DEPARTMENT OF EDUCATIONAL FOUNDATIONS MASTER OF EDUCATION IN CURRICULUM AND INSTRUCTION TEACHERS' RESPONSIVENESS TO LEARNERS WITH LEARNING BARRIERS (VISUAL IMPAIRMENT): A CASE STUDY DESIGN

 \mathbf{BY}

NALEDI ROSE KABOMO

STUDENT ID No: 200002547

SUPERVISOR: DR M. GAOTLHOBOGWE

nrkabomo@gmail.com

EFC 751: Research Essay



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Declaration

I, Naledi Rose Kabomo hereby declare that this research essay is my original work. It has not been presented to any university. Reference is made to the literature and collaborative research from other researchers in the literature review. The research essay is submitted to the University of Botswana in partial fulfilment of attaining a Degree of Master of Education in Curriculum and Instruction. It has never been published anywhere else.

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Signature

.....

Date

DEDICATION

I would like to dedicate this work to my beloved husband Jeremiah Koonethebe Kabomo and my lovely children Selemo, Letsema and Thobo for their patience, support and love. Thank you for being there for me throughout and for wishing me the very best. Your support motivated me whenever I was going through a tough time.

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Writing this research was not an easy task, God gave me strength and wisdom to not give up.

Great thanks to Ms Baaisi. Thank you for understanding whenever I asked for time off to focus on this work, your love and support is really appreciated.

Statement of Originality

This research essay was carried out at Line	chwe II Junior Secondary School. It is my original work
It is hereby submitted for partial fulfilmer	nt of Master Degree in Curriculum and Instruction at th
University of Botswana.	
Researcher's Signature	Date

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Abstract

The United Nations mandate was to have all children of the world to be educated, no matter their social status, race or disability. Teachers have affirmed that they had an increased number of learners with visual impairment in their mainstream classrooms, most of these learners have been diagnosed with multiple disabilities and teachers` responsiveness towards them is essential. This research was a qualitative study which sought to investigate the responsiveness of teachers to learners with visual impairment. The main purpose of this research was to find out teacher responsiveness to learners with visual impairment and later suggested intervention strategies that could help teachers overcome inclusive education implementation challenges. The paper not only presented teachers' responses but learners and braillists were also interviewed as well to state their opinions on how responsive teachers are to the learners with visual impairment. The braillist and students were pivotal to the research as they work closely with teachers, so their views and observation were very important as it was free from bias. Suggestions and recommendations were also given that could assist teachers to positively assist learners with visual impairment. To carry on this work the data was obtained by interviews, focus discussions and observation done in the classrooms. This study employed qualitative method design; force field model was used as a theoretical framework. Data revealed that several teacher responsiveness affected the learners` attitude towards their schoolwork. Some teachers seemed to be very helpful to their learners and the issue of lack of training and brailed resource scarcity were outcries as most of the teachers in the school lacked the skills to assist learners with visual impairment. It was also revealed that teachers faced difficulties in handling challenges that learners with visual impairment face because of the language or communication barrier, as they are unable to read braille. This made successful implementation of inclusive education hard.

Key words: visual impairment, mainstreaming, inclusion, challenges, learners, braille, braillists, vision, transcribe, scribe

Definition of terms

Blind: sightless, visually impaired, and visionless. This is when one is not able to see.

Visual impairment: 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

Responsiveness: Denotes an awareness to a situation.

Mainstreaming: This is moving a child out of both special education selfcontained classrooms and pull-out programs and putting him/her in a
"regular" classroom -- in the "mainstream" of schooling.

(Regular classrooms are considered to be the mainstream.)

Inclusion: This is when students with disabilities to learn alongside their non-disabled peers in general education classrooms. It is also the integration of students with special needs into the general education with their non – disabled peers.

Learners: a person who is learning a subject or skill.

Student: denoting someone who is studying in order to enter a particular profession

Challenges: This is a situation of being faced with something that needs great mental or physical effort in order to be done successfully and therefore tests a person's ability

Braillist: An expert at writing Braille.

Braille: Is a system of touch reading and writing for blind people in which raised dots represent the letters of the alphabet. It is read by moving the hand or hands from left to right along each line.

Chapter 1 – Introduction

The focus of this chapter was to give an overview of the research. The following sections have been covered; background of the study, statement of the problem, purpose of the study, objectives, research questions, significance of the study, theoretical framework and the limitations of the study.

The inclusion of learners with special needs in regular educational settings has become increasingly common (Ainscow & Cesar, 2006), not only in Botswana but the world at large. Polat (2011) defined inclusive education as the inclusion of all students in learning regardless of their differences; either race, ethnicity, disability, gender, sexual orientation, language, or socioeconomic status. Mainstream classrooms are classes that have special education students who are taught alongside other students who do not require special education, they attend regular classes with regular teachers while inclusion typically refers to a special education student in a classroom with two teachers - one regular teacher and one special education teacher (Shirley, 2019). Mainstreaming means that a school is putting children with special needs into classrooms with their peers who have no disabilities.

As I walked through the corridors of Linchwe II Junior Secondary School, chatters of students and teachers in the classrooms could be heard. The only assumption was that teaching or facilitation and learning was taking place. As I looked around to take a mental picture of the classroom arrangement, seated in the front row were students with machines and hand frames busy taking notes as the teacher turned around to dictate to them what she had written on the whiteboard, observation made was that other students were writing in their exercise books. These learners seemed different from the rest of the learners in the classroom and suddenly truth was revealed, the students with machines could not read what was on the board, not for lack of trying

but because of their impaired vision. These learners had special needs, they were visually impaired (VI), among them some could partially see while others were totally blind. They were fully dependent on their sense of hearing and touch.

Ainscow (2010) referred to visual impairment as a significant loss of vision. This research discussed how responsive the teachers were to learners with visual impairment.

Teachers by nature wear many hats in the educational setting, at one point they are social workers, psych educators, and counselors in order to help their students. They feel compelled to adopt these roles even though they do not have the proper training and how they are receptive to these tasks determines their success in the classroom (Dussault, 2018). This study discussed teachers' responsiveness to learners with visual impairment who have learning barriers.

1.1 Background of the study

The inclusion of students in regular classrooms supported by Education for All (EFA) crusade was launched at the World Conference in Thailand in 1990 with the objective of providing all children the right to education. After this era, its vision was endorsed at the World Education Forum meeting in Dakar, held to review progress in achieving Education for All (World Education Forum, 2000). The Forum emphasized the ongoing obstacles faced by disadvantaged groups in education and called for positive action to overcome those impediments. The motivation for inclusive education came from the 1994 World Conference on Special Needs Education in Salamanca (Nasiforo, 2011). The conference endorsements were centred on the principle of inclusion. It was recommended that schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions (UNESCO, 1994).

According to Botswana Federation of Trade Unions (BFTU, 2007) education for the people living with disabilities had received attention over the years. NDP 9 advanced that during NDP 8 this was achieved when additional special education units within the conventional school system were established to ensure inclusive educational provision. Special education was first introduced by the Dutch Reformed church in Mochudi 1969. In 1991, the government of Botswana commissioned a consultancy to review special education provision in Botswana with the intention of meeting its obligation to Batswana (Abosi, 2000).

Abosi asserted that after the Dutch Reformed church founded Special Education, the first resource centre for blind children was established in Mochudi. This led to many other institutions for different disabilities to be opened at different locations throughout Botswana by various missionary organizations. Currently, there are more than 18 special education schools; 8 adult vocational rehabilitation centres; and 9 stimulation centres to cater for different disabilities in Botswana (Abosi, 2000). All the schools that cater for learners with visual impairment are found in Mochudi. There are two primary schools (Matsieng Primary and Linchwe Primary), one junior secondary school (Linchwe II J.S.S), one senior secondary school (Molefi) and a tertiary school (Pudologong Rehabilitation Centre). This has made Mochudi a central area for learners with visual impairment, from primary level to tertiary level.

Due to shortage of services for children with special needs, support for these children was traditionally provided by the Social Welfare Department (SWD) since the 1970s (Social Welfare Department, 2008). In alignment with the inclusive philosophy, the SWD later on advocated for the inclusion of children living with disability in regular classrooms. Public schools did not have enough and relevant resources to help advance education for the Visually Impaired learners (Ferrell, 2007). In 1984, the government of Botswana took the first steps toward direct

involvement in the education of people with disabilities by establishing a unit within the Ministry of Education, this unit was raised to the status of a division within the Ministry of Education around 1994 (Abosi, 2000). As a measure to assist the learners with visual impairment, the Ministry of Basic Education had an Inclusive Education Policy of 2011.

This research discussed the responsiveness of teachers towards learners with visual impairment. Challenges faced by the visually impaired learners were identified and then exploration of teacher responsiveness was carried out. Strategic interventions were proposed which could assist teachers in the way they should be responsive to the challenges faced by learners with visual impairment. Teachers are the link between parents, students and the school management. How the teachers respond to students' academic challenges could also be influenced by their own challenges ranging from parent conflicts; unsupportive administrator; lack of state funding, teachers often feel underappreciated (Nerstheimer, 2017). Regardless of these challenges they have to know how to assist learners with visual impairment.

Having the ability to see is a very important to everyone; most expressions can only be enjoyed by those with eyesight. Most classrooms use visual teaching aides that can only be utilised by the sighted students. It can be hard or even an oversight for sighted people to think about how a student with visual impairment studies in a classroom that is well equipped with visual learning materials, or even be empathetic and imagine themselves in the same situation if they were to lose their sight. This lack of empathy has led those who facilitate learning to bring disgruntlement to the learners with impaired vision. Some instructors have taken it for granted that they are able to distinguish light from darkness or their ability to run away or retreat from danger after seeing something that poses as danger, some have concluded that education becomes easier with sight (Zeiss, 2010). Deiner (2010) posit that many social skills are learned

through observation. Observation dictates presence of sight. Webster (2013) in (Ghafri, 2015) stated that 80% of what we observe, understand and remember depends on the competence of the visual system. It is therefore very important to bring awareness of how teachers are receptive to these learners.

The importance of education to the development of children cannot be overemphasized. Education is central to the realization of the 2030 Agenda for Sustainable Development. Within the comprehensive 2030 Agenda for Sustainable Development, education is basically referred to as a stand-alone goal (SDG4) with its 7 outcome targets and 3 means of implementation (UNESCO, 2015). Individuals are helped by education to develop their skills, improve their social status and gain access to networks that could lead to enhanced social outcomes (OECD, 2010). Botswana has educational policies whose mandate is to improve Batswana amongst which is the 1994 Revised National Policy on Education and Education for *Kagisano* of 1977 which advocates for personal growth and to enrich the nation at large. The report on National Commission on Education (NCE, 1977) has advocated for access to education for all; but it has been found lacking because of its silence about people with disabilities.

(Mastropieri & Scruggs, 2004 in Mangope & Mukhopadhyay (2012) posit that children with special needs should learn in the regular school classroom alongside their peers. They theorize that children should not be separated from others, no matter their special needs. This posedw as a misstep, because even though access to equal education was necessary for every learner regardless of ability, some children do not fully benefit (Mangope, et.al. 2012). It was therefore vital that learners go through assessment to ensure that schools are able to provide them with the necessary services to support learning.

The challenges faced by learners with visual impairment required to be addressed. The National Development Programme (NDP 8) was successful in establishing Special Education units within schools in Botswana to ensure that children living with disabilities could be assisted. Children with disabilities have remained relatively invisible in most governments' efforts to achieve universal access to primary education as stated by United Nations (UNESCO, 2012) but support is however provided for learners with Special Educational Needs during assessment (UNESCO, 2018). The Botswana Examination Council (BEC) made a commitment to increase access for candidates with special needs during examinations. This council allows candidates to take their examinations under conditions that are favourable and fair as possible. This was to enable effective participation in their assessment (The Voice, 2018), to ensure fairness and equity; BEC requires Centres to provide evidence and supporting documents in order to allow extra time and other special provisions for such learners.

1.2 Statement of the problem

In Botswana, the NDP 8 and the RNPE 1994, are reforms aimed to address the needs of visually impaired students through inclusive education. These reforms are also viewed as vehicles towards attainment of Education for All (EFA) (UNESCO, 2015). Through sustainable development goal (SDG) number 4 (NDP 11 draft 2017 - 2023). However, despite these efforts, the performance of Visually Impaired learners is a great concern. The Junior Certificate results show that learners' performance is lower than that of the sighted learners (Linchwe Special Education Records). These results reveal that there is lack of alignment between intentions and reality. Failure by teachers to respond positively to learners with visual impairment can compromise their quality of learning and ultimately their academic performance. This responsiveness of the teachers can be viewed as a limitation to the implementation of inclusive

education. There is therefore a need for this study to reveal the experiences of teachers and Visually impaired learners in main stream classrooms and to formulate strategies to efficiently cater for the needs of learners with visual impairment.

1.3 Purpose of the study

The purpose of this study was to investigate responsiveness of teachers towards learners with visually impaired. Learners with visual impairment tend to perform lower than the sighted students, this led to this research in order to find out how responsive their teachers are to their academic needs. Both teachers and learners (with visual impairment) shared their experiences regarding teachers' responsiveness. Students stated their difficulties and how teachers address them and teachers also shared their experiences of teaching learners with visual impairment. Findings showed teachers' preparedness or lack thereof for integrated classrooms to support learning of the visually impaired learners. The findings will be used to inform interventions to assist teachers in the way they respond to learners with Visual Impairment.

1.4 Objectives of the study

- 1. To unveil teachers' responsiveness to learners with visual impairment.
- 2. To examine academic experiences of students with visual impairments.
- **3.** To explore the general needs of students with visual impairment in their academic environment.
- **4.** To investigate the teaching strategies used by teachers in order to accommodate the needs of their visually impaired learners.

1.4 Research Questions

The vital intent of this study was to answer the following research questions:

- 1. In what ways do teachers respond to learners with visual impairment?
- 2. What teaching strategies do teachers employ in order to accommodate learners with visual impairment?
- 3. What are the academic experiences of learners with visual impairment?

1.5 Significance of the study

Education Policy along with the country's educational curriculum should work harmoniously and be developed in tandem so as to eliminate the cracks that learners with visual impairment fall into. The study shed light on academic experiences of students with visual impairment as well as how teachers are responsive to their academic needs. This will promote equal educational opportunities for all. With over ten years of teaching experience in a school offering education to students with special needs specifically those with visual impairment, I have observed that challenges are there, some are external and others are self-induced. While many learners look forward to learning new subjects and forging new friendships in the new school year, some may have reservations, worry and apprehension. These learners may worry about whether the school environment is accessible, to whether they will fit in with their classmates and whether the teacher will understand their condition. With the intimate knowledge and understanding I have developed over the years those are some of the stresses that learners with visual impairments who attend mainstream schools face.

The findings from this research will be used to formulate policy that is refined and informed by evidence that has been attained. Suggestions for the way forward or solutions have been made. The information gathered in this study will be used to make recommendations based on the responses that were provided.

The gap between curriculum developers and teachers need to be closed. This comprehensive study will influence development of curriculum and instruction as well as policy which will elevate learners with special needs to be responsible educated citizens taking into consideration their teachers responsiveness to their needs. Teachers will also receive the assistance they need in order to better assist learners with visual impairment. This study will help policy makers, curriculum developers, teachers and management in schools to come together to address challenges faced by learners with visual impairment. (Obiakor, Bakken & Rotatori, 2010) in (Zheng, 2014) states that previous researches show that "qualitative research focusing on the voices of individuals with disabilities is limited" and most of them describe only the educators or parents".

1.6 Theoretical Framework: Force Field Model

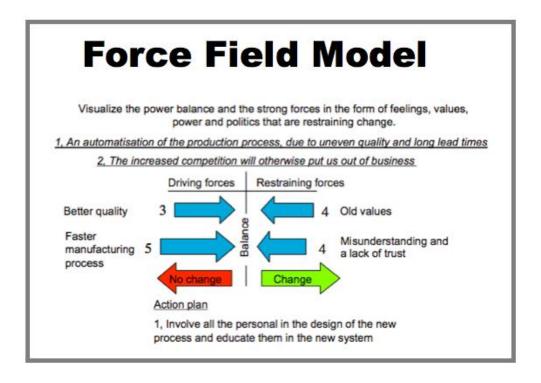
This study was influenced by Force Field Model. Brent (2018) described forces that push a decision in a particular direction as driving forces, while restraining forces are defined as those that hinder the decision-making process. Force Field Model provides a framework for looking at the factors (forces) that influence a situation (Mange, 2016). It looked at forces that are either driving movement toward a goal (helping forces) or blocking movement toward a goal (hindering forces). Force-Field analysis helped in understanding the balance of the driving forces and the restraining forces. Driving forces are forces that push in a direction that causes change to occur. They facilitate change because they push one to a desired direction, in the case of this study the direction is towards Inclusive Education. According to the Force-Field Model, whenever there is curriculum reform to implement policies such as inclusivity, there will always be the driving forces to ensure that this reform is implemented. But then these driving

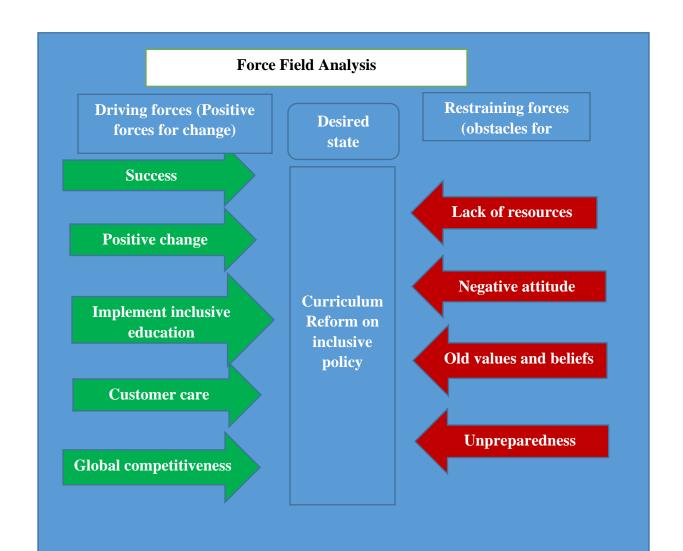
forces are counteracted by restraining forces. The driving forces is the demand upon teachers to implement Inclusive Education.

