistrer l'entretien afin de saisir toutes vos réponses. Je vais aussi prendre des notes pendant que vous parlez. L'entretien va durer environ une heure.
4. Assurer la confidentialité: les informations partagées lors de l'entretien seront gardées confidentielles conformément à un accord et à un code de conduite au sein du groupe. Les informations recueillies seront utilisées à des fins académiques, de plaidoyer et uniquement pour influencer les politiques. Je ne mentionnerai pas votre nom dans les rapports issus de l'entretien. Après l'étude, je garderai les enregistrements dans un

5. endroit uniquement accessible par moi. Je les détruirai au bout de cinq ans après la fin de la recherche.
6. Avez-vous des questions?

### **C. Questions de l'entretien**

17. Quels sont les besoins d'apprentissage ou quels sont, selon vous, les besoins d'apprentissage des élèves ayant une déficience visuelle dans votre école? (Explorer: En quoi les besoins des élèves ayant une déficience visuelle sont-ils différents ou similaires à ceux de leurs pairs voyants?)
18. Comment les parents et les enseignants répondent-ils aux besoins d'apprentissage ou comment pensez-vous que les enseignants et les parents devraient répondre aux besoins d'apprentissage des élèves ayant une déficience visuelle?
19. Comment répondez-vous aux besoins d'apprentissage des élèves ayant une déficience visuelle?
20. Quels sont les facteurs qui contribuent ou qui, selon vous, contribuent à répondre aux besoins d'apprentissage des élèves ayant une déficience visuelle? (Explorer: catalyseurs, défis. Pourriez-vous expliquer votre réponse plus en détail? Quels sont les autres défis? Dans quelle mesure vos défis sont-ils différents de ceux des enseignants et des enseignants-ressources?)

Voulez-vous ajouter quelque chose à propos des besoins d'apprentissage des élèves ayant une déficience visuelle?