

**EXPLORING LEARNERS WITH VISUAL IMPAIRMENTS' EXPERIENCES  
IN INCLUSIVE HIGH SCHOOLS IN THE KINGDOM OF ESWATINI**

by

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## DECLARATION

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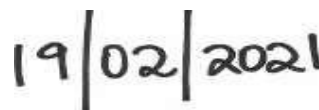
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## **KEY TERMS**

Assessment methods

Barriers to learning

Classroom practices

Curriculum

Educational conditions

Educational constraints

Inclusive education

Kingdom of Eswatini

Learners with Special Needs

Visual impairments

## **DEDICATION**

This dissertation is dedicated to my beloved late father, Amos Vika Zulu. I wish you were here to celebrate this milestone with me. You taught me perseverance, dedication and hard work. This one is for you, Daddy! Mageba! Ndabezitha! Sithuli sikaNdaba!

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This Master's thesis fulfils one of my lifetime goals. It truly is grace that I have covered this milestone of a challenging journey. I am grateful to God for the gift of life, for His love, strength and endurance to complete this research.

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This study is meant to motivate and encourage my sons, Seluleko Sipehelele Dlamini, and Mukelwe Lwandile Dlamini, and my only daughter, Sapho Snemkhuleko Dlamini, and many more generations to come, that success comes from hard work.

## **ABSTRACT**

The focus on this research was to explore experiences of Learners with Visual Impairments in inclusive high schools in the Kingdom of Eswatini. The objectives of the study were establishing education conditions in which Learners with Visual Impairments (LVI) find themselves in schools, establishing educational constraints encountered by both educators and LVI and how they could be addressed in schools and establishing best classroom practices for LVI in the Kingdom of Eswatini.

A qualitative approach was used in this study. It was selected based on the nature of the study problem and the expectations of a qualitative approach that were applicable to this study. The population for this study included school principals, educators and learners. A purposive sampling procedure was used to select the participants in which ten (10) educators, three (3) principals and six (6) learners with visual impairments were selected. All the participants were taken from three (3) inclusive high schools. The overall total for all the selected participants was 19.

Data was obtained through semi-structured questionnaires, observation and document analysis. Data was coded into categories so as to be able to identify the emerging themes. The researcher used interim analysis of data to ascertain if any further information needed to be collected. Data was then transcribed into texts and thematic analysis was used to prepare the data.

The findings of this study indicated that a limited number of educators were trained on Inclusive Education. It also emerged that some schools' vision and mission statements did not embrace Inclusive Education. There is also a need for the curriculum and the schools' physical environment to meet the needs of the learners.

Key recommendations included the need to train all educators on Inclusive Education, ensure that resources, infrastructure, availability of assistive devices, physical environment, curriculum and large class sizes are addressed.

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## ACRONYMS AND ABBREVIATIONS

AFB	American Foundation for the Blind
AT	Adaptive Technology
BFF	Best Friends Forever
CAPS	Curriculum and Assessment Policy Statement
CSR	Class size reduction
DNEA	Director of National Examinations and Assessment
DoE	Department of Education
DPO	Disabled People Organisation
EAP	Educator Assistance Programme
ECC	Expanded Core Curriculum
ECESWA	Examinations Council of Eswatini
EDSEC	Education Sector Policy
EFA	Education for All
FODSWA	Federation of Disabled persons in Swaziland
FVE	Functional Vision Evaluation
ICT	Information and communication technology
IDEA	Individuals with Disabilities Education Act
IE	Inclusive Education
IEP	Individualised Educational Plan
ILST	Institution Level Support Team
LVI	Learners with Visual Impairments
MDG	Millennium Development Goals
MOET	Ministry of Education and Training
MOLSA	Ministry of Labour and Social Affairs
NCC	National Curriculum Centre
NCPD	National Council of Persons with Disabilities
NDP	National Disability Policy
NDPA	National Disability Plan of Action
O & M	Orientation and Mobility
PTR	Pupil-teacher ratio

SADPD	Secretariat of the African Decade for Persons with Disabilities
SAVIP	Swaziland Association of the Visually Impaired Persons
SEN	Special Educational Needs
SGCSE	Swaziland General Certificate of Secondary Education
UDL	Universal Design for Learning
UK	United Kingdom
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNISA	University of South Africa
URB	Rwanda Union of the Blind
US	United States of America
WHO	World Health Organisation