The retraining forces are the challenges that teachers face during implementation. They stop change from happening as they push one to the opposite direction. These restraining forces cause a shift in the equilibrium which opposes change. In the case of teachers, the restraining forces could be their attitude, the beliefs, their unpreparedness, and other factors that causes them not fail to implement inclusivity in their classrooms. For change to take place or for implementation to take place, one needs to reduce the retraining forces by addressing the challenges that teachers face. Then the two forces balance out reaching the state of equilibrium, at this state implementation is likely to be successful. The logical thing would be to increase the driving forces and restraining forces are reduced and change/ implementation begins to take place. In Force-Field Analysis when change is not moving forward as desired it is because there are equally strong restraining forces holding back the driving forces.

This model even though it is Eurocentric, it is relevant to our African setting. Teachers have factors that influence their decision making and the forces that are elaborated by this model informs supervisors who in the majority of cases concentrate in increasing driving forces hoping that change will come as a result. The model indicates that instead of increasing driving forces supervisors need to concentrate in decreasing the restraining forces, in that case the system gets into equilibrium where change can begin to take place.

https://daniellock.com/force-field-analysis/





1.7 Limitations of the study

The issue of time was predicted a great challenge. There was not enough time as the participants were busy with their work, some were not willing to be interviewed and students were preparing for their end of term examinations. Some teachers and other staff members did not want to participate in the interviews while others were not available to participate. The study was also in small scale as it focused on participants in Mochudi. The sample size in this study was small leading to lack of information on how other teachers are responsive to the visually impaired learners in other areas of Botswana. The information was not generalized to the larger group of teachers in the different parts of the country. The viewpoints expressed by the participants may not necessarily represent those of the majority of teachers of students with visual impairments in the whole country.

Chapter 2 - Literature Review

2.1 Introduction

The chapter presented review of literature based on three key research questions stated in the previous chapter and force field model adopted as the theoretical framework informing the study.

Teachers have the opportunity to make an enormous impact in the lives of their learners; that opportunity comes with many responsibilities. Inclusive education is aimed at reaching all learners including those with visual impairment. Learners with visual impairment need extra attention and special skills when they are included in the mainstream classroom. This tend to require more classroom time for teachers to plan and implement; this puts an extra burden on teachers, leading them to perceive students with special needs differently than they perceive regular education students.

Hare (2019) affirmed the above statement by his assertion that many teachers needed proper education for them to do a better job of preparing for these real classroom issues and challenges. The education provided to the teachers help them to be competent and sharpens their skills to meet the requirements of the profession and face the challenges that they may come across. An understanding of challenges faced by learners with visual impairment determines teachers' responsiveness to their learners. Teachers responsiveness is at the core of this research. Stefanich and Norman (1996) reported that most teachers lacked experience in teaching learners with visual impairment, they tend to conform to preconceived ideas from the community about how they should interact with them.

Education has always been full of many interesting ideas coming from within the education sector and even outside from stakeholders such as parents and other community

members about expectations in the classrooms. Challenges are faced by both teachers and learners in the school environment, what is important is how teachers are responsive to those challenges. Teachers and administrators are regularly bombarded with numerous suggestions on how to treat their students while students may also feel like they are not given attention. Bayram (2014) postulated that individual interests and abilities of the students should always be considered and integrated into the daily dealings in the school. Teachers are expected to create conducive classroom environment where all students are given plenty opportunities to be the best version of themselves according to their interests, skills, and readiness. Responsiveness of teachers to challenges faced by learners is important to achieve this conducive learning environment. Ryan (2013) concluded that developing rapport with students is essential in creating a good classroom environment.

Agesa (2014) pointed out that children with visual impairments are restricted in their movement and this restriction is viewed as the most severe single effect of blindness. Teachers need to know how to deal with these challenges in a wise way as they deal with learners with visual impairment in mainstream classrooms. Demir and Açar (2011) referred to mainstream classrooms as mixing students of different abilities or disabilities in the same classrooms, instead of separating learners with disabilities from the ones who do not have any disabilities. In the pursuit to determine their differences, it should be noted that inclusive education is a key policy in the integration of learners with disabilities in mainstream classrooms in a number of countries. Demir and Açar, further defined inclusive education as the practice of assimilating students with disabilities into regular classrooms. This inclusion fosters both the social and academic development of those learners. Eiken (2014) affirmed this by viewing inclusion as a philosophy that states all individuals, regardless of ability to participate within the same

environment with necessary support and individualized attention. Inclusive education has created a unified educational system, the kind of education that is able to accommodate the needs of the students living with disabilities in the mainstream classrooms (Kinyamjui, 2008). Different terms are used in literature such as integration, normalization, mainstreaming, inclusion and least restrictive (Ross-Hill, 2009). Even though these terms often reflect different conceptualizations, the success and failure of such educational approach hinge on the knowledge, attitudes and responses that teachers exhibit in classrooms (Ross-Hill, 2009, Malak, 2013). Kinyamjui asserted that Botswana like other African countries encourage integration of learners with visual impairment by setting up units within the regular schools and adopting the curriculum in order to facilitate direct integration regardless of the inadequate resources. Teachers are in the midst of it all because the policies are implemented by them. Ajzen, (2005) posited that the attitudes of teachers influence their behaviour in classrooms. How a teacher behaves in the classroom determines the degree to which students will learn. Eiken (2014) added that to meet the needs of individual special need learners, teachers need to adapt to the curriculum to closely meet the individual needs. Malak complemented this statement by stating that teachers' willingness to teach students with Special Education Needs in regular classrooms depend largely on their attitudes and experience.

Inclusivity put pressure in those delivering the curriculum as certain areas of the curriculum needs adjustment as the case of learners with visual impairment cannot be treated like sighted learners especially in subjects that emphasize their objectives in pictures and illustrations such as Social Studies, science and Agriculture just to mention a few. Teachers are also pressured by the community at large on their interactions and stereotypes of the learners with visual impairment. The community indirectly gives direction on how they should do their job,

implement the curricula and come up with new teaching strategies. How they respond to the criticisms outside the school environment tend to determine their reaction towards their learners. Thus, Force Field Model is used, to find out all the restraining forces that may be influencing teachers in their responsiveness, the demand that is upon the teachers and intervention strategies that could help teachers overcome inclusive education implementation challenges. These challenges may also be a result of the impact of the stereotypes on the learners so it is imperative to investigate the responses and inform interventions.

There is expectation for teachers to prepare learners and to identify the challenges they are facing in the classroom. Mrstik (2017) established that teachers in Botswana have shown apprehension in embracing inclusion in schools, previous researchers discovered that a lot of teachers responded adversely on the issue of inclusion of students with disabilities in their lessons (Brandon, 2006). Mangope and Kuyini (2011) also discovered that teachers' attitudes contributed to the success of inclusion and that positive attitudes are linked to training in special/inclusive education and experience working with students with disabilities. These driving forces are needed to bring about the change that is needed for positive inclusivity to be possible. Most learners tend to use teachers as their role models based on their founded relationship of admiration throughout their time together in the school. How teachers respond to learners' concerns and challenges is key to whether that learner enjoys their time in that school or not.

Differences between mainstreaming and inclusion

Mainstreaming	Inclusion
- Mainstreaming means that a school is	- Inclusion allows the learner with
putting children with special needs	disabilities to receive instruction in the

into classrooms with their peers who have no disabilities.

Example: including a learner with disabilities in a general education class as long as he/she can perform similar work to his/her non-disabled peers.

- Selective placement of special education students in one or more "regular" education classes.
- Mainstreaming is allowing the student with a disability to be educated along with non-disabled peers in a general education classroom.

- general education with special education services coming to them.

 Example: a learner with difficulties in reading would have the special education teacher come to them to receive their instruction in the same room with their non-disabled peers.
- Commitment to educate each child, to
 the maximum extent appropriate, in
 the school and classroom he or she
 would otherwise attend. It involves
 bringing the support services to the
 child (rather than moving the child to
 the services) and requires only that the
 child will benefit from being in the
 class (rather than having to keep up
 with the other students).
- Inclusion allows the student with disabilities to receive instruction in the general education with special education services coming to them.

Research Bulletin Number 11, 1993, from Phi Delta Kappa's Center for Evaluation,

Development, and Research

2.2 Historical Perspective of Special Education

Special needs people have always been in existence, their education just took a little longer to be implemented. The way special education is viewed today has not always been like that. Its recognition was not how it is like today towards special education learners. A study by Wilmshurst and Brue (2005), confirmed this by saying; children with special needs have always been part of our society. In the past, some "special" education was provided to individual children on an individualized basis. As formal education became established, welfare or religious groups for the care of children with special needs often became involved in their education. Government provision of special education services generally followed the work of voluntary groups.

2.3 Teacher Education

Success achieved in the school environment is attained from the competences of a teacher and the willingness of a student to learn. Teachers are very important in helping learners to succeed in their learning and it is their competencies that create learning opportunities with the greatest potential learning outcomes (Bürgener & Barth, 2018). Teacher training institutions have courses that encourage potential teachers to carry out researches that enhance their competences in their day-to-day lessons in their schools. Shakouri (2015) theorized that teacher education developed teachers, this has some degree of truth as it empowers them to meet what the profession calls out to them to do. Their importance in the lives of their students cannot be minimized. Teaching is not only in the classroom; education involves both the formal and nonformal activities and experiences that help enable them to take on the world. Teacher education encompasses different skills that helps the teacher to know how to tackle different challenges, not only the challenges faced by the particular teacher but her students as well. The education

received by the teacher is a continuous process. There is constant learning that helps the teacher to be best at what s/he does. The right knowledge and skills help teachers become proficient in their work. The challenges faced by students require teachers who can evolve with the times and exercise patience and acquired skills to deal with them in the way that will encourage the student to look forward to coming to school. In the pursuit to prepare teachers to face the challenges of the ever-changing world, teacher education has to be up-to-date on recent developments and trends. The academic and professional standards of teachers are not only important to them but to their learners in the educational goals that needs to be accomplished.

Caring and positively responding to the students' needs and challenges depends not only on ensuring that teachers have the necessary knowledge and skills to carry out their work, but also own the responsibility for their students to reach high levels of learning and succeed in their life pursuits. Learners who feel different from others tend to feel out of place in regular schools, especially those with disabilities. Teachers need to be equipped to overcome these prejudices towards such learners and positively handle any challenges that these learners maybe having with regard to their learning and academic difficulties that they may be facing.

2.4 Teachers' responsiveness to learning

It is very important for those in the educational sector to take responsibility for the education they provide. They should be in a place where they take accountability even in the public arena. Students' competencies are developed through standardized tests given by their teachers to measure their level of understanding. Better education however could be beneficial, which better serves students, parents and external stakeholders could be to educate the public about more inclusive representations of learning than those measured by standardized tests (Sherman, 2004). Sherman purported that broad aims of teaching should include advancement of

literacy, deepening the ability to think critically and fostering moral development. A teacher should be able to approach these aims in a way that will advance the student towards a fulfilling life. For a teacher to be more responsive to students needs s/he should capture the essence of that student's personal learning space. Sherman says in recognizing how unique the space is, the teacher should enter it with the utmost respect and understanding. This will bring more understanding of the student's needs and in the process advance the student's learning. To accomplish this, the teacher learns about the student's intellectual ability, family background and prior learning experiences. It is important for the teacher to understand the student wholly as it helps them to be responsive to the learners' needs. Knowing the student's present life helps the teacher to move the student in their future. The daily interactions between the teacher and the student helps the teacher to have more understanding about the student needs. There are challenges in being responsive to student needs in inclusive classrooms. Mixing learners with disability and those without increases the possibility of not paying attention to all of them looking at classroom sizes and the need to bring results posing as measure hindrances. This is a challenge that stops teachers from fully accessing and meeting their learners' needs. Raising students' academic results on standardized tests stops teachers from exercising patience and deeply knowing their learners because they need to finish the syllabus and revise intensely for the betterment of the whole class. A teacher who has to focus on more than 50 students per class in most cases is not able to fully focus on their individual assessment of both the social and intellectual ability.

2.5 Meeting the Educational Needs of the Visually Impaired

According to the American Foundation for the Blind (2016), "The National Agenda represents a broad consensus of how educational programs must change to meet the needs of

students with visual impairments." The goal is to prepare learners with visual impairments to meet the challenges of the 21st century, (Willings, 2015). Expanded Core Curriculum (ECC) is the body of knowledge and skills that are needed by learners with visual impairments due to their unique disability-specific needs. Learners with visual impairments need the expanded core curriculum in addition to the core academic curriculum of general education. The American Foundation for the blind has alluded that the ECC should be used as a framework for assessing students, planning individual goals and providing instruction. Learners with visual impairments need to be asked about their needs, wants and academic challenges so that they can be helped easily. Teachers need to have an awareness and openness towards those challenges experienced by the learners.

In the past disability was shunned upon. Having disability was seen as a deficit but that notion is slowly changing. Meng Ee (2017) posit that with the right support structures in place, barriers to inclusion can be overcome and learners with disabilities can live peacefully in schools. Meng Ee believes in supporting learners with visual impairments by providing them with the right skills to cope in mainstream environment. Education provided to the visually impaired learners can be divided into three types: special education, inclusive education, and mainstream education. Special education deals with educating learners with visual impairment in isolation from the sighted learners. This takes into consideration the extension of the learners' needs and disability (Kurz, Elliott, Lemons, Zigmond, Kloo, & Kettler, 2014). Inclusive education brings the learners with visual impairment and the sighted learners together in the same educational environment (Phinias, Jeriphanos, & Kudakwashe, 2013). This type of arrangement helps learners understand that they are not living in isolation, their existence is in extension with the rest of the community they live in. They grow as rounded human beings.

Inclusive education brings fairness and equality in education (Wang, 2009). The principle of justice is exercised. Last type of education that is provided to the learners is mainstream education, this type of education is similar to inclusive education in the sense that learners are put in the same classroom whether they have visual impairment or not, they are made to see beyond their disability (Crockett & Kauffman, 1999). Out of the three types of education discussed above the last two have some similarities. The only difference between them is the support that is provided to the learners with visual impairment. In mainstream education the subject teacher has a teacher aide who is there sorely to assist the visually impaired students. There is a lot that the teacher aide does, ranging from modifying the students' work, dictating to them information that may have been written on the board for the sighted students and there is also support given to these learners that is provided outside their normal classroom environment (Allen & Cowdery, 2011). The learners with visual impairment may use braille, large print with the use of optical devices, regular print, and or recorded devices in their daily lessons. Korir (2015) argued that each learner need instruction from the teacher with professional preparation. This helps to instruct them in each of the compensatory and functional skills they need to master. There is common belief that these needs of the learners may be significant but they seem not addressed with sufficiency specifically in the existing core curriculum which may make teachers not to accept inclusive policy as proper resources to assist the learners with special needs are not provided by the relevant offices.

2.6 Teaching strategies to accommodate learners with visual impairment

Teachers` main priority is making sure that all the students have an equal opportunity to access learning materials and succeed in their academic work. Visually impaired learners require modified teaching strategy, allow for the use of suitable teaching aids and assistive technology,

and create a safe learning environment (Staff, 2019). It is important that the learners do not feel excluded in the teaching and learning process. Strategies outlined by Staff are; teachers should always explain visuals. It is important for visuals to be explained so that visually impaired students could also benefit from the lesson that is being carried out. Pictures that are to illustrate objectives of the lesson need to be described for the sake of those who cannot see it. Teachers of learners with visual impairment should have a habit of dictating what they are writing on the chalkboard or whiteboard. Talk while teaching as students may miss visual cues and written instructions (Carney, 2003). This helps learners who are unable to see the board to follow along with the material and take notes. Teachers are also encouraged to carry out their lessons in close proximity to the students when doing demonstrations or using visual aids. Staff also encouraged teachers to give oral instructions during lesson delivery. This helps visually impaired learners to take instructions and ask questions if they need to. Tactile learning experiences also helps visually impaired learners to feel included in the learning experience. Teachers should address all learners by name because learners with visual impairment may not always know who is talking. This helps them to identify their peers based on the sound of their voice. It is important to give visually impaired learners additional time to complete their work. Equality is key, even though visually impaired learners need modifications in their teaching style, they should be treated the same way as the sighted students. They should not be given special treatment. The 21st century learner is technology survey; teachers need to use assistive technology in order to impact the learner. Lessons should be recorded, in recording the lesson the visually impaired learner can listen to the recording later on and this brings understanding. Brailed text books and handouts makes learning easier so these should be provided in classes, computers should be installed with braille translation software. Visually impaired learners can benefit from the use of smart scanners and readers. These technological devices easily convert documents into speech. Page magnifiers helps learners with low vision as they enlarge text and images. This benefit learners in reading and being part of the larger school community of performers. Many students who are visually impaired, with low vision need written material to be presented in high contrast using a clear bigger font in order for them to read easily without any strain to their vision. It is best to write using a dark black marker on a whiteboard.

2.7 Academic experiences of learners with visual impairment

Mugambi (2011) speculated that the perceived inability of people who are blind results from the limitations imposed on them by society. This could be through ignorance. There are so many challenges faced by the 21^{st century} learner, the learners with visual impairment face a great deal focusing on the fact that nature has denied them sight. Human (2010) speculated that learners with disabilities experience greater levels of loneliness, isolation and interpersonal conflict at school. Geisthardt and Munsch (1996) hypothesizes that most learners with visual impairment tend to rely less on their peers for social support whenever they experience academic challenges or interpersonal problems than learners without disabilities. Marumo (2016) quotes Taneri and Engen (2011) who categorize challenges faced by leaners as push/pull factors within the school, community and the home. Other factors identified by previous studies are house – hold level factors such as socio-economic resources which may be attributed by their parents` level of education, occupation and wealth, the educational resources such as availability of schools that cater for all learners and trained teachers (Smits & Huisman, 2015). None of these factors seem to focus on students with any form of disability. These researchers just focus on sighted students. There is a need for everyone to see that learners who are visually impaired needs their challenges addressed for the betterment of their lives just like learners who live

without any form of disability. Kassile, Anicetus, and Kukula (2015) postulated that discrimination by the society of learners with visual impairment may hamper their studies and general outlook of themselves. Korir in his study on the challenges faced by learners with visual impairment discovered that learners made an outcry on how their respective schools had basic facilities like classrooms, playground, books, laboratory and the library, among other facilities. Their greatest issue emanated from the fact that those facilities did not have resources needed by the learners with visual impairment. The learners showed that even though they had a library in their school it only had books that are written in small print which the learners with visual problems cannot make use of. They felt discriminated.

Challenges faced in the school environment are varied. These range from their adolescent changes to how the people they interact with daily treats them. Meng Ee concluded that those learners had a lot to think about in the school ranging from making friends, learning the content of different subjects, dealing with social differences. Teachers should be prepared to anticipate challenges in their classrooms with students of different needs and differentiate their approach according to the learners' expectations and aspirations (Chronaki, 2011). This can get overwhelming especially for a learner with visual impairment. Academic challenges can have a root cause from elements which are non-academic. Where there is a lack of support structure learners with visual impairment can be disadvantaged and hindered academically.

Some of the challenges faced by the learners are ethical issues based on the behaviors of teachers towards learners. Studies in Botswana indicate teacher absenteeism in classes, inappropriate sexual relationships with the learners as some of the disturbing behaviours that makes school challenging for many learners. BOFESETE (2003), and Tafa (2002) also mentioned amongst others excessive use of corporal punishment as a challenge to learners in

schools; one can only imagine how learners with visual impairment perceive this kind of punishment being administered to them when they cannot even see the person who is administering the punishment. Marumo (2016) and UNESCO (2014) also posit that it is worth noting that an education system is only as good as its teachers, their responsiveness towards their learners` determines success in their content delivery and relationship with their learners. This can however be hindered by a lot of factors as Malak (2013) pointed out factors such as large class size, high work load, inflexible curriculum policy and inadequate resources needed to make teaching easier and accessible for special needs learners. These were identified as some of the barriers faced in the implementation of inclusive policy in schools.

Darling – Hammond (2006) argued that a teacher is the single most powerful variable that determines educational success of a learner but the truth of the matter is that the learner should be the most important entity when designing the school curricula. Focusing on leaners and in the current research the visually impaired who have less representation at the parliament is something the government and other stake holders should consider very seriously. There is need for research to be conducted because they are in the minority and they suffer as a result of that. It is therefore necessary to interrogate and unpack their treatment in schools and how responsive their teachers are towards their academic challenges.

Mertens (1999) quotes Banks (1993) who claimed that transformative scholars assumed that knowledge is not neutral, but is influenced by human interests, and that all knowledge reflects the power and social relationships within society. This gives insight to how the community that learners live in could influence awareness and attitudes of educators towards their learners. Knud (2004) claimed that cognitive, emotional, environmental factors and prior experience, all play a part in how people understand themselves; it is therefore very important to

look deep within how learners view themselves in their academic environment and their diagnosis of teachers' responsive actions to their needs. Vygotsky (1978) believed that students construct mental signs to represent concepts, the challenges they face therefore could be directly influenced by socially constructed perceptions of the environment they grow up in and their school environment as well. These are the restraining forces outlined by the force field model. Teachers' role is to guide students to the awareness of their experiences and socially agreed upon meanings. These experiences and socially agreed meanings lead to the challenges that the learners are facing. They need to motivate learners, provide examples, discuss, facilitate, support and challenge but not to act as if they know everything. This enables learners to express themselves. Agesa (2014) posited that visual loss imposes limitations on learners. These challenges may affect learners in their academics. Agesa identified them as control over the environment and one's relationship with it, mobility and the limitation of concepts and their varieties. Learners with visual impairment's performance of orientation and mobility skills depends on whether they have mastered these concepts. Therefore, it is vital to determine their performance with regard to concepts related to orientation and mobility skills. Teachers need to know how to handle these challenges in their understanding of these learners; Brunner (1996) calls this support instructional scaffolding.

2.8 Social aspect of inclusive education

The main reason people go to school is to make a better future for themselves and their families. They want to move from their known reality to the unknown, which is assumed to be better. Education ensures success and prepares learners of all calibers a bright future. In the case of learners with visual impairment, obstacles have been observed. Some of which emanate from their lack of sight. Bayram (2011) posit that these obstacles are a result of their social

environment. Their problems are actually the problems of the community and their socialization plays a major role in their everyday lives. This calls for the community to come together and solve these problems. Inclusiveness not only helps the learners with visual impairment, it helps the sighted students and the teachers as they learn ways to live with these learners. They become aware of their social reality, and how they should co-exist with learners with visual impairment. They become sensitive to their needs.

2.9 Nature of teachers' attitudes and concerns about inclusive education

Castellano (1996) postulated that teachers' beliefs about blindness affect how they act toward the learners with visual impairment, their expectations of them, the way they teach them and their interactions with them. They see the disability more than the person. However, Cassady (2011) stated that the type and severity of the learners' disabilities affected teachers' willingness to accommodate them in their classes and their confidence that they will effectively manage their classroom. Their perceptions about inclusion is very important, this is because the success of this initiative by the government can only work if teachers are fully onboard. Inclusion of children with visual impairment in education depends on sufficient knowledge and skills of teachers (Flecha & Soler, 2013). Mangope and Kuyini (2011) concerning inclusive education posit that teachers show both positive and negative attitude. Depending on their attitudes toward inclusive policies, teachers can promote or hinder the success of inclusion (Avramidis & Kalyva, 2007 in Mangope & Kuyini, 2011).

Literature indicated that negative attitudes among teachers constituted a barrier to inclusive education (Thompson, Fisher, Purcal, Deeming & Sawrikar, 2011). Thompson, et.al (2011) posit that there is need for special training for teachers in order to fight these negative attitudes. Observation that was made is that some teachers are not willing to have learners with

disability in their classrooms, others are willing to have such students but they have a challenge of not knowing how to help them because they have not been trained. These teachers need support to carry out their duties. Cassady (2011) further made an observation that many teachers do not believe they are able to teach learners with disabilities effectively while simultaneously teaching a large group of typically developing students. Their attitudes toward their current student population with special needs dramatically affected the success in their classrooms. Cassady reiterated that teachers' relationships with their disabled learners significantly impact their overall attitudes toward including these students in their classrooms. This further impact on the way they tackle their everyday academic and social challenges that they experience in their classrooms. Tensions arise from teacher beliefs and self-doubt that they are unable to address the disabled students' different challenges, needs and instantaneously the way they approach and teach the other remaining students who do not have any physical disabilities.

2.10 Teacher Competencies

In the quest to include all in the education sector, exercising justice to all learners is of paramount importance. Since the worldwide paradigm shift from exclusive to inclusive education, the roles and responsibilities of teachers have undergone a drastic change (Majoko, 2019). There is expectation from the public and government for teachers to meet the needs of all learners especially those that have been side lined for long by the general public because of their disabilities in regular classrooms (Allday, Neilsen-Gatti, & Hudson, 2013). These kinds of skills that is expected from teachers towards meeting students` needs requires unique set of capabilities which most teachers never got from their formal education to become teachers. Florian and Spratt (2013) stated that there is need for some key competencies in the journey to assist learners with disabilities and for these learners to benefit from education in regular classrooms. Ainscow

and Goldrick (2010) reiterated this by their stance that knowledge and skills are essential to meet the needs of all children in regular classrooms. Majoko further said teachers need to be competent in teamwork with others so that they can harness their own problem-solving and creative thinking. Sharing ideas with others help them know better ways of assisting learners with different needs and disabilities (Berry, 2010). This means that with teaching learners with visual impairment in inclusive environment, curriculum and teaching methods need to be differentiated.

2.11 Summary/ Conclusion

Specially trained teachers who could handle learners with visual impairment are still on demand, most teachers have not really had comprehensive special education to prepare them for the challenges that they might face. It is also important for them to know how they should respond to those challenges once they are in the classroom with learners with special needs. The scholarship that have been done on teachers' attitudes and responsiveness to students has little to say about teachers of learners with visually impairment, or their attitudes towards their learners' challenges, questions about how teachers respond to challenges is not addressed in the existing literature. The research that was carried out shows that current research supports inclusion of learners in mainstream classrooms but little has been said about teachers' acceptance and response of inclusive education. According to review of literature above, teachers are left behind in the policies that are made and expected to carry out lessons afterwards. Most researchers seem to be interested in establishing integration of learners with those who are sighted or without any disability but their teachers are left in the background. This is a gap that has been discovered, this insufficient information limits the ability to reach a conclusion thus the pursuit of knowledge to establish teachers' stance in the inclusive policy. Most scholars focus on sighted learners and

those who attempt to address this question talk more about physical challenges than academic challenges. They however acknowledge the inequalities faced by learners with visual impairment in schools. Some point to teacher training as a challenge that affects the learners with visual impairment (Darling-Hammond, 2006) while others point to discrimination of such learners as a challenge, (Willings, 2015). It is therefore very important to conduct more research to help determine how the system can be of assistance to the blind community. Mugambi (2011) believes that it is only by removing physical and social barriers that learners' challenges can truly be addressed. The 21st century learner and teacher needs to be fully informed and proper knowledge and resources are needed. The government of Botswana, through the Ministry of Education need to provide appropriate teaching / learning resources for learners with visual impairment in order to ease the tension and make teachers' job easy to carry out. Training institutions and continuous workshops geared towards all teachers (new and old service alike) on special education should be performed. The community needs informative campaigns that will emphasize equality amongst all and for them to know that disability is not inability. Today, education is the most important function in all countries, it awakens all the children to their cultural values, by preparing them for professional training, and helping every learner to integrate and adjust smoothly and normally to their environment. It is therefore doubtful to conclude that without proper policy backed with appropriate resources that the visually impaired could be expected to succeed in life. Quality inclusive education cannot just happen or be a dream, access to the general education curriculum requires careful planning and preparation (Whitbread, 2019).

2.13 Recommendation

It is time that teachers are fully involved in curriculum development; their involvement should be from inception of a policy until its completion. The curriculum should take note of learners` challenges as well as their teachers. The anticipated response of teachers will therefore give insight of what truly need to happen in schools for easy and effective interaction to take place. Educational Regions should receive funding in order to purchase proper resource for teachers to use whenever they educate learners with visual impairment. All aspects of life need to be addressed in order to fully understand and address the academic areas. The government should come up with strategies on how to sensitize the public on needs of the learners with visual impairment and make the objectives of the program be known to teachers, students, school administrators and shareholders so that they can contribute to successful implementation of the program.

Chapter 3 - Methodology

3.1 Introduction

This chapter focused on research methodology; research design, study area, sample population. Description of how the study was carried out is looked into. Qualitative method design was used, and then sampling concentrated on the population from which data was collected. Interactive data collection instruments described the responses and awareness of teachers towards challenges faced by learners with visual impairment. Data collection procedures were described. Pilot testing described the pilot study procedures, data analysis procedures described how data was handled, limitations of the study focused on anticipated limitations and any strategies that will be used to minimize their impact and timelines will depict the approximate time in which each research activity will be completed.

The objective of this study was to establish teachers' responsiveness to learners with visual impairment in the chosen school, and to suggest intervention strategies that teachers could use to respond positively to the needs of learners with visual impairment. Phenomenology within the qualitative research paradigm was appropriate to provide the information and contribute knowledge needed to achieve the objective of the study. Qualitative methodology was appropriate as indicated by (Rossman & Rallis,1998, Creswell, 2014) who purported that the world has multiple perspectives. Creswell further says this description culminates in the essence of the shared experiences by several individuals. Phenomenology means the study of events, situations, experiences or concepts (Astalin, 2013). This is a way of describing something that exists as an integral part of the world in which we are living. Phenomenology has strong philosophical underpinnings and typically involves conducting interviews. Exploring the issues concerned with teachers' responsiveness to learners with visual impairment provided multiple

perspectives and also offered opportunities for data triangulation, which is an important attribute for ensuring data trustworthiness. Phenomenologists are concerned with understanding social and psychological phenomena from the perspectives of people involved, so there was active and direct interaction with the participants, priority was on teachers` responsiveness to challenges faced by learners with visual impairment. Phenomenology is concerned with the lived experiences of the people, so that was under scrutiny as well.

3.2 Research design

Research design provided a plan on how the research was conducted (Babbie & Mouton, 2001). The research design combined the purpose of the research, the paradigm informing the research, the context within which the research was conducted and the research techniques that were used for data collection and analysis (Human, 2010). This research adopted case study research design. It is used as a design to analyze a phenomenon, to generate hypotheses, and to validate a method (Summers, 2008). This design is appropriate for qualitative research as it recognizes the importance of the subjective human creation of meaning, but doesn't reject outright some notion of objectivity (Baxter & Jack, 2008). Yin (2003) describes a case study design as one that does not manipulate the responses given by those in the study and this generates new ideas that helped to show the relationship of teachers and students.

Procedures for collecting, analyzing, interpreting and reporting data for this study were guided by the research questions and the nature of the study. The study adopted qualitative method. The subject being explored has not been widely researched and there are high levels of uncertainty and ignorance surrounding it. We are surrounded by many phenomena, this research explored teachers` collective behavior, attitudes, responses and perception towards responsiveness of teachers towards their visually impaired learners. The main aim of this

research was to identify the salient factors or variables that might be found there and be of relevance to the research. An intervention was paved which could help teachers to respond effectively to students' needs.

Yin (2003) describes qualitative research as an interpretive study of a specified issue in which the researcher makes sense of informants' views. It means that qualitative approach brings the researcher close to participants and also provides flexibility to explore topics and enable participants to share view freely (Creswell, 2012).

3.3 Research settings

3.3.1 Study area

This research was carried out in Linchwe II Junior Secondary School in Mochudi. Mochudi is a village in the Kgatleng district about 40 km from Gaborone. Gaborone is the capital city of Botswana. In Kgatleng there are ten Junior Secondary Schools, only one school provides education to learners with visual impairment and it is located in the centre of the village.

Amongst the places in Botswana, Mochudi is the only place in the country that has Primary schools, Junior school, senior school and tertiary school that provides education to the learners with visual impairment. Learners with visual impairment come from around the country to attend schools in Mochudi. As a place that has visually impaired people, this has also translated to the health sector as Deborah Retief Memorial Hospital (DRM) is well equipped with eye specialists. Linchwe II Junior Secondary School has a support unit for learners with visual impairment providing brailled materials and has human resources that assist learners with visual impairment such as braillists and teacher aides. The Special Education Unit currently registered 34 learners with visual impairment out of the 490 learners that are enrolled in the school. The learners that

registered in the Special Education unit have sight challenges that varies from low vision to total blindness. Many of the learners were born blind while others lost sight in their infancy.

3.4 Population of the study

The participants of the study consisted of learners with visual impairment, their teachers, school braillists and teacher aides. Linchwe II Junior Secondary School offers inclusive education to learners with visual impairment and is abreast with issues and challenges affecting the visually impaired learners. The school offers different subjects which learners with visual impairment do. The subjects that these learners do are English, Setswana, Mathematics, science, Moral Education, Agriculture, Social Studies, Religious Education, Home Economics, and Business Subjects. They do not do Music, Physical Education, Design & Technology and Art. The braillists and teacher aides took part in the study because they are better placed to shed some light on how teachers respond to students' challenges. This is because there is daily interaction with the learners with visual impairment and their teachers. Their main job in the school is to receive work from learners with visual impairment, they transcribe their work then hand it to the teachers to grade it. The learners with visual impairment were questioned to talk about their experiences with their teachers and other academic challenges they face in school. Braillists receive the visually impaired learners' exercises, tests and examinations given by the teachers so they know what the learners' different challenges could be. Total number of students in Linchwe II Junior Secondary School is 490. This number includes both the sighted and the learners with visual impairment. There are 34 learners with visual impairment, 48 subject teachers, 4 braillists and 6 teacher aides.

3.5 Sampling

Sampling is a process used in statistical analysis in which a predetermined number of observations are taken from a larger population (Kenton, 2019); one selects a number of people from a population containing common characteristics that can be found in the entire group. The sample is a representation of the entire population. The method used to sample from a larger population is dependent on the type of analysis being performed. Purposeful sampling was used to select the participants for this study. The participants who were selected contributed to the research topic and they shared their experiences in the academic environment (Crabtree & Miller, 1992). These participants know and understand how teachers respond to the challenges that are faced by learners with visual impairment. Learners with visual impairment were interviewed. The sample included the completely blind students and those who are partially blinded (impaired). Six visually impaired learners from Linchwe J.S.S, three boys and three girls from three completing classes were used in the study. This sample is appropriate because it covered learners who have been in the school for a longer time. The learners understand the procedures of the school, they also have been in the company of the teachers longer. One on one interviews were carried out with learners. Focus groups discussions were used for teachers and braillists. They were in different groups. Teachers had their separate discussions; and braillists were grouped with teacher aides in another group. Purposeful sampling was used for teachers who provide services to the learners with visual impairment. Teachers who offered Music, Art, Design and Technology and Physical Education were excluded because they do not have learners with visual impairment in their subjects. All the braillists and teacher aides were put in the same group and interviewed. The reason for choosing one school was because of time limitations. It was also convenient because of its proximity to the researcher.

3.6 Data collection instruments

Three research instruments were used for data collection. The participants were interviewed to collect data. Observation protocol helped to get information as it is through observing the interaction of the study participants. The interaction of the learners with visual impairment and their teachers were noted, constructivism theory acknowledges the learners' active role in the personal creation of knowledge (Prawatt & Floden, 1994). Prawatt and Floden (1994) posit that knowledge is the result of social interaction, it occurs within a socio- cultural context (Gergen, 1995); the researcher therefore observed teachers and students in action in their classrooms, staff room and school grounds. Bakhtin (1984) says truth is not to be found inside the head of an individual person, it is born between people collectively searching for the truth in the process of their dialogue interaction; while Cobb and Yackle (1996) argues that truth is socially constructed and agreed upon resulting from co-participation in cultural practices. This is why information was derived from the teachers, students and braillists. These experts are of great importance to the research because they interact daily with learners with visual impairment.

3.7 Instrument development

3.7.1 Interviews

Interviews allows participants to discuss their interpretations of the world in which they live and to express how they regard situations from their own point of view. Semi structured questions were used to predetermine lists of questions to ask the participants. Interviews are a prime method for qualitative data collection. Spoken narrative is the basis of most qualitative data; this is gained by direct encounter between the researcher and participants (Lopez & Whitehead, 2013). This allowed flexibility and enabled the participants to raise issues that could have not been initially been there but vital to the research. Flexibility also allowed the interviewees an

opportunity to shape the flow of information as they understood it. The interviews were held with learners with visual impairment and the school counsellor. From these respondents, data was generated. The learners were made to feel comfortable and the school counsellor with his expertise allowed them to be free to say their views. An audio recorder was used to capture the interview; field notes were also taken. Audio recording is low cost and unobtrusive so it was easy to use and derive information from during transcriptions. This method of data collection was preferred because it did not require learners who were good in writing unlike questionnaires. It just required freedom to express themselves; this helped to validate data by listening to the tone of voice used. Each interview ranged from 13 to 16 minutes per participants.