## **CHAPTER 1:**

### **GENERAL INTRODUCTION**

#### **1.1 INTRODUCTION AND BACKGROUND TO THE STUDY**

Inclusive education was globally initiated in Spain in 1994 by the Salamanca statement and Framework for Action. This is where 25 international organisations and 92 governments met to reaffirm their vital commitment to Education For All (EFA) (United Nations Educational, Scientific and Cultural Organisation (UNESCO, 1994); UNESCO, 2006). In the Kingdom of Eswatini, Inclusive Education (IE) started in earnest when the Constitution of the Kingdom of Eswatini (Swaziland Government 2005) was passed. All Swati children, according to the Constitution, have a right to compulsory basic education in government schools at primary school level. The Constitution of the Kingdom of Eswatini guarantees justice, equality, freedom and dignity of all people and specifically emphasises for a society that is inclusive for all including persons with disabilities (Swaziland Government, 2013).

Until 2013, the Kingdom of Eswatini did not have a comprehensive policy, legislation or strategy for attending to the rights and needs of people living with disabilities; hence, the promulgation of the National Disability Policy (NDP). The NDP embraces a number of national, regional and international policies that are in place to sensitise and advocate for the rights of persons with special needs to which the Eswatini government is signatory (Swaziland Government, 2013).

The Swaziland Government (2009), on the other hand, explicitly explains that it is national policy to provide free compulsory basic IE for all learners in the Kingdom irrespective of their capacity to learn, disability, financial status, level of development, health, life circumstances, age or gender. This therefore has afforded an opportunity to the orphaned and vulnerable children who would otherwise be out of school to be in school like their peers.

The objective of the Swaziland Education and Training Sector Policy is to provide a reasonable and fair IE that awards all learners an opportunity to free compulsory primary and high school education of quality.

The NDP (Swaziland Government, 2013), Swaziland National Disability Plan of Action (DPMO, 2015) and the Persons with Disabilities Act (The King and Parliament of Eswatini, 2018) unanimously advocate to mainstream learners with special needs across all levels; from planning, monitoring and implementation of all governmental sectorial laws, policies and programmes. It aims to encourage planning for education from a social model perspective rather than from a medical model of disability. This is likely to result in the protection and recognition of children's basic rights. It also aims to ensure that they are capacitated and free to use their human rights while enjoying fair and equal participation where they reside (Swaziland Government, 2016).

Several laws and policies are in place to ensure that all learners in the Kingdom of Eswatini receive the right quality of education. These include:

- The Poverty Reduction Strategy and Action Plan (Ministry of Economic Planning and Development, 2007)
- Swaziland National Children's Policy (2009)
- NDP, Swaziland Government (2013)
- Persons with Disabilities Act (2018)
- The Government of the Kingdom of Eswatini (EDSEC) Policy (2018)
- Draft Inclusive Policy (Kingdom of Swaziland, 2008)

The above policies have been put in place to aid individuals living with disabilities and to further promote positive living amongst them. They also aim to capacitate and sensitise all stakeholders on how best they could be positive towards disability. However, it was not until the Free Primary Education Act (Swaziland Government Gazette Extraordinary, 2010) was promulgated that IE was formally rolled out in the Kingdom.

Even though these policies are in place to award all learners living with disabilities equal opportunities as their peers, these learners still struggle academically. Griffin and Shevlin (2007) argued that there has been a history of missed opportunities and exclusion of learners living with disabilities across all levels of education. The learners' level of impairments was considered in allocating them to specific education varieties. This arrangement was made at face-value and was not backed by professional advice and further implied that these learners had more learning needs than their peer

groups. It therefore surfaced as an arrangement that had unfounded generalisations that did not consider the learners with special needs.

I work in an inclusive school and have noted with keen interest over the years that the performance of the visually impaired learner is not up to standard. Table 1.1 (2014 – 2018) shows the results in the school where I work.

Table 1.1: Performance of LVI at Form 5 SGCSE syllabus.