3.7.2 Focus Group discussions

Focus group discussion is a qualitative research method whereby the group is asked questions to elicit responses to generate discussion among the participants (Krueger, Richard & Casey, 2000). Field notes were taken during the discussions and they were asked if they could be recorded during their discussions and they affirmed. All the focus group were recorded using an audio tape. The participants were allowed to freely express themselves through put the discussions, meaningful quotes were captured, main ideas expressed were also highlighted, the non-verbal cues were recorded. The main purpose of focus group research is to draw upon respondents' attitudes, feelings, beliefs, experiences and reactions in a way in which would not be feasible using other methods, for example observation, one-to-one interviewing, or questionnaire surveys. Gathering research participants together for group interviews allows researchers to gather data from a number of people in one session (Reed & Payton, 1997). Reed and Payton argued that focus groups are characterized by the explicit use of the group interaction to produce data and insights that would be less accessible without the interaction found in a

group. The analysis and interpretation of focus group data require a great deal of judgment and care, the researcher was rigorous when analyzing and interpreting data derived from focus group discussions. The nature of the analyses of focus group interview data is determined by the research question and the purpose for which the data was collected was to provide an in-depth exploration of teachers' responses to challenges faced by learners with visual impairment. The data that was recorded ensures trustworthiness and accuracy. To ensure consistency and trustworthiness the results from the field notes and the audio recorder were checked and compared in order to complete the transcript (Creswell, 2012). The advantage is that considerable amount of transcript was obtained in real time. The participants worked together and built on each other's ideas; what one respondent may forget the other will bring the issue out which helped with varied ideas. This form of collection of data was very rich in content because the participants were free around their colleagues to express their daily observations and responses in classes. A prime advantage of focus groups is that large amounts of information was collected in a short time. Group differences in the groups yielded a lot of results as participants stimulated each other's reactions and consequently conversations. As participants interact, their viewpoints emerged.

3.7.3 Observation protocol

It was important to witness teachers in action because the research is about their responsiveness to their learners. The researcher directly observed teachers and students, how they relate with each other in the classrooms, what was seen and heard was recorded. The researcher carried a diary to capture the field notes. This method involves viewing and recording the actions and behaviors of participants. It made information gathering easier to establish teachers' responsiveness as they interact with learners with visual impairment.

It is very important to conduct collection of data from participants in areas that are conducive, so the researcher chose multiple areas that will be favorable. The setting where focus groups and individual interviews were conducted were chosen considering individual participant's personal space and privacy. People use personal space and various types of territorial behavior in their attempts to seek ideal levels of privacy at a specific point in time (Altman, 1975). Moreover, different people have different needs for privacy and personal space so the discussion was held in a room that is free from any external destructions. Observations were mostly done in classrooms and examination halls. The mandate was to see how teachers deliver content in the classroom, how learners with visual impairment are assisted, how they participate in class, how they are given feedback. Instructional materials used were observed if learners with total vision loss were included and accommodated in the planning. In addition, brailed materials for learners with total vision loss and enlarged printed copies for those with low vision were also checked.

3.8 Ethical considerations

The researcher asked for permission (consent) from the gate keepers (Regional officers and School heads). A consent letter/ permission to do a study was written to the gate keepers. Letters which were written were IRB Clearance from the office of research at the University of Botswana, Ministry of Education was consulted so that the participants will be interviewed. Once the permission/ consent letter was granted then the Regional office and the school heads were approached so that participants can be freely approached. Since learners with visual impairment stay in the school boarding facilities, through the school head's office, the matron and the boarding master as the learners' guardians while in the boarding facility were asked to

sign for them. Everything was explained to them and they were asked to state their concerns if they had any.

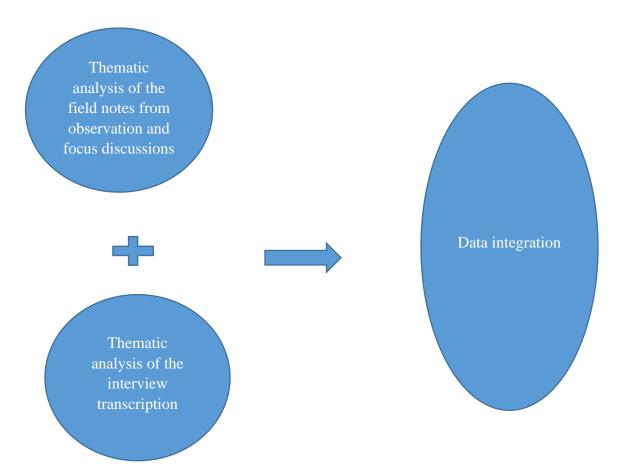
Teachers responded to questions to illicit reactions, beliefs and attitudes. Structured questions enabled the participants to express themselves. Sampled students were interviewed because most of them are visually impaired and it is easier and quicker to use audio with them than to ask them to write. This helped with issues of confidentiality because with a questionnaire a second person will have to be involved who will have to transcribe the information stated by learners because the researcher is not able to read brailed work. Teachers, teacher aides and braillists were put in separate focus groups, they were asked questions and allowed freedom to discuss amongst themselves while being recorded. To avoid power dynamics and bias, the researcher chose to actively involve the guidance office when dealing with learners with visual impairment. The school counsellor was requested to carry out the interviews with the learners, he is a professional as well as an academic so the interviews went smoothly with him and the learners.

3.9 Data analysis plan

Qualitative data is interpretive and subjective by nature, the analysis methods used are less structured than quantitative techniques. Data analysis depends on the questions that the respondents were asked. This was done after collecting data. The researcher listened to the tapes, transcribed interviews from tape to paper, and read over the written transcripts. This helped in being familiar with the data that was collected. There was a lot of reading done to understand the data then the researcher wrote down impressions, looking for meaning and determining which pieces of data had value. This gave an understanding of what the participants are saying. In analyzing data, coding techniques were used to find and mark the underlying ideas in the data;

the collected data was coded in categories relating different ideas and themes to one another (Rubin & Rubin, 1995). This type of analysis according to Creswell (1998) include organizing the data, finding and organizing ideas and concepts, building overarching themes in the data, ensuring consistency and accuracy in the data analysis and in the findings, finding possible and plausible explanations for findings an overview of the final steps. This type of analysis is called thematic analysis; it involves reducing data into themes. It is important to code and arrange ideas and concepts for easy analysis. Once the words and phrases that are used frequently were identified, as well as ideas coming from how the interviewee expressed him/herself and from the stories that were told, ideas were organized into codes or categories. The identities of the participants were protected throughout this process. Interviewees responses were then grouped to bring similar ideas together and themes together. Important quotes that added value to the research were included.

3.10 SYSTEMATIC DATA INTERGRATION



3.11 Consistency and Accuracy

Interviews were piloted to check consistency and accuracy of the instrument. The results were discussed with the supervisor for truthfulness and expert advice. All errors, discrepancies and illogical statements were noted and corrected to ensure that only relevant information was discussed. Trustworthiness of the research enhanced confidence. To ensure this, participants were given reasons why the research was carried out. They were given an option to opt out if they are uncomfortable about taking part in the research. Qualitative research is subjective by nature so to avoid bias different forms of data collection were implored (Creswell, 2014).

3.12 Instrument Accuracy

The accuracy of the content of the instrument was determined by testing and retesting the participants. It measured the extent to which the instruments used measured what they intended to do. Expert review was sorted through constant consultation with my supervisor to establish reliability.

3.13 Pilot Study

The researcher did a pilot study. The participants of the pilot were interviewed to determine the strengths and the weaknesses of the questions set aside for the interview. Critiques and corrections that were suggested improved the instrument before it was given to the participants. The participants in the pilot study were allowed to make suggestions on the improvement of the tool. The pilot study that was conducted was for both the learners and teachers. This involved 5 teachers and 6 visually impaired students. These participants were excluded in the study to avoid bias in the answers that they may provide. They helped in the shaping of the questions that were later asked the participants in the final study. For example,

initially the teachers were going to be asked about their general observation of the visually impaired learners in their classes without focusing on their own challenges in the classes. This was modified in order to find out their challenges and how they are combated. The interview guide was modified after recommendations were made. The questions were improved and the researcher managed to find out that both teachers and students face challenges in the classrooms as a result of barriers that are encountered. Teachers may not be able to help the learners on time as a result of not being able to read braille. They therefore have to wait for braillists to transcribe for them and learners may not perform very well because sometimes teachers write on the board without fully explaining to those who cannot read on the board because they cannot see.

3.14 Instrument consistency and trustworthiness

The researcher made sure the instruments used were free from error, the supervisor was included in every step to cross check the work already done. Contributing factors to error could be in the way the questions were asked. If questions are ambiguous, it may lead to results that are full of errors. Common procedures to establish consistency and trustworthiness of instruments were implored such as retesting the participants and making sure the environment to which interviews were taking place were conducive and free from bias.

To ensure consistency, trustworthy and accuracy of data instruments, everything was developed under close guidance of the supervisor. Guba's constructs of credibility, transferability, dependability and confirmability were used as well (Shenton, 2004). Credibility was ensured by engaging for long with the participants and re testing where clarity was needed, they were observed and triangulation was done. Instruments that were used to collect data were also vetted

by Office of Research Department at the University of Botswana (ORD), Ministry of Basic Education (MOBE) and the Education Regional Office in Kgatleng Region. The study also confirms what other people have found out in previous researches. The participants of this study could also be trusted to ensure what they discussed to be reliable, through triangulation teachers, braillists and students confirmed each other's information which shows that there was no intention to misrepresent. An outside researcher was also asked to conduct an inquiry audit on the research to establish dependability. Online statistics solution says dependability is important to trustworthiness because it establishes the research study's findings as consistent and repeatable. To make sure that nothing was missed the research was given to the supervisor and a classmate to check if there nothing missing.

Chapter 4 – Data presentation, analysis and findings

4.1 Introduction

This chapter presents research findings and discussion based on collected information from Linchwe II Junior Secondary School teachers, braillists, teacher aides and learners with visual impairment. The presentation of the data is followed by a discussion of the research findings. The main objective of the study was on teachers' responsiveness to learners with visual impairment. The researcher unveiled teachers' responses to the academic barriers that learners with visual impairment face and suggested way- forward or solutions to such barriers. The information gathered in this study has been used to make recommendations based on the responses that are provided. The participants responded to interview questions that answered the below research questions:

- 1. In what ways do teachers respond to learners with visual impairment?
- 2. What teaching strategies do teachers employ in order to accommodate learners with visual impairment?
- 3. What are the academic experiences of learners with visual impairment?

Since the study was focused in understanding the teacher responsiveness towards learners with visual impairment. Information was gathered directly from the learners with visual impairment, braillists, teacher aides and their teachers. Participants were approached in their natural setting. They were free during the interviews and focus discussions which made information sharing easier. The different data collection methods formed a methodological triangulation; this made the data more trustworthy and credible as one source was checked against the other (McMillan & Schumacher, 1993).

4.2 Instruments

Data was collected using semi – structured interviews, observation checklists and focus group discussions. The students were interviewed on their own, teachers were put in a group and asked questions to enable them to have an open discussion; and braillists were put in a group with teacher aides separately as they do similar work of transcribing and embossing students` work. Braillists and teacher aides are essential as they witness interactions between teachers and their students on daily basis. They provided information that otherwise learners and teachers could not unravel. All these participants were recorded as they discussed the questions that were asked and classroom observations were carried out randomly. The aim of the observation was to see how teachers carry out their lessons and how learners with visual impairment participate compared to their sighted counterparts. It was also to see the rapport between teachers and their learners. These observations were conducted during lessons, tests and examinations.

4.3 Background Information of the Participants

4.3. 1 Categories of Participants

There were three categories of participants in this research. First, teachers who were put in a focus group. They were asked to discuss the questions that were asked. They were divided into two groups to avoid having a very big group. Each group consisted of 8 members. The number of teachers that were in the two groups were 16 in total. Next, were students who were each interviewed to solicit information on how their challenges are responded to by the teachers. Only form three students participated in the study. 6 students were interviewed; 3 girls and 3 boys. Third, were support staff consisting of braillists and teacher aides. These participants were put in a focus group and asked questions which they discussed amongst themselves and with their permission all these groups were recorded. Total number of students in Linchwe II Junior

Secondary School is 490 and learners with visual impairment are 34. The are 48 subject teachers, 4 braillists and 6 teacher aides.

Table 1

Participants	Method of data collection	Gender	
		Males	Females
Teachers	Focus Discussions	4	16
Braillists and teacher	Focus discussions	2	8
aides			
Students	Interviews	3	3

Table 2

		Students	Teachers	Braillists
Gender	Male	3	4	2
	Female	3	16	8
Age group	16- 20	5	0	0
	21 - 30	1	4	3
	31 – 40	0	12	5
	41 – 50	0	2	2
	51 - 60	0	2	0
Employment	Full Time	0	18	4
status	Part Time	0	2	6

	Student	6	0	0
Education	Primary	6	0	0
Level	Secondary	0	0	6
	Diploma	0	12	4
	Degree	0	6	0
	Masters	0	2	0

4.4 Research Findings

4.4.1 How teachers respond to learner challenges

This research question was aimed at finding out how responsive teachers are towards the needs of their visually impaired students, research further found out how they deal with the challenges they have observed in their classes that are faced by learners with visual impairment. It was important to establish that indeed there are challenges that learners face. This means the learner have to be assessed by an educational psychologist or a low vision officer who understands visual impairment. Basing on the recommendations that are going to come out of the assessment then the response and learning support will be guided by the results of the assessment or the recommendations coming from the assessment.

Research has proven that indeed the learners with visual impairment face challenges that are unique to their disabilities, which the sighted learners do not necessarily face. Kinyanjui (2008) establishes that for the learners with visual impairment to be integrated into a mainstream school, a full assessment of each pupil's individual needs is essential. This is to make sure that

the working environment can be planned and decisions made about what adaptations are needed, additional skills the child needs to learn for example mobility and orientation and what is required in terms of technology to give access to the adapted curriculum.

The first thing that is done when learners are received in Linchwe II J.S.S through the Special Education unit is to teach learners with poor mobility orientation and mobility so that they may be able to walk from one place to the other efficiently with confidence. This mean their minds are at ease. When they are taught in class, they will not be worried about who will take them to the toilet if they need to excuse themselves to go to the bathroom, or when they go to the hostels or in between classes. This builds learner confidence. This act helps teachers because once the learner is in that state of mind, he will be able to easily relax and learn in class.

The information that is gained from the clinical tests are important as they enable the contact teacher to know how the learners uses their vision in and outside the classroom both in academic, non-academic and social activities. Knowing this helps the teacher to place the learner with visual impairment appropriately in class so that their different challenges can be addressed. Some visual conditions are addressed by enlarging the print either through print magnification or the use of low vision aids. Teachers makes sure that safety precautions for the learners with visual impairment are prioritized at all times. Through classroom observations, one thing that is done is to place learners with visual impairment in front. This enables the learner easy access and movement in the class. This also helps them when they want to exit the classroom. The classes that were observed ranges from 38 students to 45. The space is minimal thus teachers put the learners with visual impairment in places that are conducive to them and safe. This also avoids cases of bumping on chairs and desks which could be hazardous to the learners.

Findings from the interviews conducted with learners show that in responding to the challenges, some of the teachers go out of their way to assist learners. Some teachers use the stipulated time of 0730 -1630 to help the learners while others come outside their teaching hours; even if they do not get compensated for the extra time. Another discovery that was made is that others do not do anything to help the learners outside the stipulated time. They utilize the time-tabled allocations for their lessons and do not follow up on the visually impaired learners who would have been behind time during lessons.

Some teachers who are responding positively to the learners` challenges said they conduct needs assessment. They then refer the academic challenges to the Special Education Unit to engage professional assessors. The educational assessment is an important exercise that helps in early identification, assessment and referral of learners with any form of challenges or disabilities. The teachers of English and Setswana deal with issue of long passages that are in their subjects by assigning scribes and readers to the learners. Teachers also conduct remedial lessons while others do motivational talks.

4.4.2 Teachers` passive responses

From the interviews, the learners expressed that some teachers seem not to care whether they are left behind or not during lessons. They said teachers mostly focus on learners who are brilliant and sighted. They said that during lessons where formulas need to be written on the board such as Mathematics and science; the teachers generally just write the formulas and work out the sums without reading aloud what they have written for the sake of the learners who cannot see the board. One of the students who was interviewed said most of the time, subjects such as Mathematics can be very frustrating for him because he was born blind and cannot see. The student is quoted thus;

Student 2: "I have realized that Maths and science are a challenge, where the teacher will refer to what is written on the board, expressions like you see 'when you subtract the number from that one'. The sighted students are able to relate with what the teacher will be saying because they can see the numbers the teacher is talking about on the board. When the teacher keeps pointing you get to wonder whether the sum is on the left or right which can get really tricky for someone like me who was born without sight, nna kana ke tshotswe ke sa bone. Ga ke bone sepe mo boarding, ebile ga ke tlhaloganye gore go ntshiwa eng, mo go eng".

Another student who says whenever she is in lessons where the teacher uses the board a lot she just gives up and loses concentration also shared this view. She is quoted saing;

"I have given up when it comes to Maths in fact I wish it was an option because even when we are in class, the teacher just ignores us. It is not easy to answer the questions that are asked because most of the time I lack understanding. The teacher does not come with calculators to class. Sometimes they are only availed during exams. It is difficult to fully use them because they are shared amongst all candidates in the exam room."

When asked to share in the focus discussions teacher aides reiterated what the students mentioned by saying, it is difficult for them to explain to the learners because in most cases when the teacher explains to the rest of the class some difficult equations they wish he could also take his time to help the learners with vision loss. One teacher aide said when she asked the teacher to help, he simply assigned a sighted student to help those who could not understand and when his 40 minutes were over, he went away to the next class.

Teachers showed that there is a degree of truth in the above statements in their focus group discussions; one teacher said she is clueless on how she can help the learners.

"Social studies have map reading and the learners with visual impairment are tested on it but every time I try to get help with diagrams at the special education unit there is always complaint of the paper that is used not being there. This makes me not to help the way I could. My hands are tied."

She said this waving her hands helplessly in the air.

One braillist in the focus discussions alluded to the fact that some teachers do not really pay attention to the learners with VI. She said that she once had a discussion with one teacher and showed her that one learner with vision loss was not writing notes like the rest of the class. This particular teacher simply told her to ignore that learner because she is not serious with her work. To support these allegations, one teacher aide said she has realized that teachers do not come to class prepared to help the learners with visual impairment. To back what she was saying, she said in one of the lessons at the science lab the learners were given notes. The teacher had made hard printed copies for the sighted learners, they were required to go and write notes at home. Those who were visually impaired were not given copies. The teacher aide had to approach the teacher after lesson to demand the copies for the learners with visual impairment. She said,

"Even though the paper was not brailled at least I will take time during study time to dictate the notes to them".