YEAR 2014	GRADES ATTAINED FOR DIFFERENT SUBJECTS									
SYMBOLS	A*	A	B	C	D	E	F	G	U	X
Learner 1					XX	X		XX	X	
Learner 2					XX	XX	X	X		
Learner 3					X	XXXX		X	X	X
YEAR 2015	A*	A	B	C	D	E	F	G	U	X
Learner 1						X	X	XX	X	
Learner 2				XX		XX	XX		X	
Learner 3					X	X	XXX		XXX	
YEAR 2016	A*	A	B	C	D	E	F	G	U	X
Learner 1					X	X	XX		X	
YEAR 2017	A*	A	B	C	D	E	F	G	U	X
Learner 1				X		XXX	X			
YEAR 2018	No LVI									

**Key:** X = Overall grade for each learner in each subject

Source: School A (2014–2018).

Table 1.1 indicates academic performance of learners with VI in Form 5 (Swaziland General Certificate of Secondary Education) SGCSE external examinations in School A. The learners barely successfully make it past Form 5. The LVI sit for their Form 5 external examinations but they do not perform well. Some are even granted a second chance to redeem themselves, but they again fail to perform satisfactorily. This thus hinders their chances of enrolling in tertiary institutions and living better lives.

### 1.1.1 Defining Visual Impairments

The term disability is defined as a group of all permanent challenges and limitations in one's physical activity (Carney, Engbretson, Scammel & Sheppard, 2003). Visual impairment can either mean low vision or blindness. Low vision is the significant loss



of sight to a person's eyes (Carney et al., 2003). Some people with low vision wear corrective lenses. The degree and nature of an individual's visual impairment varies significantly, thus each learner requires individualised adaptation and materials to effectively learn (Carney et al., 2003). Visual impairment can be distinguished in two. There is blindness and low vision. Blindness is classified in two ways: legal blindness and blindness. Carney et al. (2003) defined the following:

- **Blindness**

This ranges from primary reliance on other senses to being totally shut out and having unreliable vision. Learners with blindness use Braille for reading and writing.

- **Legal Blindness**

Legal blindness is sight of 20/200 acuity after correcting the eyes to having no remnant vision or having sight decreased to an angle of 20 degrees. A decreased vision means that an individual has a vision with limited peripheral sight and a tunnel vision.

- **Low vision**

Low vision is described as a decrease in central acuity of 20/70 that exists after correction of the better eye. Low vision affects a majority of LVI. These learners should be trained and motivated to use their remnant vision and are advised to use the needed adaptation and optical aids.

Visual impairments can further be categorised as adventitious and congenital (Carney et al., 2003).

- **Congenital**

This refers to vision loss that is present at birth. Learners with congenital blindness often have challenges acquiring concepts. Some causes of congenital visual impairments are:

- Perinatal and prenatal infections
- Substance and material abuse
- Prematurity

- **Adventitious**

Vision loss that a person acquires after birth due to illnesses or accidents is called adventitious. Sometimes learners with adventitious blindness have substantial visual memory to benefit when directed with descriptions that are visual.

Learners with special educational needs (SEN) have always existed since time immemorial (Wilmshurst & Brue, 2005). In the past, SEN were catered for informally but as formal education started, caring for learners with SEN was included in educators' task (Mugambi, 2011:13). Voluntary groups became the initiators in the provision of special education and governments followed suit. Education for learners with SEN has continued to expand; for example, (Wilmhurst and Brue, 2005) stated that, in the United States, all special education services now extend past normal school-going age into adult education with post-secondary transition. This programme includes families, communities and school-based activities. However, approaches to SEN differ from place to place and this has led to different practices and policies globally. Thus, this research is designed to investigate day-to-day experiences of LVI in Eswatini; the experiences of the educators who provide support to these learners; and the barriers to educational achievement that are faced by these learners.

### **1.1.2 Global Trends in Inclusive Education**

Globally there are between 93 million and 150 million children who live with special needs (World Health Organisation (WHO), 2011). The World Bank and the WHO believe that in some states a person's disability aggravates their chances of never enrolling in a learning institution. An estimate of thirty-three percent of children live with special needs (WHO, 2011).

Less than 10% of African learners with disabilities are in primary school (Their World, 2021). A total of 13% receive any form of education in some countries (Their World, 2021). By comparison, Paraguay in South America has enrolments of between 56% and 72% of children with a disability, while Zambia has 43% (Their World, 2021).

People with disabilities are often poorer than other adults in developing countries. They miss out on educational opportunities and their quality of living is negatively influenced. This also negatively affects the countries they live in. A study carried out by the International Labour Organisation found that by excluding all people with

disabilities from the job market makes their countries to drop between 3% and 7% of Gross Domestic Product (Their World, 2021).