When probed further the respondent said in her observation, these learners are normally excluded in the particular subject. These responses show that learners needs are not really met and teachers need to find better ways to approach and respond to their challenges. Both learners and teachers showed frustrations. Learners feel excluded in the lessons and teachers showed helplessness because they do not know how they can assist the learners. Mathematics teachers

showed that they need all the learners to have calculators but the special Education unit lacks funding to buy enough for all the learners. Despite the school being fully government, this particular sector of learners does not receive their resources the same way the sighted are.

Kinyanjui (2008) asserts that the lack of stationery is a hindrance in the learning process. The teaching and learning materials are important in the whole process of integration.

Availability of these resources is essential to learner development and understanding of concepts in class. The normal instruction of the learners with visual impairment requires a lot of specialized instructional materials. Their production requires specialized machinery. Without the materials the instruction of the visually impaired may be nearly impossible. All these factors are to be considered for the integration process and subsequent retention of the visually impaired.

Teachers need to work as a unit in the delivering and providence of these resources.

Learners feel helpless because they feel discriminated in a school that is supposed to help the visually challenged. From the teachers' focus discussion the revelation made was that they feel incapacitated because they do not have formal training to assist learners with visual impairment. In their different teacher training colleges and universities, they were not imparted with skills to teach visually impaired learners. One teacher of English who has been in the school for over 15 years expressed that she wishes she could help but she is also struggling because she cannot read braille. This makes feedback to be given to learners with visual impairment later than their sighted colleagues do.

She says,

"We teach the learners to the best of our abilities, but we are not trained to deal with their challenges or to teach them so we are failing them in the process. Maybe they are not performing well because we are not teaching them the way they should be taught. We were never taught at our colleges how to teach them so; Ke Modimo nthuse hela".

This mistake needs to be rectified as per advisement by the Kenya Institute of Special Education (KISE). This institute according to Kinyanjui encouraged all teachers to build their capacity through distance learning so that they have skills to handle the learners with visual impairment. Ruto (1996), per the information shared with the UNESCO's programme of special needs education, said the success of an integration project depends primarily on the commitment and skill of the teachers.

Another teacher added to this by saying, she cannot read braille. She says,

"Even when I give two questions and mark in class and give quick feedback. I cannot read what these learners write because I do not know how to read braille. When I ask the learner what she or he has written they tell me what they have written but I cannot confirm the spelling or the grammar. So, when I give others feedback, I do not address their needs because their work has to be taken to Special Education department to be transcribed first. It takes long to reach me so the learners remain in the background because their needs are beyond me. No one taught me braille."

These two teachers provide English as their teaching subject. They indicated that there is no teacher aide assigned to their subject. The Special Education unit took this decision without any explanation to them even though other subjects have aides.

She said,

"When I asked them why we are not appointed a teacher aide because in the past we had one, senior teacher special education could not give me an answer. They just said English is not assigned an aide."

When probed further, another teacher of English said,

"I normally use friendship to get help from other teacher aides, otherwise I am just told to wait for students` feedback from the department."

The teachers showed that they are passive because there is no help coming from relevant offices and that makes them to not assist the learners the way they had hoped they could help them.

One student when asked if she receives help, she answered by saying,

"I do not get the kind of help I need, some subjects I am able to get help but most of the time teachers do not help me. I wish there could be a time when teachers could just go out of their way and help me. I have approached some to appoint with them but they are always busy. If I was to be taken aside and be helped it will make my life better. Sometimes when we ask for clarity, the way it is explained is too difficult for me to understand. For example, during Maths lessons the way it is explained, the teacher will just explain by writing on the board forgetting that some of us cannot read the content on the board."

The observation made is that indeed learners' needs are not fully met because there is a common trend and complaints from the learners despite the fact that learners who were interviewed were from different classes. Different teachers teach them. Teachers also acknowledged that sometimes, time does not allow them to help the learners because they are

expected to finish the syllabus. These constraints restrict them from fully focusing on the visually impaired. Setting time assigned for learners with visual impairment is not easy for them as they will also try to help the whole class towards syllabus completion.

One teacher said, "These kids require a lot of time which we do not have. If we are given 40 minutes for single period or 80 minutes for double, it is not easy to take time with the visually impaired. I have 45 students to give attention to, I am given limited time to complete the syllabus. There is nothing to be done. Maybe they should be separated from the sighted learners and their syllabus modified. For now, I do not have the expertise to know what I can do because I am expected to have completed the syllabus before the learners sit for their J.C. Exams."

To further show teachers' responsiveness one student in her views said, 'Kana rona Ma Special Ed ga re itse sepe' loosely translated as Special Education students we are dull. We can never contribute anything positive to the academic world. When probed further to find out what the cause of such utterances are, she said,

"Teachers say we are a cause to the academic decline of the school. One teacher even mentioned in class when we were given our test papers that our results led to the class quality to drop."

This is sad because with this kind of attitude, mindset and labeling it will be hard for this child to do well. In the observation made, the learners with visual impairment did not participate a lot in the daily activities of the class. Most of them just kept quiet until end of the lesson. They only participate when the teacher calls the student by name but still others will just be quiet.

To add to the observation above, when braillists and teacher aides were asked to state what they have seen happening in their different classes, one said

"During class discussions, I have observed that some teachers will just skip learners with visual impairment and focus on learners who are sighted or those with their hands raised."

4.4.3 Teachers` active responses

In responding to the challenges that learners face, teachers` focus group said they conduct needs assessment to identify challenges. After knowing about those challenges, they then involve stakeholders especially the parents. Long passages in Setswana and English subjects were identified as a challenge for learners who write using braille as compared to learners who use enlarged print. Teachers read the passages to those learners during class exercises. They however have a limitation if the learner is assessed and recommendations are not done by the assessment team for that learner to use a scribe. This is so because the team that is normally called for assessment focus more on learners with academic disabilities than those who have vision loss challenges. One teacher said,

"I normally read to my learners in class to avoid delay in answering questions. Braille is bulky so if they read on their own, they tend to take longer time to answer the question. Some learners do not go back to refer to the text because it is not easy to find information compared to when a student has sight they can easily spot in the text where the question might be referring to."

Learners with visual impairment showed that despite the difficulties that they face in practical subjects like Agriculture they have teachers who seem genuinely interested to help them. They cited one teacher who frequents their studies specifically to deal with their challenges.

"Sir, o kgona go tla ka nako ya study go re thusa mme bo teacher ba bangwe ga ba nke ba itshwenya ka go ba batla go re thusa. Fela fa ba fetsa ko classing ba kgaogana le rona,"

This comment came from one learner who lost sight since birth. Loosely translated, this learner gave the particular Agriculture accolades for taking his time to help them outside the teaching hours because he had realized that they were behind in the work he had given to the class. This is important to note because other learners from a different class indicated that the experience was different with them because their teachers do not do that.

One Agriculture teacher said as a way to help the learners they normally avail diagrams and help learners with practice. The more they give them the diagrams the better for the students because they will later on recognize them if questions were to come out referring to the same diagram.

Another teacher from a different subject said,

"There are times when I am teaching and if I know that I am going to use diagrams in my lesson, I make sure those diagrams are embossed. After doing so I set time aside time to teach those learners the diagrams before going to class. When I go to class they already have their diagrams. What I do is to make sure that the learners follow as I explain to the class and if they get lost, I show them. How I show them is, I use their index finger to show them the diagram so that they understand it"

Yet another teacher said he prefers to braille the learners' notes in advance. He said,

"Depending on the braillists schedule, I give them printed notes in advance so that they could be brailled before I go to class. Then I give the learners these notes and make them read.

This is a form of my personal remedial education or pre lesson. Sometimes I do it after lesson"

This is something that is done by individual teachers as it was elaborated in the teachers' focus discussion. Other teachers said because of the shortage of resources in the school they are not able to have diagrams for all the topics they will be teaching because it a duty of the braillists to emboss those diagrams so if they are busy with other duties it is not easy to get the work on time. Similarly, braillists also agreed with the statement from the teachers about shortage of resources stating that paper used is not easily availed and this makes it hard for them to fully assist the teachers.

Some teachers said they normally meet learners in the afternoons or evening study for remedial lessons. They alluded that when they meet the learners, they first find out what the learner will not have understood and they will work on the weakness to broaden the learner's scope. One teacher during the focus discussions said,

"I do help the learners where I can. There are times when I meet them during afternoon studies. They let me know where they need help and elaboration of certain objectives we would have done in class; this helps me to know the areas I should focus on when I am assisting the learners."

Additionally, another teacher said,

"I normally take the learners aside during their evening study. They really open up about the difficulties they face in class. It is easy for them to state their challenges when they are outside the mainstream students."

This particular teacher chooses evening study because access to these learners is easy because they are given one hour every day of the week to study in the evenings. All of the visually impaired live in the school hostels.

Similarly, in their interview, one learner said,

"I have challenges in Maths so normally sir sometimes helps me in the afternoon if he has the time."

Learners also indicated that some teachers are very nice to them as they take time to talk to them and get to know them, one learner in her interview said,

"The only thing that makes my stay in the school bearable is because some teachers takes time to know me and my needs. They are able to help me accept my disability because sometimes lack of sight can be depressing."

This same sentiment was shared by teachers in their discussion, one teacher's narration is as thus:

"Our learners who has visual impairment needs support and general counselling. I normally sit down with some from my class. I have realized that some have not accepted that they do not see. I have also arranged with the counselling department to do motivational talks geared towards them."

The consensus throughout the interviews and the discussions is that indeed learners with visual impairment have struggles and different teachers respond differently to the challenges faced by these learners. The responses that teachers gave indicates that the way they approach challenges of learners with visual impairment differs. Others try to help them while the other group do not. External factors that contribute to these are topped by the lack of resources that enable the learners to do their best in school. The themes identified are remedial lessons, motivational talks, use of scribes, brailed notes and embossing diagrams and providing to learners to practice with the given diagrams.

4.5 Intervention strategies to help teachers overcome inclusive education implementation strategies

The common strategies that were proposed by a majority of the interviewees included improving the teacher – learner ratio, stakeholders called for participation and encouragement from Non-government Organizations, soliciting government support and ensuring that the school provides resources; both human and material to help the learners with visual impairment overcome challenges of inclusive education. Stakeholder involvement is a strategy that can help overcome inclusive education implementation strategies. Stakeholders can help with ideas and resources to help make inclusion a success. It was concluded that there is need to ensure that teacher learner contact ratio be increased. The government needs active participation in helping implementing inclusive education by providing the required funds and materials needed.

The government needs to employ relevant legislation and policies that promote inclusive education. They should be programs geared towards making the public aware of the visually impaired and their needs. These programs should also help teachers know better ways of dealing with the learners' challenges. Recommendations should be made to Botswana examination council (BEC) on modification of the examinations as findings show that some subjects are struggling with objectives that learners with visual impairment are not able to do because of the nature of their disability.

This was discovered during the focus discussions with the braillists and teacher aides.

One teacher aide said,

"It is difficult for the learners because sometimes certain objectives are only taught the sighted students. I was in one class where the teacher said there was no need for the learners to take part because their paper will be modified to exclude the material he was teaching. During

school local exams the learners were not tested on those objectives. Unfortunately, when the J.C.

Exams were written the learners with visual impairment were required to write the same objectives that they were excluded on"

When asked to elaborate this, the teachers confirmed that indeed sometimes how the J.C. Exams are is different from the recommendations that will have come to them through the school. One teacher said,

"Sometimes the exams that come from BEC surprises us all because the modified papers include the material that is not suitable for learners with visual impairment."

Teachers also recommended for listening comprehension in Setswana and English instead of long passages that learners cannot comprehend. One Language teacher said,

"Despite what we do, it is difficult for learners who cannot see to have long passages in their exams, rather have someone read for them thus I advocate for listening comprehension".

Teachers asked for extensive training to enable them to teach learners with visual impairment. One teacher said,

"I wish I knew how to write and read braille. That will help me assist the learners.

Feedback will come speedily."

Yet another said,

"It is very important to have short courses, in-service training and workshops to help us be knowledgeable in assisting all forms of learners especially those with disabilities."

Teachers are calling out for the Tertiary schools to intensify inclusive education in training teachers. They said,

"It is about time inclusive education becomes core for all those training to teach. This will help because teachers will be able to help learners better."

Another in the discussion added to this by saying,

"VI Programme for specialists should be intensified. More teacher aides should also be hired to relieve regular teachers. Aides should be skilled in the work that they do as well"

Concerning resources, all the interviewees said provision of brailled material was essential. Braillists said,

"We need to have texture paper and perkins braillers to ease the load and expectations put on teachers"

Teachers on the other hand said they needed brailled textbooks. The students made this outcry as well.

From the above discussion, realization is that there is still a long way to go in Botswana when it comes to assisting learners with visual impairment. Policies are there in paper but what happens in classrooms brings to light that as a country we still have a long way to go. The reasons why teachers are not able to help learners with visual impairment is an alarm to the nation of Botswana to start directing resources to the special education department to better assist these teachers in order to do their best in their facilitation and curbing challenges that are faced by the learners. The teachers have limited knowledge and skills, for those who have received formal training there is lack of resources. These challenges stop the teachers from performing to their level best. One of the resources everyone was concerned about is the *braillo* machines (perkins brailler), learners are given hand frames which are very slow compared to using machines. The braillists showed that there is lack of funds allocated to the department which is a

factor stopping everyone involved to fully help the learners. Inclusiveness in the classrooms also contributes as discussed by the teaching staff in the focus discussion where they showed that these students should be separated from the sighted students and have their own classrooms which will help in assisting them. One teacher said,

"We should try new strategies like separating the learners and focus on their needs.

Their classrooms will be a safe place for them to fully express themselves without feeling intimidated by the sighted learners."

This assertion did not receive the same responses from other teachers who felt that doing that will be discriminating. One teacher however said with the right skills to know how to assist the learners, they can be in the same classes with the sighted students but teachers have to go an extra mile in helping them. Remediation and pre lessons should be conducted with them to enable better understanding when they are now in the classroom.

The findings also point to the issue of motivation of both teachers and learners with visual impairment. They both need positive reinforcement from the stakeholders so that they may develop assertive skills in their learning capabilities. Most of the teachers at Linchwe II J.S.S are not knowledgeable and skilled to teach learners with visual impairment that is why most of them answered that they needed to be equipped with skills to help the learners with visual impairment.

It is worth noting that the teachers in this research are as desperate as the learners themselves in order to better achieve positive results. Despite their limited knowledge, they work hard in order to help the learners. Those teaching language subjects were having challenges of long passages and notes; subjects that required experiments and diagrams such as science, mathematics, social studies and agriculture were a challenge for the teachers and students alike. Some subjects do not enroll such learners because they do not have the right equipment to help

assist them. Subjects such as Music, Physical Education, Art and Design Technology said these subjects are not equipped enough to enroll VI students.

4.6 Interpretation

The results that were attained; through interviews, focus discussions and observation shows that both teachers and students are frustrated by the current system in place. Even though teachers try their best, the fruits of their labour cannot be seen because students are tested just like the sighted learners. Teachers are transferred to Linchwe from schools where they have never been exposed to learners with visual impairment and it is a cultural shock for them when they enter the inclusive classrooms and do not know how to help the learners. Most of them said lack of in-service training and workshops stops them from knowing that which they need to do to help the learners. The students on the other hand feel discriminated by both the teachers and other learners. Instead of *Neo* being called by her name, the general consensus is to call her 'le special ed'.

4.7 Recommendations made by the participants

4.7.1 Learners with visual impairment's recommendations

The learners with visual impairment suggested they should be given extra time in their lessons. Observation that was made is that extra time is only awarded to students during tests and examinations. The learners would like to have this extra time even during normal day to day lessons. They would also like to be treated as individuals and be helped according to their needs not just as a group. Students also asked for extra lessons by teachers in order to better explain concepts that may have been hard for them to grasp in class. They further asked for diagrams that are normally used in Agriculture, science and social studies to be removed. Testing them using

diagrams is a futile exercise like one learner expressed. Others advocated for agriculture to be made an optional subject like they do in senior schools because the work is too much for them as they do practical part at the garden as well.

4.7.2 Teachers, teacher aides and braillists' recommendations

In the focus discussions for both braillists and teachers, participants voiced in unison that they are not provided with resources to help learners with visual impairment. Teachers providing Mathematics do not have enough talking calculators, Perkins machine is needed to make the learners work faster than the rate they do when using hand frames. The learners are not able to complete the work on time because of using the hand frames. Some teachers asked to be taught braille and have short courses that will prepare them to teach learners with visual impairment and be sensitive to the learners needs. Teaching learners with visual impairment requires preparedness and skill that most teachers felt they do not possess. Some suggested that learners with visual impairment to have separate classrooms so that they can get the attention they deserve. Teachers asked for further studies and re training so that they could be in a better place to help learners with visual impairment because they are not fully equipped with the necessary skills

Chapter 5 - Summary, conclusion and recommendations

5.1 Introduction

The chapter presents the summary, conclusion and recommendations of the study. The chapter presents suggestions for further research.

5.2 Summary

The purpose of this study was to investigate teacher responsiveness towards challenges faced by learners with visual impairment in mainstream classrooms. It is a qualitative approach. Force Field Model provides a framework for looking at the factors that will help successful implementation of inclusivity and the forces that are negating the success as discussed in the previous chapter. Teachers and learners with visual impairment shared their experiences. The participants' responses were unveiled guided by the research questions. The first question was aimed at soliciting information on teachers' responses towards academic challenges faced by learners with visual impairment. The second one was aimed at eliciting intervention strategies that could help teachers overcome inclusive education implementation strategies. Observation was made that learners with visual impairment were struggling in their studies, the teachers were approached to find out how they respond to different challenges the learners face. The frustrations faced by learners and teachers were looked into. Teachers are frustrated that their efforts to help the students are futile, as they are not able to deal with the challenges the learners face in their different subjects. The research showed that teachers' responsiveness to the challenges faced by learners with visual impairment differs. Some are passive and hopeless because of their lack of understanding to how they could assist the learners while others are showing effort despite faced with the same challenges as their colleagues. Most teachers are not able to provide their learners with notes despite the fact that sighted learners are given

photocopied notes, the subjects that provide the learners with notes teachers are not able to truly see if the notes have been completed by the learners because they cannot read braille. There is a shortage of teacher aides in the school. This makes it difficult for the teachers to properly track learner performance and combat the challenges and properly respond to them. The challenges that were identified included lack of resources (brailled textbooks) which teachers have no powers to attain for their learners because of procurement procedures. Most teachers are not fully equipped to help learners with visual impairment while others showed that there is lack of support from the stakeholders (parents, Regional office, Ministry of Basic Education).