Education assists people living with impairments to get admitted to employment, health and to better advocate for their rights (WHO, 2016). The Salamanca Statement and Framework for Action on Special Needs advocates for an education system that accommodates the diversity of all learners with special needs and allows them into mainstream education (UNESCO, 1994). Learners with SEN have needs that are unique from the standard needs of other able-bodied learners. The Salamanca Conference had the aim of ensuring that the education system would embrace all learners regardless of their physical, social, intellectual, emotional, linguistic and other conditions. This includes working children, homeless children, gifted and disabled children, nomadic children, linguistic minorities and those from marginalised or disadvantaged areas or group (UNESCO, 1994).

In 1994 the Salamanca Declaration of 1994 aimed at changing practices and philosophy towards persons living with impairments. Acknowledging and recognising capabilities and potential of learners with SEN was necessary to change the existing attitudes and to advocate for new attitudes (Zimbardo et al., 1977), because attitudes were stalling the integration programme. Advocacy for attitude change must be holistic and across all stakeholders.

## **1.2 STATEMENT OF THE PROBLEM**

There are several barriers that affect LVI. Some of the barriers that face LVI daily include communication problems, a rigid curriculum, unsafe and inaccessible building, negative attitudes towards these learners and under-qualified and unqualified educators (Engelbrecht, Oswald & Forlin, 2006).

This is in spite of the many policy documents that are in place that seek to redress all challenges faced by LVI. These policy documents strive to capacitate LVI in a bid to empower them and further to ensure that they become advocates for other LVI.

However, the support that is currently provided by the Constitution of the Kingdom of Eswatini (2005), the Poverty Reduction Strategy and Action Plan (2007), Swaziland National Children's Policy (2009), NDP (2013), Persons with Disabilities Act (2018),

MOET Policy (2018) and the Draft Inclusive Policy (Kingdom of Swaziland, 2008) is not adequate for the LVI. LVI do not successfully progress academically.

The loss of vision imposes numerous limitations upon learners. LVI are a heterogeneous group with varying levels of difficulties and problems that demand proper attention in instructional systems in the implementation of the curriculum so as to be able to perform well academically. Often, the learners' academic performance is in a deprived state. They experience a series of problems not only in taking examinations and writing assignments but also in understanding academic concepts (Agesa, 2004). The challenges faced by these learners demand educators who are trained in SEN.

Learning Braille with the remnant senses that take the place of sight are simply attempts to assist the needs of the LVI. The school has a responsibility of ensuring that there are special provisions made for these learners that must consider all the implications of perceptual restrictions. LVI, who are born without vision or those who lose their sight early in life, have to understand their surroundings by using their remnant senses. They therefore depend entirely on their auditory, tactual and kinaesthetic experiences (Agesa, 2004).

I have worked in an inclusive school for the past (five) 5 years and have taught many LVI. I have personally experienced their urge to learn and to succeed. As an educator, I have seen the effort that they put into succeeding but sadly they rarely pass. I have seen how they are discriminated by the system of education and have been exposed to unequal and unjust circumstances within the school. The opportunities that are availed to these learners are not similar to those awarded to other normal learners. It is therefore this reason that has inspired me to write this study in a bid to find solutions to the challenges that these learners face. This study hopes to expose barriers that are faced by these learners in an endeavour to help them improve them holistically. It seeks to address a gap in knowledge on IE since there is minimal research that has been done on LVI in the Kingdom of Eswatini. I hope this study will lead to future research and I have a strong urge to develop it. The unique and diverse background of these disadvantaged learners is seen they connect to each other and further adapt to the challenges that they face in the school. They demonstrate self-compassion and strive to succeed in the midst of challenges faced by the LVI. I have worked with them

and can testify that they continue to dream big and hope for a better future. This, I believe, is the biggest expression of resilience that the LVI could show.

### **1.3 AIM OF THE STUDY**

The research aims to explore LVIs' experiences in inclusive high schools in the Kingdom of Eswatini with the objective of highlighting the barriers they experience.

### **1.4 RESEARCH OBJECTIVES**

- To establish the education conditions in which LVI find themselves in schools in the Kingdom of Eswatini.
- To establish educational constraints encountered by both educators and LVI and how they could be addressed in schools in the Kingdom of Eswatini.
- To establish best classroom practices for LVI in the Kingdom of Eswatini.