In teacher responsiveness towards learner challenges remediation topped the list. Most teachers who are actively responding to learner challenges said they conducted remedial lessons whenever they find the time. Some said they give learners less work so that they could be able to give them quick feedback while others involve readers and scribes. Some teachers said they lack skills and resources to help the learners so they are still awaiting the government to empower them. Intervention strategies that were suggested included involving stakeholders, making recommendations to Botswana Examination Council, learning braille, getting proper training, intensifying inclusive education at tertiary for all teachers.

5.3 Conclusion

Teachers in mainstream classroom work in a world of multiple demands. Their job is not for the faint hearted, it required love and determination from all those fully involved. Schools receive students from all walks of life with different challenges and abilities. It is of great importance to note how teachers have reacted towards learners who are visually impaired. Steps were taken to find out the learners` academic challenges and how responsive teachers were

towards them. Most teachers had differing views about the inclusion of learners with visual impairment and other disabilities in mainstream classrooms (Cassady, 2011).

Linchwe II J.S.S does not receive enough support to ensure successful integration of learners with visual impairment. Teachers and students are frustrated, they are all crying for help. It is evident that poor coordination and partnership among stakeholders impact immensely in integration processes. Findings indicate that to-date; there is insufficient collaboration and coordination of organizations and agencies providing support to teachers in order to help learners with visual impairment. Resources that the learners use are expensive and their availability is dependent on the help the special education department get from different companies and organizations as donations. Linchwe II J.S.S is not getting the required support from external stakeholders including the government, which should be providing the required funding to ensure that the learners' academic needs are met. These challenges have made the work of teachers difficult.

The teachers however indicated that they could cope with some of the challenges that they were facing by being more committed to their work. Some said they are trying to make do with the few resources at their disposal in order to ensure successful integration implementation. Brailled books and machines are a major hindrance but teachers try to help learners with the little that the school avails to them.

The findings showed that teachers are qualified to teach but not all of them know how to help learners with visual impairment. Learners are also willing to learn even though some seem to have just given up and waiting for the 3 years of Junior Certificate to end as one interviewee expressed. Strategies that are used by some teachers as seen in the observation made in some lessons is that they work for some students but not necessarily the learners with visual

impairment. For example, the constant science experiments that are conducted regularly benefit the sighted students while those who cannot see seem to just be in class for the ride. Teachers seem helpless, as they do not know how they can help the learners with visual impairment.

The findings of this research show limitations in the knowledge of assisting learners with visual impairment and the learners seem to have just given up on themselves. Both students and members of staff need motivation. Findings also show that despite Linchwe II J.S.S being a school that provides learning to learners with visual impairment there are no resources to fully assist in the learning. The teachers need the Ministry of Basic Education to give them support for them to fully meet the learners' challenges. If it is in the ministry's mandate for every teacher to be expected to teach learners from all scopes of life, be it visual impairment or those with hearing impairment then teacher colleges should train all the teachers to have all the necessary skills to properly do their jobs.

Public awareness is important to let people know what inclusive education is. When people understand what they need to do, likelihood is high to overcome negative perceptions towards inclusive education. Members of staff should be developed to impart special skills that will enable them to combat learner challenges. Education for learners with visual impairment is resource intensive. There should be adequate members of staff; learners need attention so having more teachers is not a waste if that will be a solution to implement inclusive education. Assistive technology should be provided to the learners to enable both teachers and learners to progress. Channels of communication should be implemented so that at least everyone is on board and know what is needed to fully implement inclusivity. Assessment of learners should be done when there is plenty of time instead of doing it when the learner is already in form 3 because BEC wants some assessment report. This disadvantages learners. Scribers should actively work

with students throughout the time the student is in the school instead of involving them only when the student is writing their final exams. Learners need a conducive environment for proper learning to take place so the school infrastructure needs to accommodate the learners' needs. Lights and curtains should be available because depending on the learners' needs some may require light while others may need a dim room because too much light may hurt their eyes. Learners with visual impairment demand more time and patience from their teachers, they require specialized instructional strategies in structured environments that supports and enhances their learning potential. Research has shown that it is difficult for teachers to cater for individual needs of every learner, let alone the visually impaired ones who need extra attention (Serite, 2018). Positive teacher attitudes are essential for success when children with special educational needs (SEN) are placed into mainstream classrooms (Saloviita, 2018). Studies (Mphale & Moswela, 2015; Unianu, 2012; Hay, Smit, & Paulsen; 2001; Buell, Hallam, Gamel-McCormick, & Scheer, 1999; Ismail, Basheer, & Khan, 2015; Mangope & Mukhopadhyay, 2015) have indicated that teachers have challenges in handling learners with disabilities including those with visual impairment. Unianu (2012) illustrates factors that influence teachers' attitudes towards learners with disabilities as including: the degree of children's difficulties, the nature of children' disabilities, the teachers' experience with children with special educational needs, the trust in their own capabilities to implement inclusive activities; the teachers' preparedness for integrated classrooms. This according to the force field model are restraining forces that work against inclusive education. This research focussed on finding out teachers' responsiveness to visually impaired learners. It further looked at how prepared they are to teach in integrated classrooms.

5.4 Recommendations based on findings

5.4.1. Recommendations to the Ministry of Education

Given the findings of this research, it is recommended that teachers be trained who have no basic skills to help learners with visual impairment. Systematic professional development programs for teachers on the new trends of special education should be intensified. Workshops should be done in order to help teachers be equipped for the classroom challenges. A lot of the teachers are willing to go back to school to train as observed in the focus discussions, it is about time to take them back to colleges and universities and impart the right skills that will help them. If these wishes by the teachers to go back to school were to be listened to, then more of the learners with visual impairment will also have hope that they will not be pushed aside.

- The government should have clear policies on how learners with visual impairment should be included in mainstream education system and set aside more financial resources towards their learning. This will show that the visually impaired learners are prioritized.
- The study therefore recommends that the Ministry of Education should provide continuous in-service training to teachers on emerging issues so that they are able to handle issues such as learners` challenges especially those with physical disabilities.
- Learners should be stream lined according to their abilities, modifications should be made to accommodate them.
- Limit the number of subjects the learners take, enable them to choose the ones they are comfortable in just like what the senior schools are doing.

5.4.2. Recommendations to the School (Teachers and School Management)

- Learners suspected to have sight problems should be taken for assessment to Central
 Resource Centre (CRC) in Tlokweng for assessment.
- Learners with visual impairment needs to be placed strategically in class. Whenever the school takes learners for assessment and the results of that assessment show that learners have low vision, recommendations should be followed. If they are short sighted, they should be placed in the front of the board but if they are long sighted, they should be placed further away from the board. If the eye that has a problem is the left one then they should sit on the right side of the class. This then means that strategy that is used is to place them in front, back, middle or right side depending on the assessment recommendations instead of just grouping them all in front.
- Teachers need to be audible enough when they are teaching. All the teachers need to be clear to help the learners who depend on their sense of hearing to capture everything that they are saying.
- If a teacher is writing something on the board, s/he is supposed to describe what they are writing for the learner who is not able to see.
- If they are some key words which the teacher will like the learners to know, s/he must spell them out for the learner with visual impairment.
- The teacher is also supposed to write bigger bold letters on the board so that those who are able to see may see them clearly especially those with low vision instead of writing them in small letters.
- Teachers should avoid talking to the board, they need to face the learners so that those who are able to see a bit should lip-read what they may have not heard from the teacher.

- Teachers need to create a conducive atmosphere for the learners so that learners are free to participate and ask questions. Teachers need to be warm and accommodative to their learners.
- Assessment of learners with visual impairment should be done optimally and in time.
- Amanuenses (Scribers) to be involved in the student academic life throughout, not only in the exams.
- Infrastructure should be more accommodative if we need learners to feel free in the school. Some buildings need to be modified to suit the learners.

5.4.3. Recommendations to the Education Regional Office

- Public awareness and education.
- Skills development and in-house training. Continuous development of members of staff.

 Develop teachers so that they have the skills so that when they implement special education, they have understanding of what they are doing.
- Workshops should be held to develop members of staff. A two weeks long training workshop for new teachers and refresher workshops to help those who have been in the service for long in order to prepare for the 21st century learner with disability. Teachers should also be taught basic braille so that they can at least read the A,B,Cs of braille. Annual professional development through teacher training workshops at the beginning of each academic year should be in the Regional annual plans. This will help teachers with latest instructional strategies to incorporate in their lessons. These workshops help teachers to also network and to stay current in their lessons which contributes to positive reception of their visually impaired learners.
- Availability of physical resources: skilled human resource and assistive technology.

- Community participation needed.

5.5 Recommendation for further research

This study focused in one school. The results have limited generalization and application. The study can therefore be expanded to involve more schools that provide learning to learners with visual impairment. The teachers in those schools could be interviewed to find out how they respond to challenges their learners face in order for other teachers to bench mark in those schools. Teachers could also go further studies or do courses that can further assist them in the challenges they face, along with those their learners face and get skills on how they should positively respond to them.

Future researchers should also investigate the effects of support services offered to learners with visual impairment. This will look into integration goals and whether they are met and to ensure if the support services can influence positive teacher responsiveness. In the future effects of parental support in students' academics could be looked into.

5.6 Implications to Research and Practice

This research will bring more insight and understanding on teachers` responsiveness towards their learners with visual impairment. In carrying out the research, awareness and understanding was there about the inclusive policy in Botswana. The discoveries made in collecting data will enable those involved in integration to establish appropriate interventions and programs that are geared to benefit learners with visual impairment and their teachers. The intended purpose of this research was to benefit teachers who are actively involved with learners with visual impairment and those that are still in training to gain more insight and understanding on the challenges that face them. Since there has been little research undertaken on teacher

responsiveness to learners with visual impairment and intervention strategies have not been brought about inclusive education in Botswana, the present study was vital to fill the gap in knowledge regarding Inclusive Education through the lens of teachers. This will therefore help to establish ways and means to meet the needs of teachers with visually impaired learners in a more sufficient and adaptive manner. The learners with visual impairment will also benefit from the results of this study in that, the curriculum developers and everyone else who is involved in the integration program can develop positive response that ensures the needs of the students are met. The intention is also to make sure that policy makers especially those who are active in the inclusive policy would gain insight and understanding. This will lead to formulation of appropriate policies that ensure the needs of students in general are addressed within mainstream schools across the nation. Currently Linchwe II J.S.S is the only junior secondary school in the country providing education to the learners with visual impairment, learners travel long distances to receive education which could also pose as a challenge as they miss their families. Other schools are in the educational plan to be established in other parts of the country and with these findings the Ministry of Basic Education (MOBE) will be more informed in the courses that are given to teachers at tertiary level. This research has touched on unchartered waters. Scholars and researchers will benefit from this study. Previous researches focused on the learners with visual impairment, their teachers were left behind yet they are the ones doing the spadework in the classrooms. The results from this research maybe used as a reference point as well as an entry point for other studies related to the topic and cover areas that this study may have not been able to address. Limitations of time and finances restricted the research to be in one location as explained in page 22. The study was in small scale, the small sample size lead to lack of information that could have been obtained from other teachers in other parts of the country. The

information was not generalized to a larger group of teachers and other studies that come after this one may focus in those areas for generalized viewpoints about teacher responsiveness in the different parts of the country. The collected data may not express and represent majority of teachers in Botswana.

References

- Abosi, O., Didimalang, C., Gabanakemo, C., & Nwaogu, P. (1998) . *Issues on access and opportunity to basic education for disabled children in Botswana*. Gaborone, Botswana Council for the Disabled
- Abosi, O.C. (2000). Trends and Issues in Special Education in Botswana, *The journal of Special Education*. University of Botswana
- Agesa, L. (2014). Challenges faced by learners with visual impairment in inclusive setting in Trans- Nzoi County. *Journal of Education and practice*. Kenya.
- Ainscow, M., Booth, T., & Dyson, A. (2006). *Improving schools, developing inclusion*. New York, NY: Routledge.
- Ainscow, M., & Goldrick, S. (2010). *Making sure that every child matter: Enhancing equity within education systems*. The Netherlands: Springer.
- Ainscow, M. & Sandill, A. (2010). Developing inclusive education systems: the role of organizational cultures and leadership. Springer
- Allen, E., & Cowdery, G. (2011). The exceptional child: Inclusion in early childhood education. New York: Cengage Learning.
- American Foundation for the Blind (2016): http://www.afb.org/
- Astalin, P.K. (2013). *Qualitative research designs*: A conceptual framework.

 Department of education, DDE, Madurai kamaraj university, Madurai-625021, India.

- Avramidis, E., & Kalyva, E. (2007). The influence of teaching experience and professional development on Greek teachers' attitudes towards inclusion. *European Journal of Special Needs Education*
- Banks, J. A. (1993). *The canon debate, knowledge construction, and multicultural education*. Educational researcher
- Babbie, E., & Mouton, J. (2001). *The practice of social research*. Cape Town: Oxford University Press
- Baxter, P., & Jack, S. (2008). *Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers*. The Qualitative Report, 13(4), 544-559. Retrieved from https://nsuworks.nova.edu/tqr/vol13/iss4/2
- Bayram, G.I. (2014). Exploring the academic and social challenges of visually impaired of visually students in learning High school mathematics. Bilkent University, Ankara
- Berry, R. W. (2010). *Preservice* and early career *teachers'* attitudes toward inclusion, instructional accommodations, and fairness: Three profiles. The Teacher Educator
- BFTU (2007) The constitution Botswana Federation of Trade Unions, Gaborone
- BFTU (2006) Position Paper on Privatization in Botswana, 2006, Gaborone
 - Botswana, Finance & Planning (1997). *National Development Plan 8, 1997/98-2002/03*:

 Republic of Botswana, Ministry of Finance and Development Planning.
- Brandon, D. P. (2006). Botswana's family and consumer science teachers' attitude towards the inclusion of students with physical disabilities. *Journal of Family and Consumer*

- Brent, M. (2018). Advantages & Disadvantages of the Force Field Analysis. Accel Team

 Development
- Bryman, A. (2006). *Integrating quantitative and qualitative research: how is it done?* Research article. University of Leicester Sciences Education
- Buell, M.J., Hallam, R., Gamel-McCormick, M., Scheer, S. (1999). A survey of general and special education teachers' perceptions and inservice needs concerning inclusion.

 International Journal of Disability, Development and Education, 46, 143-156
- Burke R. et al. (2004). Mixed methods research: A research paradigm whose time has come. Educational Researcher. *Sage Journals*. https://doi.org/10.3102/0013189X033007014
- Bürgener, L., Barth, M. (2018). Sustainability competencies in teacher education: Ma king teacher education count in everyday school practice
- Carney, S. (2003). *Teaching students with visual impairment*. A guide for the support team. Saskatchewan Learning
- Cassady, J.M. (2011). Teachers' Attitudes Toward the Inclusion of Students with Autism and Emotional Behavioral Disorder. Electronic *Journal for Inclusive Education*, 2(7).
- Castellano, C. (1996). The blind child in the regular elementary classroom. *Future Reflections*Summer, Vol. 15 No. 3
- Cheuk, J., & Hatch, J. A. (2007). Teachers' perceptions of integrated kindergarten programs in Hong Kong. *Early Child Development and Care*, 177, 417–432.
- Chronaki, A. (2011). Disrupting 'development' as the quality/equity discourse:

- Cyborgs and subalterns in school technoscience. In Mapping equity and quality in mathematics education (pp. 3-19). Springer Netherlands.
- Creswell, J.W. (1998). *Qualitative Inquiry and Research Design Choosing Among Five Traditions*. Sage Publications, Thousand Oaks California.
- Creswell, D.L. (1999). Handbook of mixed methods in social and behavioral research. Sage
- Creswell J. (2003). Research Design: Qualitative, Quantitative and mixed methods approach (2nd edition). Thousand Oaks, CA: Sage
- Creswell, J.W. (2003). Advanced mixed methods research designs. `Advanced mixed methods research designs`, in A. Tashakkhori & Teddlie (eds) Handbook of mixed methods in social and behavioural research. Thousand Oaks. CA: Sage\
- Creswell, J. W. (2012). Educational research: planning, conducting, and evaluating. Thousand Oaks, CA: Sage
- Creswell, J.W. (2014). Fouth Edition, Research design, Qualitative, Quantitative and Mixed Methods Approaches. Sage
- Crockett, J. B., & Kauffman, J. M. (1999). The least restrictive environment: Its origins and interpretations in special education. Matwah, NJ: Lawrance Erlbaum Associations.
- Demir, M. K., & Açar, S. (2011). Experienced class teachers' views on inclusive education. Kastamonu Eğitim Dergisi
- Deiner, P.L. (2010). Early childhood Education Development, Resource and Practice. Ward sworth: Cengage publishing.

- Dussault, A. (2018). 2018's top 8 classroom challenges, according to teachers.

 https://www.classcraft.com/blog/features/8-teacher-challenges-2018/
- Eiken, R. (2014). Teacher attitudes towards the inclusion of students with disabilities in the general education classroom. Northwest Missouri State University.
- Elibariki, N. (2014). Factors influencing shortage of teaching learning resources in Tanzania

 Primary Schools: A case of Priary schools in Kindoni municipality. University of

 Tanzania
- ETSSP (2015). Education & Training Sector Strategic Plan. Gaborone
- Ferrell, K. A. (2007). Visual development in normal and low vision children. In A. Corn,

 A. Koenig, & J. Erin (Eds.), Foundations of low vision: Clinical and functional

 perspectives (2nd ed.). New York, NY: AFB Press.
- Flecha, R., & Soler, M. (2013). Turning difficulties into possibilities: Engaging Roma families and students in school through dialogic learning. *Cambridge Journal of Education*
- Florian, L., & Spratt, J. (2013). Enacting inclusion: A framework for interrogating inclusive practice. *European Journal of Special Needs Education*
- Geisthardt, C & Munsch, J. (1996). A comparison of adolescents with and without learning disabilities. *Journal of Learning Disabilities*
- Gergen, K.J. (1995). Social construction and the educational process in Doolitle, P.E. (2018).