### **1.5 RESEARCH QUESTIONS**

The major question guiding the research is:

How do Learners with Visual Impairments experience Inclusive Education in high schools in the Kingdom of Eswatini?

#### **1.5.1 Sub-questions**

These are sub-questions that will guide the study.

- What are the education conditions of Learners with Visual Impairments in high schools in the Kingdom of Eswatini?
- What are the educational constraints that educators encounter in high schools in the Kingdom of Eswatini?
- What are the barriers to learning that Learners with Visual Impairments encounter in high schools in the Kingdom of Eswatini?
- How do educators overcome these constraints in high schools in the Kingdom of Eswatini?

## **1.6 PRELIMINARY LITERATURE REVIEW**

A literature review is the core framework of a study that explores all relevant literature (Merriam, 1998). This research reviewed and analysed the literature to determine the views of other researchers for a deeper comprehension of the day-to-day encounters of LVI, challenges to achievement and opportunities that are available to these learners in education in the Kingdom of Eswatini.

A visual impairment is a constraint of the eyes, overall visual system or eyes that can exhibit as distortion of the vision, diplopia, reduced acuity of vision, photophobia, sensitivity to contrast, visual field loss, visual perceptual difficulties or any combination of the above (Freeman et al., 2007). LVI face many challenges like mobility, reading printed texts and others (Alemayehu, 2005).

### **1.6.1 Experiences of LVI in Inclusive Classrooms**

Allowing all learners to fully participate in classroom activities irrespective of their disability, gender or race is called inclusion. It is usually applied in classrooms with learners with SEN. It provides numerous experiences and activities to ensure that learners are successfully involved in the normal classrooms of their neighbouring schools (Stainback, 2006).

Learners spend more time at school than anywhere else. This thus renders the school setting as their key source of interaction. The educator is the principal educator of the learner. It is the educator's task to ascertain that all learners are educated, including those with visual impairments (Mberimana, 2018). LVI often have challenges in their day-to-day living. Experiences of being teased, being bullied, dealing with poor infrastructure and an unmodified curriculum are only a tip of the iceberg for these learners. Human (2010) believes that mainstream schools are usually not ideal for LVI mainly because currently these schools fail to grant full access to the curriculum and the resources. A number of these schools are discriminatory.

I have noted that some LVI are not comfortable in having normal sighted learners read for them. They would ideally read for themselves. Sadly, they are often read for by

other learners under duress. They prefer to have large print, Braille or an audio version of what they have to read. The audio version is excellent as they can easily listen to texts and prescribed materials. They prefer having magnifying glasses and bright light to assist their sight (Kabeto, 2015:72).

### **1.6.2 Barriers to Learning Faced by LVI in Inclusive Classrooms**

Persons living with visual impairments are often discriminated against because they are often regarded as abnormal in social circles. This is one reason that has led to many blind learners lacking in play skills, engaging in inappropriate acts of affection and asking irrelevant questions. Some of these learners show signs of inappropriate social behaviours like rocking their heads back and forth and raising their hands strangely into space (Tirago, 2012:5).

Purdue (2009) highlighted challenges regarding these learners' educational achievements. The Ministry of Labour and Social Affairs (MOLSA) (2004:16) echoed the idea that inconvenient classrooms, physical seating arrangements, lack of teaching aids, furniture, and an inflexible curriculum affect the quality of education for LVI.

A study conducted by Zwane (2016) revealed that there are several other challenges faced by LVI in the Kingdom of Eswatini. A majority of these learners are in mainstream classrooms. Most educators in inclusive schools are unqualified in SEN and have a different understanding of IE. A substantial number of educators seem not to be aware of the department's policy pertaining educator training in inclusive schools in the country (Zwane, 2016).

Some educators felt it was inappropriate for the Ministry of Education and Training to mainstream LVI because the current curriculum was not tailor-made for inclusive schools. This statement by the educators is substantial and realistic because a curriculum design needs to relate to lesson planning, assessment methods, teaching methods and lesson structures. This, to a large extent, is a barrier to the LVI in the Kingdom. The recent curriculum fails to acknowledge diversity, unique abilities and their need in a classroom thus hindering efforts towards inclusion (Zwane, 2016).

The following are other barriers in educational achievement for LVI as stated by Engelbrecht et al. (2006):

- Communication problems;
- Inadequately and inappropriately trained educators;
- Inadequate policies;
- Attitudes that are negative towards disabled people; and
- Unsafe and inaccessible buildings

There are a number of other barriers that hinder the academic progress of learners. They are discussed in the following sections.

#### 1.6.2.1 A rigid curriculum

UNESCO (2004) stated that failure of the curriculum in catering for the needs of the LVI and the poor, rigid teaching methods further aggravates the plight of these learners. This therefore results in schools being unable to embrace learners with special needs, thus ending up forcing the learners to accommodate to the school instead of having the school accommodating to the learners' needs (UNESCO, 2004). Lofomsky and Lazarus (2001) argued that a curriculum that is flexible is necessary to conform to the unique and diverse needs of all the learners. This thus implies that the curriculum should embrace all learners' needs. A rigid and inflexible curriculum disadvantages learners with SEN.

Maguvhe (2005) indicated other dimensions to curriculum delivery and adaptation that have been used to teach visually impaired and blind learners. These are:

- Using teaching and learning aids, technology or the special arrangement to undertake assessment tasks;
- Setting substitute tasks of demand and scope;
- Granting learners permission to undertake tasks at a later time;
- Substituting one learner-unfriendly or difficult task with one that is different;
- Giving extra time to the learner to complete given tasks; and
- Estimating learners' grades by considering previous assessments that were done by the learners.

#### 1.6.2.2 Restricted mobility

One experience for LVI is restricted mobility which confines them. This leads to limited experiences which often lead to learner helplessness and dependency on others. Low



self-esteem is a psychological aspect that often affects these learners which is caused by one's low self-worth and value. Positive self-esteem is key to an improved life (Scott & Murry, 2001:287).

#### 1.6.2.3 Unqualified and under-qualified educators

Loreman and Harvey (2005) believe that IE often fails because the educators are not able to modify and deliver the necessary curriculum to learners with unique needs. Educators themselves can experience feelings of not being sure and confident about the materials covered in the curriculum.

Savolainen (2009:16) stated that the educators play a pivotal part in insisting on a standard quality of education and further asserted that the quality of educators in schools should supersede the quality of an education system. Studies have shown that once educators are capacitated in IE, they then become willing and active participants who see themselves as prepared and competent to teach. The Kingdom of Eswatini's Draft IE Policy (Kingdom of Swaziland, 2008) explains that for a successful implementation of IE in Eswatini, there must be training during tertiary learning to equip educators who are in the field and to keep them abreast of new developments in the IE sector. This therefore means that the Ministry of Education and Training recognises that, for the successful implementation of IE in Eswatini, it is fundamental to have trained and qualified educators. The Government of the Kingdom of Eswatini (2011) acknowledges that facilitating and developing programmes for capacity building for educators is a necessity.

Studies done in the Kingdom after the implementation of IE confirm that most educators are not trained in IE thus rendering them to be incapacitated to teach in inclusive schools. Zimba (2011) stated that lack of training and capacitation in some schools in Eswatini led to challenges in administration. In most schools, neither the administrators nor the educators are trained in IE. The one-week training that was provided for educators and administrators in these schools was deemed not enough (Zimba, 2011).

The lack of qualified educators in the schools is also another challenge. Zwane (2016) argued that the mathematics and science departments in the schools face major challenges. Some educators who teach Integrated Science, Physical Science, Biology

and Mathematics are unqualified. Most of them studied Agriculture and are simply not even qualified to teach Agriculture. Most specialised in animal science and agronomy. While awaiting a break-through in their relevant professional areas, they while away time by teaching mathematics and science to learners in the schools.

In his study, Kabeto (2015) noted that most educators who are assigned to inclusive schools that cater for the LVI could neither read nor write Braille. This meant that they could not make instant educational assessments that would help to locate the learning needs of the LVI. Educators who deal with learners who are visually impaired need to be proficient in reading and writing Braille as they can correct learners instantly instead of waiting for the lengthy transcribing process. If the educator is not proficient in Braille, by the time the transcribed Brailled scripts are returned, the class had moved on to the next lesson; thus, the LVI are left behind.