 Constructionism and online education. Virginia
- Ghafri, M.S.A (2015). The challenges that visually impaired students at Sultaqn Qaboos

 University face in learning English. Sultan Qaboos University

- Government of Botswana (1994). The Revised National Policy on Education: Government paper number 2 of 1994. Gaborone, Government Printer
- Hare, J. (2019). 7 Biggest challenges teachers face. teaching.monster.com
- Hay, J.F., Smit, J., Paulsen, M. (2001). Teacher preparedness for inclusive education. *South African Journal of Education*, 21, 213218
- Human, L. (2010). The social inclusion of learners with visual impairment in a mainstream secondary school in Namibia. University of South Africa
- Ismaila, Z., Basheer, I.B., & Khan, J.H. (2016). Teachers' Attitudes towards Inclusion of Special Needs Children into Primary Level Mainstream Schools in Karachi, *The European Journal of Social & Behavioural Sciences*,

 17(3),2177.http://dx.doi.org/10.15405/ejsbs.195
- Kassile T, Anicetus H, Kukula. R. (2015). *HIV/AIDS Related stigma and discrimination in workplaces in Tanzania*, Dar es Salaam, Tanzania
- Kinyanjui, N.P. (2008). Challenges facing intergration of visually impaired learners in public primary schools in Trans Nzoia West District. Kenyatta University
- Korir (2015). Challenges Encountered by Students with Visual Impairments and Teachers In An Integrated School Environment: A Case Of Integrated Secondary Schools In Kericho District, Ainamoi Division, Kenya. European Centre for Research Training and Development UK (www.eajournals.org)
- Kurz, A., Elliott, S. N., Lemons, C. J., Zigmond, N., Kloo, A., & Kettler, R. J. (2014). Assessing opportunity-to-learn for students with disabilities in general and special education classes. Assessment for Effective Intervention. Tempe, AZ: Arizona State University.

- Krueger, Richard A. and Mary Anne Casey (2000) Focus *Groups 3rd edition*, Thousand Oaks, CA: Sage
- Lormer, R. (2000). History of the embossed code of learning. Paris: Le Vies
- Lopez, V. & Whitehead, D. (2013). Nursing & Midwifery Research: Methods and Appraisal for Evidence-Based Practice, Edition: 4th, Chapter: Sampling data and data collection in qualitative research, Publisher: Elsevier
- Majoko, T. (2019). Teacher key competencies for inclusive education: Tapping pragmatic realities of Zimbabwean Special needs education teachers, Sage
- Malak, M. S. (2013). Inclusive education reform in Bangladesh: Are pre-service teachers` ready to accept students with special educational needs in regular classrooms? *Disability, CBR* & inclusive Development, 24(1), 56 81
- Mangope, B., & Mukhopadhyay, S. (2015). Preparing Teachers for Inclusive Education in Botswana: The Role of Professional Development. *Journal of International Special Needs Education*, 18(2), 60-72. doi: 10.9782/2159-4341-18.2.60
- Marumo B.B., (2016), Early school withdrawals and underperformance as indicators of poor attention to learner's welfare: Botswana in 50 years of self-rule. University of Botswana. URL: http://dx.doi.org/10.5296/jei.v2i2.10270
- McMillan, J., & Schumacher, S. (1993). *Research in education: a conceptual introduction*. New York: Harper Collins Publishers.
- Meng, Ee W. (2017). *Meeting the educational needs of the visually impaired*.

 Singteach.nie.edu.sg

- Merriam, S. B. (1998). *Qualitative research and case study applications in education*.

 San Francisco: Jossey-Bass.
- Mertens, D.M. (1999). *Inclusive evaluation implications of transformative theory for evaluation*.

 American Evaluation Association.
- Ministry of Education and skills and Development (2008). *Draft National Report on the Development of Education "Inclusive Education: The way of the future"*
- Mrstik, S.L. (2017). An examination of inclusive practices for Junior Secondary Students with learning disabilities in Gaborone Botswana. Orlando, Florida
- Mugambi, M.K. (2011). Challenges facing teachers in teaching students with visual impairment in an intergrated school: Astudy of Moi Girls` School, Nairobi
- Mukhopadhyay, S. and Mangope, B. (2012). *Inclusive Education for Learners with Disabilities* in Botswana Primary Schools. Sage
- Nerstheimer K (2017). Top 5 challenges teachers face in the classroom, tweet, Mimio Educator
- OECD (2010). Sickness, Disability and work: Improving social and labour market integration of people with disability.
- Prawat, R. & Floden, R. (1994). Philosophical perspectives on constructivist views of learning, *Educational Psychologist*
- Peterson, P.L. and Wilson S.M. (2006). *Theories of Learning and Teaching What Do They Mean for Educators*. National Education Association
- Reed, J. & Payton, V.R. (1997) Journal of Advanced Nursing 26,765-771

- Ross-Hill, R. (2009). Teacher attitude towards inclusion practices and special needs students. *Journal of Research in Special Educational Needs*, 9 (3), 188-198
- Rossman, G. B., & Rallis, S. F. (1998). Learning in the field: An introduction to qualitative research. Thousand Oaks, CA: Sage.
- Ryan, H. (2013). The effect of classroom environment on student learning. Western Michigan University
- Rubin, J.H. and S.J. Rubin. (1995). *Qualitative Interviewing, the Art of Hearing Data*. Sage Publications, Thousand Oaks California.
- Ruto, S. (1996). Integration of the visually impaired into the mainstream of vocational training in Kenya. Kenyatta University
- Saloviita, T. (2018). Attitudes of Teachers Towards Inclusive Education in Finland. Department of Teacher Education, University of Jyvaskyla, Jyvaskyla, Finland
- Schoonenboom J. (2019). A performative paradigm for mixed methods research, *Journal of mixed methods research*, *13*(3),284-300.https://journals.sagepub.com/doi/10.1177/1558689817722889#
- Serite, S. (January 18, 2018). "A shithole Education". *The Botswana Gazette*. Gaborone. http://www.thegazette.news/a-shithole-education/#prettyPhoto
- Shakouri, N. (2015). An attempt to empower teachers in Education: An Epistemological look. Roudbar Branch, Islamic Azad University. Iran
- Shenton, A.K. (2004. Strategies for ensuring trustworthiness in qualitative research projects.

- School of Informatics, Lipman Building, Northumbria University, Newcastle upon Tyne, NE1 8ST, UK
- Shelley Sherman, (2004). Responsiveness in teaching: Responsibility in its most particular sense, The Educational forum. 68.2, 115 124, DOI: 10.1080/00131720408984618
- Social Welfare Department. (2008). *Integrated programme in kindergarten-cum-child care*centre. Hong Kong: Author. Retrieved from http://www.swd.gov.hk/en/index/site

 pubsvc/page_rehab/sub_listofserv/id_integrated2/
- Staff, W. (2019). How to teach a blind or visually impaired student. WikiHow
- Stefanich, A.P and Norman, K.I. (1996) "Teaching science to students with disabilities:

 experience & perceptions of classroom teachers and science educators". Association for the education of teachers in science
- Teegavarapu, Sudhakar & Summers, Joshua & Mocko, Gregory. (2008). Case Study Method for Design Research: A Justification. *Proceedings of the ASME Design Engineering Technical Conference*. 4. 10.1115/DETC2008-49980.
- Teague, L. (2017). 5 ways teachers can challenge inequality in the classroom. University of London
- Thompson, D., Fisher, R.K., Purcal, C., Deeming, C. and Sawrinkar, P. (2011). *Community attitudes to people with disability: Scoping project. Social Policy*, Research Centre, University of New South Wales
- Polat, F. (2011). Inclusion in education: A step towards social justice. *International Journal of Educational Development*, 31(1), 50–58. doi:10.1016/j.ijedudev.2010.06.009[Crossref], [Web of Science ®],, , [Google Scholar]

- Peterson, P.L. and Wilson S.M. (2006). Theories of Learning and Teaching What Do They Mean for Educators. *National Education Association*
- Phinias, T., Jeriphanos, M., & Kudakwashe, M. (2013). Inclusion and the world of disability: A case study of Zaka Central Cluster, Masvingo, Zimbabwe. *Journal of African Studies and Development*
- UNESCO (1994). The Salamanca statement and framework for action on special needs

 education adopted by the world conference on special needs education: Access and

 quality. Salamanca, Spain, 7-10 June 1994. Paris, UNESCO/Ministry of Education,

 Spain. Retrieved from:

 www.unesco.org/education/pdf/SALAMA_E.PDF+unesco+salamanca

 +statement&hl=en
- UNESCO (2012) Education for all Goals, Retrieved from:

 http://www.UNESCO.org/new/en/education/themes/leading the
 intergrationagenda/education for all/efa goals/c//
- UNESCO. (2014). *EFA Global Monitoring report:* Teaching and learning achieving quality education for all
- UNESCO (2017) Rethinking Education: Towards a common global good? *Unpacking Sustainable Development Goal 4 Education 2030*.
- Draft National Development Plan 11 April 2017 March 2023 UNESCO (2015) Botswana
 National EFA 2015 Review. *Retrieved from http://unesdoc.unesco.org*
- Unianua, E.M.(2012) *Teachers' attitudes towards inclusive education*. Transilvania University of Brasov, Romania Procedia Social and Behavioral Sciences

- Wang, H. L. (2009). Should all students with special educational needs (SEN) be included in mainstream education provision?-A critical analysis. *International Education Studies*
- Whitbread, K. (2019). What does the research say about inclusive education, Wrightlaw
- Williams, P. W. (2008). Students' Perceptions of Bullying After the Fact: A Qualitative Study of College Students' Bullying Experiences in Their K-12 Schooling. Blacksburg, Virginia
- Willings C. (2015). Teaching students with visual impairments. *National Agenda*.

 https://www.teachingvisuallyimpaired.com/national-agenda.html
- Wilmshurst, L. & Brue, A.W. (2005). *A parent's guide to special education*. New York:

 Amacom
- World Education Forum (April 2000). Dakar, Senegal
- Yin K. R. (2003). Case Study Research Design and Methods, (3rd Ed.) Sage
- Zheng, Z. (2014). A Study on Blind Students' Experience of Provision and Support in Schools.

 University of Oslo

Appendix 1: Information sheet and Consent Form Information Sheet

Title of Study: Teachers responsiveness to challenges faced by learners with visual impairment in mainstream classrooms in one school in Mochudi.

Name of Researcher: Naledi Rose Kabomo

Introduction

You are being invited to participate in a research study. Before you decide it is important that you understand why the study is being conducted and what it involves. Please take time to read the following information. Ask if there is anything that is not clear or if you would like more information. Take time to decide if you want to participate or not.

1. The purpose of the study

The purpose of this study is to investigate teachers` responsiveness to learners with visual impairment (VI). Both teachers and VI students will share their experiences regarding teachers' responsiveness to challenges faced by VI learners. The findings will be used to inform interventions meant to assist teachers in the way they respond to challenges faced by VI learners.

2. Do I have to take part?

It is up to you to decide whether or not to take part. If you do you will be given this information sheet and asked to sign a consent form. You are still free to withdraw at any time and without giving a reason. A decision to withdraw will not affect your rights/any future treatment/service you receive.

3. What will happen to me if I take part?

As a participant, you will be required to sit for an interview session not exceeding a duration of 20 minutes unless we agree on an extension. The interview will be voice recorded and transcribed thereafter. You are free to withdraw from the study at any point without stating any reason.

4. Are there any risks / benefits involved?

There are no known risks involved in the study and no personal benefit you will get for participating.

5. Will my taking part in the study be kept confidential?

All information collected from you will be kept confidential and secure. Any use of such information in the research report will be made anonymous.

Thank you

Contact: Naledi Rose Kabomo

Mobile: 71707430 or Office 5777287

Email: nrkabomo@gmail.com

Appendix 2: CONSENT / ASSENT FORM

Title of Study: Teachers responsiveness to learners with visual impairment in mainstream classrooms in one school in Mochudi

Clas	ssrooms in one school in Mochuul				
Nar	ne of Researcher: Naledi Rose Kab	omo			
1.	I confirm that I have read/have information provided for the about consider the information, answered satisfactorily	ove study. I have h	nad the opportunity		
2.	I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and that this will not affect my legal rights				
3.	I understand that the interview will be audio recorded and direct quotes may be used in report writing or presentations, however, these will be anonymized.				
4.	I understand that any personal information collected during the study will be anonymized and remain confidential.				
5.	I agree to take part in the at	ove study			
All information collected about you during the course of the study will be kept strictly confidential. Any information about you will not be disclosed to anyone. If the results of this study are in report writing no reference will be made to those individuals who took part.					
Name of Participant		Date	Signature 		
Name of Researcher		Date	Signature 		
3		Date	3		
711 (_			

Note: When completed 1 copy for participant and 1 copy for researcher

TUMALANO/CONSENT/ASSENT FORM

Setlhogo sa patisiso: Teachers responsiveness to learners with visual impairment in one school in Mochudi Leina la mmatlisise: Naledi Rose Kabomo Ke rurifatsa fa ke badile/ke baletswe mme ebile ke tlhaloganya ka dipatlisiso tse. Ke nnile le sebaka sa go keleka tsotlhe ka dipatlisiso tse, ka botsa dipotso mme di arabilwe ka mo go nkgotsofatsang. 1. Ke tlhaloganya gore go tsenelela dipatlisiso tse ga me ke ka boithaopo le gore ke kgona go tlogela nako nngwe le nngwe ke sa tlamege go ntsha mabaka mme ebile se, se ka seke se ame ditshwanelo tsame tsa semolao ka gope. 2. Ke tlhaloganya gore dipotsolotso tsotlhe di tlaa bo di kapiwa mantswe mme fale le fale go nopolwe go dirisiwa mo di phatlalatsong tse di ka nnang teng,mme fela, tse tsotlhe di tlaa dirwa ka tsela e go sa supeng yo o bueleng. 3. Ke tlhaloganya gore dikitso tsotlhe ka nna di tlaa seke di dirwe phatlalatsa, go tlaa dirisiwa maina-papiso (pseudonyms) mme ebile e tlaa nna sephiri se se itsiweng ke mmatlisise fela. 4. Ke dumalana le go tsaa karolo mo dipatlisisong tse. Leina la motsaakarolo_____Kgwedi____ Monwana_____ Leina la mmatlisise _____ Kgwedi ____ Monwana ____ Leina la yo o _____ Kgwedi _____ Monwana _____ ikanelang motsaa karolo (fa ele gore o farologana le motsaakarolo) GO BOTLHOKWA: Pampiri e le nngwe e fiwa motsaakarolo, fa ele nngwe e sala le

mmatlisise.

Teachers' responsiveness to learners with visual impairment

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Consent Letter

Dear Parent/ Matron

This letter is to introduce you to a study concerning the research I am undertaking in Mochudi.

Study Title: Teachers responsiveness to learners with visual impairment in one school in

Mochudi

Researcher

Naledi Rose Kabomo

(Investigator, Graduate Student)

Department of: Educational foundation, Curriculum and Instruction

Address

Telephones: 71707430 and 76788377

Emails: nrkabomo@gmail.com

Study Purpose and Rationale: The purpose of this study is to investigate teachers` responsiveness to challenges faced by learners with visual impairment. Both teachers and Visual Impairment students will share their experiences regarding teachers' responsiveness to challenges faced by that learners face. The findings will be used to inform interventions meant to assist teachers in the way they respond to challenges faced by learners with visual impairment.

Inclusion/Exclusion Criteria: To be eligible to participate in this study, you must be a parent or guardian of a child who is boarding at Linchwe II Junior Secondary School who is visually impaired.

Participation Procedures and Duration: For this study, your child will be interviewed about the academic challenges they face at Linchwe II J.S.S and how teachers respond to those challenges. This will require 20 minutes of the student's time.

Privacy:

Data Anonymity: All data will be anonymous. Your child 's name will not be used in any part of this research but he/she will be identified as participant A,B, C...

Risks or Discomforts: There are no foreseeable risks to participating. You may choose not to answer any question that makes you uncomfortable, and you may quit the study at any time.

Benefits: No direct benefits will be provided; however, your participation in the study will help in the generation of knowledge that is necessary in coming up with interventions that could help techers to respond positively and effectively towards challenges faced by visually impaired learners. The findings of this study may influence policy makers to make changes in teacher education and inclusion of visual impaired learners in mainstream classrooms.

Voluntary Participation: Your participation in this study is completely voluntary and you are free to withdraw at any time for any reason without penalty or prejudice from the investigators. Your completion of the survey is an indication of your informed consent in this study.

IRB Contact Information: For one's rights as a research subject, you may contact the following: UB (Office of Research and Development)

Thank you very much for your time and input.

Sincerely,

Office of Research and Development

University of Botswana

Gaborone

TEL: 352900

Assent Form

My name is Naledi Rose Kabomo. I am investigating teacher's responsiveness to learners with visual impairment in one school in Mochudi.

If you decide you want to be in my study, you will be interviewed and observed in the classroom. There are no foreseeable risks to participating. You may choose not to answer any question that makes you uncomfortable, and you may quit the study at any time. No direct benefits will be provided; however, your participation in the study will help in the generation of knowledge that is necessary for finding out challenges faced by visually impaired learners and how teachers respond to such challenges. Possible interventions will be suggested to help effective and positive responses by teachers.

If you don't want to be in the study, no one will force you to. If you want to be in the study now and change your mind later, that's still fine, you can stop at any time.

My phone numbers are 71707430 and 76788377. You can call me if you have questions about the study or if you decide you don't want to be in the study any more.

I will give you a copy of this form in case you want to ask questions later.

Agreement

I agree to participate in this in the stud	dy even though I know that I don't have to	do it. Naledi
Rose Kabomo has answered all my qu	uestions.	
Signature of Study Participant	Date	
Signatures of Researcher	Date	
I do not agree to participate in this in	the study even though I know that I don't h	ave to do it.
Naledi Rose Kabomo has answered a	ll my questions.	
Signature of Study Participant	Date	
Signatures of Researcher	Date	

Appendix 3

Telephone: 5777226/723

Fax: 5777879



Ministry of Basic Education Kgatleng Region P. O. Box 199 Mochudi

REFERENCE: KGATL 1/13/1 IV (23) PEO I-Secondary

3rd July 2019

Ms Naledi Rose Kabomo University of Botswana Private Bag 0022 GABORONE

Dear Madam

PERMISSION TO UNDRTAKE RESEARCH STUDY

Reference is made to your letter dated 6th June 2019 in which you are requesting for permission to undertake research study at Linchwe II Junior Secondary School under the title " Teachers' Responsiveness To Learners With Visual Impairment In One School In Mochudi".

Permission is therefore granted for you to undertake the research study. You are also requested to share the findings of your Research study with the concerned school and the Regional Education Office (Principal Education Officer I - Secondary Inspectorate).

Yours faithfully

C. R. Tamaki

For/Director, Regional Operations (Kgatleng)

CRT/tnm











Appendix 4



BOTSWANA

Office of the Deputy Vice Chancellor (Academic Affairs)

Office of Research and Development

Corner of Notwane and Mobuto Road, Gaborone. Botswana Pvt Bag 00708 Gaborone Botswana

Fax: [267] 355 2900 E-mail: research@mopipi.ub.bw

25th June 2019

UBR/RES/IRB/SOC/GRAD/190

The Permanent Secretary Ministry of Basic Education Private Bag 005 Gaborone

RE: REQUEST FOR EXPEDITED REVIEW OF A RESEARCH PROPOSAL

TITLE: Teachers' Responsiveness to Learners with Visual Impairment in One School in Mochudi

RESEARCHER(S): Naledi Rose Kabomo

Since it is a requirement that everyone undertaking research in Botswana should obtain a Research Permit from the relevant arm of Government, The Office of Research and Development at the University of Botswana has been tasked with the responsibility of overseeing research at UB including facilitating the issuance of Research permits for all UB Researchers inclusive of students and staff.

I am writing this letter in support of an application for a research permit by the above-mentioned Principal Investigator who is pursuing a Master's degree in Education: Curriculum and Instruction in the University of Botswana. The overall objective of the proposed study is to investigate teachers' responsiveness to challenges faced by learners with visual impairment. It is hoped that the research findings of the study will be used to inform interventions meant to assist teachers in the way they respond to challenges faced by learners with visual impairment and also help come up with recommendations to address such challenges.

The Office of Research and Development is satisfied with the process for data collection, analysis and the intended utilization of findings from this research and is confident that the project will be conducted effectively and in accordance with local and international ethical norms and guidelines.

We will appreciate your kind and timely consideration of this application.

We thank you for your usual cooperation and assistance

Sincerely,

The Secretariat, University of Botswana Institutional Review Board Office of Research and Development

ERSITY OF BOTSI

Appendix 5



Faculty of Education DEPARTMENT OF EDUCATIONAL FOUNDATIONS

Corner of Notwane & Mobuto Road Private Bag 00702 Gaborone BOTSWANA Telephone: Fax: Website: [267] 3552406/7/8 [267] 3185096 www.ub.bw

MEMORANDUM

TO: The Director, Ethics Approval – Office of Research and Development

From: Michael Gaotlhobogwe

DATE: 16th April 2019

SUBJECT: Submission of Proposal for Ethics Review and Approval – Naledi Rose

Kabomo.

I wish to confirm that Naledi Rose Kabomo's proposal is ready for ethics review and approval by yourselves.

Thank you,

Dr M. Gaotlhobogwe

Appendix 6: Interview questions for the learners with visual impairment

Title of Study: Teachers responsiveness to learners with visual impairment in mainstream classrooms in one school in Mochudi.

Interview questions for the learners with visual impairment

- 1. Can you tell me the challenges you face in your stay in Linchwe II J.S.S?
- 2. Are the teachers helpful towards addressing your challenges?
- 3. How do teachers assist you in your daily classroom challenges?
- 4. What kind of help would you like to receive from your teachers
- 5. Does the school have specially trained teachers to handle challenges faced by the visually impaired?
- 6. Do you have problems making friends?
- 7. Are your needs attended to or are they neglected in the school?
- 8. Do you ever feel lonely and less recognized by others?
- 9. Are you ever caught up with time while doing class exercises in class?
- 10. Are all the resources that you need in the classroom easily accessible to you?

Dipotso tsa baithuti ba bathoka pono

Setlhogo sa patisiso: Maitemogelo a barutabana le dithuso tse ba di fang baithute baba tlhoka pono mo dikgwetlhong tse ba kopanang natso mo dithutong tsa bone.

- 1. Dikgwetlho tse o kopanang natso ke dife mo dithutong tsa gago?
- 2. A barutabana ba go tswa thuso mo dikgwetlhong tse o kopanang natso?
- 3. Barutabana bag ago ba go thusa jang mo dikgwethong tse o lebaganang natso?
- 4. O e letsa go bona thuso e e ntseng jang mo sekolong sag ago?
- 5. Sekolo sag ago se na le barutabana b aba rutetsweng go ruta batlhokapono?
- 6. O na le mathata a go dira ditsala?
- 7. Matlhoki a gago ba sekolo sa Linchwe ba ete ba lebagane le one?
- 8. O etle o iphitlhele o jewa ke boduto ja gore ba bangwe ga ba go tseye tsia?
- 9. Nako e o e fiwang e lekanetse mo dithutong tsa gago?
- 10. Ditsompelo tsa borutelo tse di dirisiwang ke batlhokapono a diteng? A o etle o kgone go di dirisa?

Appendix 7: Interview questions for teachers

Title of Study: Teachers responsiveness to learners with visual impairment in mainstream classrooms in one school in Mochudi.

Interview questions for teachers

- 1. What are the challenges that learners with visual impairment face in your subjects?
- 2. How do teachers respond to challenges faced by learners with visual impairments?
- 3. What challenges do teachers have in teaching learners with visual impairment?
- 4. What support do teachers who teach learners with visual impairment receive?
- 5. Does the school have funds to purchase necessary materials needed to assist learners with visual impairment?

Dipotso tsa barutabana ba baithuti ba bathoka pono

Setlhogo sa patisiso: Maitemogelo a barutabana le dithuso tse ba di fang baithute baba tlhoka pono mo dikgwetlhong tse ba kopanang natso mo dithutong tsa bone.

- 1. Baithuti ba ba tlhoka pono ba kopana le dikgwetlho dife mo thutong?
- 2. Barutabana ba fa baithute baba tlhoka pono thuso e ntseng jang?
- 3. Barutabana ba kopana le dikgwetho dife mo go ruteng bana ba ba tlhoka pono?
- 4. Barutabana baba rutang baithute baba tlhoka pono ba bona thuso efe mo tirong ya bone?
- 5. A sekolo sa lona se na le madi a go reka ditsompelo tse di ks dirisiwang ke batlhokapono mo dithutong?

Appendix 8 : Interview questions for braillists

Title of Study: Teachers responsiveness to learners with visual impairment in mainstream classrooms in one school in Mochudi.

- 1. From your observation, what are the challenges visually impaired learners face in their academics?
- 2. Do you think teachers are aware of those challenges?
- 3. How do teachers respond to the challenges faced by visually impaired learners?
- 4. What challenges do teachers who teach visually impaired learners face?

Dipotso tsa bodiredi jo bo ranolang mokwalo wa baithute ba batlhoka pono Setlhogo sa patisiso: Maitemogelo a barutabana le dithuso tse ba di fang baithute baba tlhoka pono mo dikgwetlhong tse ba kopanang natso mo dithutong tsa bone.

- 1. Mo itemogelong a gago, ke dikgwetlho dife tse baithute ba ba tlhoka pono ba kopanang le tsone mo thutong tsa bone?
- 2. A barutabana ban a le bo itemogelo ja dikgwetho tse baithute ba kopanang natso?
- 3. Barutabana ba tsibogela dikgwetho tsa baithute b aba tlhoka pono jang?
- 4. Barutabana ba baithute ba ba tlhoka pono ba kopana le dikgwetho dife mo go ruteng baithute baba tlhoka pono?

Appendix 9: **Observation schedule**

Observation schedule

Date:

Observer:

Title of Study: Teachers responsiveness to learners with visual impairment in mainstream classrooms in one school in Mochudi.

Class:	
Academic challenges faced by visually impai	red learners
Teacher's attitude towards learners with visi	ual impairment
Assistance for visually impaired learners who	en leaving for break
Date	
Observer	
Observer	
Class	
Acadomic challenges faced by viewally	
Academic challenges faced by visually	
impaired learners	
Teacher's attitude towards learners with	
visual impairment	
Assistance for visually impaired learners	
when leaving for break	
When leaving for break	
L	<u> </u>

APPENDIX 10

REPUBLIC OF BOTSWANA

Research Permit Application Form

Two copies of this form should be completed and signed by the applicant who wishes to obtain a permit for conducting research in the Republic of Botswana, and sent to the Permanent Secretary of the relevant Ministry (See guidelines for addresses). These forms should not be submitted unless the Guidelines for the Research have been carefully studied. A copy of any project proposal submitted to funding agencies must accompany this application. Please refer to annexure I attached to this application form. **Fill this form in full.**

Description of the Proposal

1. Title of Research

Teachers` responsiveness to challenges faced by learners with visual impairment in mainstream classrooms in one school in Mochudi.

2. Name and Address of Applicant

Ms Naledi Rose Kabomo P. O Box 2907 Gaborone

Mobile Number: 71707430/76788377

E-mail: nrkabomo@gmail.com

3. Name and address of home institutions (if any) which you are affiliated

UNIVERSITY OF BOTSWANA P/BAG UB 00703 GABORONE BOTSWANA

4. Name and address of supervisor of research in home country or responsible referee:

Dr M. Gaotlhobogwe UNIVERSITY OF BOTSWANA P/BAG UB00703 GABORONE

BOTSWANA

Research plans

5. a) Main aims (general)

To assess how teachers respond to academic challenges faced by visually impaired students

Objective: detailed description of issues/problems and/or topics to be investigated, relevance of the research; hypothesis etc. (attach a separate sheet if necessary).

- a. Unveil how teachers respond to the challenges in the classroom that visually impaired learners face in Botswana.
- b. Find out the educational provisions for students with visual impairment
- c. Come up with interventions that could help teachers to respond effectively to student challenges

b) Methods or techniques

For this research, interviews, observation and document analysis will be employed to gather data.

6. Budget for the costs in Botswana (give detailed breakdown of research costs such as subsistence, traveling, local staff, secretarial service, seminar, printing etc). Please state the amount in Pula

RESEARCH PROPOSAL BUDGET

EXPENDITURE	QUANTIFY	COST
Stationery	10 pens@ P10 each	P 100.00
•	9 pencils@ P4.50 each	P 40.50
	5 erasers @ P3.00 each	P 15.00
	10 reamsA4 lined paper @ P50.00 each	P 500.00
	1 calculator @ P175.00 each	P175.00
	2 boxes of staples @ P30.00 each P	P 60.00
	5 correction pens@ P10.00 each	P 50.00
	1x file @ P50.00 each	P 50.00
	SUB TOTAL	P990.50
Typing		
	Memory stick @ P150.00*3	P450.00
	Proposal @ P2.00/ page x 50	P 100.00
	Research report@ P2.00/ page x 70	P 140.00
	Hard drive@P700x1	P700.00
SUB TOTAL	SLID TOTAL	P1390.00
Printing	SOB TOTAL	
Tilling	Research report @ P2.00/ page x 70	P140.00
	Interview transcripts @ P2.00/page x 2 x20	P80.00
	interview transcripts @ 12.00/page x 2 x20	1 80.00
	SUB TOTAL	P220.00
	Binding @ P300.00/copy x 3	P900.00
	SUB TOTAL	P900.00
	Trips from Mochudi to Gaborone and back	P1500
	SUB TOTAL	P1500
Communication	Airtime @ P500.00	P500.00
	SUB TOTAL	P500.00
	GRAND TOTAL	P5500.50

7. Name and address of financial sponsor(s) of the research (if appropriate)

SELF

8. Has funding already been obtained?

YES

a) If yes, please state the total amount granted, and the name and address of the funding agency:

P5000, self-sponsorship

- b) If no, what steps are being taken to ensure sufficient funding?
- 9. If you have previously done research in Botswana, please give details of the research.

Research essay in fulfilment for Bachelors Degree in Humanities

10. Name and address of institution in Botswana to which the researcher is to be affiliated

UNIVERSITY OF BOTSWANA P/BAG UB 00703 GABORONE BOTSWANA

11. Details of Botswana – based personnel that will be involved (names, functions, qualifications).

Linchwe II Junior Secondary School Teachers, Braillists and Visually Impaired Students

12. Places in Botswana where the research is to be undertaken

Linchwe II Junior Secondary School, Mochudi

13. Proposed time - schedule for the research

January - June

14. Plans for dissemination of research findings

The research findings are going to be shared with the Department of curriculum Development and Evaluation in the Ministry of Education, Schools offering education to visually impaired learners and teachers in order to make awareness of the responses of teachers towards students` challenges and possible solutions.

15. How are the research findings going to be used in the home country?

Findings of this study may offer some insights on teachers' awareness and responses towards challenges faced by visually impaired learners in mainstream classrooms. Interventions that could help the teachers will be highlighted. The findings from this research maybe be used to formulate policy that is refined and informed by evidence from the data that will be collected. The policy makers and the Ministry of Education may change some issues and how education provided to teachers could be geared towards all teachers taking Special Education as a core course so that when it so happens that they are posted to schools that have visually impaired learners they will be fully equipped to help them in their studies. Eventually the nation will benefit as educated and informed teachers exercising social justice in assisting special needs children in the schools that they are posted in especially those with visual impairment. This will help in the future where Botswana has graduates with better living standards.

16. Any other information

17.	Signature of applica	nt:	••••
			••••
	al Use Only		
Action taker	n:		
Action Offic	cer:	Date:	
Permit: Gra	inted/ Deferred/ Rejected		

ANNEXURE 1

i) Submit the following passport particulars:

Name : Naledi Rose Kabomo

Date of Birth : 14 April 1981

Nationality : Motswana

Passport Number: BN0035663

Place of Issue : Mochudi

Date Of Issue : 28/10/2010

Date of Expiry : 27/10/2020

- ii) Submit of Research Proposal
- iii) Attach an up to date Curriculum Vitae
- iv) Applicants from foreign countries are advised not to leave for Botswana before obtaining a research permit from the relevant Ministry
- v) Statutory deposit of resulting publications:

Resulting publications should be directly deposited with the following institutions and any other departments as may be specified in the permit.

- 1. Permanent Secretary Ministry of Education Private Bag 005 Gaborone, Botswana
- 2. Director, Botswana National Library Services, Private Bag 0036 Gaborone, Botswana
- 3. Director, Botswana Archives and Records Services, P O Box 239 Gaborone, Botswana
- 4. User Ministry and/or affiliating body.
- 5. Director, Research and Development Office, Private Bag 0022, Gaborone, Botswana
- vi) For any correspondence pertaining to research permit issued, always quote the permit reference number.

Appendix 11: Curriculum Vitae

Naledi Rose Kabomo

8/17/2019



P O Box 2907, Gaborone +267 71707430 nrkabomo@gmail.com

ID NO. 694626906

Other contacts: +267 71655888 and 76788377

PROFILE

I am an ambitious lady, ready to take on any challenge brought before me, with an aptitude for creative problem solving and analysis with attention to detail. I am very adept at multitasking and time management. I am an excellent team player and can also work under minimal supervision. I have a very a very high level of communication skills, written and verbal. I am able to cope very well under pressure. My Organizational and planning skills are also my strong points. I possess a Bachelors Degree in Humanities and Post Graduate Diploma in Education; I am currently studying for Masters in Education: Curriculum and Instruction. I have been a secondary school teacher for the past 14 years, and have had the chance to work with people of different backgrounds, which has led me to learn extensively from them.

OBJECTIVES

Whoever does not live on the edge is taking up more space. Communication is the key to all progress in all relationships, business and otherwise. My objective is to use innovative technologies, pushing the envelope and spreading the word on the intelligent and glorious services offered by the companies I promote.

EDUCATION

University of Botswana

2017 - 2019

Masters in Education: Curriculum and Instruction (ongoing)

University of Botswana

2004 - 2005

Post Graduate Diploma in Education

University of Botswana

2000 - 2004

Bachelor of Arts in Humanities

Usher Girls High School

1998

O'Levels

WORK EXPERIENCE

Makhubu Community Junior Secondary School

2005 - 2008

Senior Teacher II Linchwe II CJSS

2008 – To date

As a moral education teacher, I am a strategist as I deal with a lot of challenging life issues affecting my pupils and I help with the Guidance and Counseling Department as a PACT coordinator.

I coordinate the entire moral education department on effective communication skills between pupils, staff and the management

I do research and empirical evidence analysis using the internet and other sources to further communicate with my peers and pupils.

Coordination of various school events acting as a liaison between the various stake holders including the general public, the business community and management as well as staff. {e.g HIV/AIDS days, Cluster meetings at various locations and career guidance and counseling events}

SKILLS

Great interpersonal and communication skills as shown by the number of prominent positions usually given to me

Self-starter, autonomous and need minimal supervision to carry out my duties.

Extremely creative and results oriented as shown by the constant high pass rate of my pupils yearly.

Highly organized in my day-to-day activities.

I am often involved with my husband's business and am very aware of profit making initiatives and its importance. Very conversant with business as a whole in the country and read the business sections of our various newspapers often.

I am honest and believe in integrity and being a team player.

Very conversant with the computer usage, having taught "introduction to computers" at school and can effectively use Microsoft Word, Excel, PowerPoint, and can find my way around the internet using the modern communication tools like facebook, tweeter, WhatApp etc.

WORKSHOPS ATTENDED

- CIRCLE OF SUPPORT
- GENDER BASED VIOLENCE
- EMOTIONAL INTELLIGENCE
- SCHOOL TURNAROUND
- SMART WORK ETHICS
- VICTOR READER
- FIRE
- TEAM BUILDING

- ORIENTATION AND MOBILITY
- CASCADING STRATEGIC PLAN- IIAA
- CLASS TEACHERS WORKSHOP
- FINANCIAL INTELLIGENCE
- SCHOOL MANUAL
- SRC STUDENT REPRESENTATIVE COMMITTEE
- ACADEMIC WRITING

ARCHIVEMENTS

Best Gender Poem Award 2005 – UB Writers workshop

Outstanding J.C.E performance 2007 – Central Region

Special Teacher Award 2010 – Stepping Stones International

Outstanding J.C.E performance 2011 – Kgatleng Region

Best Performing Teacher 2012 – Kgatleng Excellence Awards

Outstanding Performance 2014 – Kgatleng Excellence Awards

Certificate of Excellence 2015 JCE Examination – Linchwe II J.S.S

Certificate of Merit 2017 JCE Results- Contribution of Excellence

Certificate of Merit 2017 JCE Results- For reaching Regional Target

Certificate of Merit 2018 JCE Results- Employee of the Month

Best performing Teacher 2018 JCE Results – Kgatleng Excellence

Awards

Best performing teacher 2018 - Ministerial Excellence Awards

REFERENCES

Mr Phometsi – Linchwe II Junior Secondary School

Mrs Phatshwane – Linchwe II Junior Secondary School

Mrs Motlhabi – Oodima Junior Secondary School

Mrs Masisi-Moshapa – Kgosimpe Junior Secondary School

Dr Gaotlhobogwe – University Of Botswana

Dr Dambe – University Of Botswana

Dr Matsoga – University of Botswana

Mrs Mbali - Makhubu Junior Secondary School