#### 1.6.2.4 Inappropriate teaching, learning and assessment methods

Assessment is how professionals and educators that are a part of a learner's education successfully gather and utilise information about a learner's state of development or achievement in different disciplines of their experience in education (Watkins, 2007).

The key focus should not simply be on assessing the learner but it should be on assessment for learning (Landsberg, Krüger & Nel, 2005). Educators should break away from a perception that is performance-oriented especially if they are interacting with a learner who has had learning difficulties. Zwane (2016) maintained that the Kingdom of Eswatini should have a curriculum that embraces IE to ensure that educators countrywide use methods of teaching that look into the needs of the learners.

Watkins (2007) noted that most countries are generally challenged in developing systems to identify the initial special needs of learners, allocating class educators and the necessary tools for assessing the teaching and learning of SEN with on-going and formative assessment.

There are a number of alternative routes to assessing learners with special needs in inclusive classrooms. These include real-world oriented, performance-oriented, interactive, contextual, holistic and multi-perspective approaches (Hockings et al.,

2012). The process of assessment is broad and it is designed to award opportunities to gather sensitive and authentic signals of performance globally.

#### 1.6.2.5 Class size

For any educator to successfully teach a class, it is key that the pupil-educator ratio is the right size. Class size is of paramount importance especially for successful IE. The right class size is key in ensuring effective teaching of all learners.

Gachocho (2017) stated that large class sizes were a huge challenge for both the educators and learners. They hinder their ability to make instructional adjustments. These results were consistent with those found by Yaman and Uygulamada (2009) who stated that an overcrowded class hinders the educator's attention. An overcrowded class also slows down the progress of the class. The National Education Sector Policy (2018) has a primary objective of having an educator-pupil ratio of 1:40 in all schools. The policy is silent on the average pupil-educator ratio in inclusive schools in the Kingdom.

#### 1.6.2.6 Extra time allowance

LVI are often slow to finish their work due to the nature of their disability (Mastropier & Scruggs, 2010). This implies that the extra time allowance granted to them is very important in ensuring that they conclude their assignments (Salisbury, 2008). Learners with low vision, for example, often spend longer periods to read and complete a text as compared to normal learners. Reading and writing in Braille also consumes a lot of time.

Learners with blindness should be granted more time to access and absorb information that comes through listening (Best, 1992; Mastropier & Scruggs, 2010). In most schools, it is a norm that learners with blindness are granted double extra time and an extra time of at least twenty-five percent for those with low vision (Spungin, 2002). The majority of external examinations recognises this necessity and awards extra time of up to 100% for LVI (Salisbury, 2008).

#### 1.6.2.7 Attitudes of educators

The classroom educator is the fundamental educator in a class with LVI. Therefore, the role of the educator is to teach all learners including those with visual impairments

(Kabeto, 2015). A determinant factor in successful IE is the attitudes of the educators in accommodating LVI (Mastropier & Scruggs, 2010). The majority of educators are positive about inclusion, but some have ill feelings about it. They become emotional and stressed about the need for additional resources and additional training for IE.

It has been found that a majority of educators are against admitting LVI in schools (Beyene & Yinebeb, 2010). They also refuse learners with special needs to learn in their classrooms. This is often because the educators are unqualified and are not sure how to teach learners with disabilities hence they feel these learners will slow down the progress of the entire class.

Educators often do not prepare to reach out to the learners with profound and severe impairments to assist them. The most frequent challenges range from the educator-pupil ratio, shortage of resources, training and that educators' time will be reduced for the remainder of the class (Kabeto, 2015).

#### 1.6.2.8 Attitudes of parents

Parental involvement is of fundamental importance in maintaining a productive educational programme for LVI. Professionals who work with these learners are encouraged to establish and maintain a good professional-parent relationship for the learners' welfare (Tanzila, 2012).

Parents of the LVI must be involved at every stage of their school life. Research has shown a distinct link between the virtues of a parent and a child has further proved that they could harness good social and intellectual development (Kabeto, 2015). Being together with a child with visual impairments not only needs the physical presence of the parent but it also means that there is a contact, an emotional and social relationship. It implies understanding everything in the world through the child's eyes. These could be solving problems, communicating experiences and perspectives with their children. A major challenge that arises in assessing vision is that the LVI do not understand what they actually are supposed to see. They may not know if what they see is what everyone else sees.

### 1.6.2.9 Attitudes of sighted learners

Most sighted learners are not comfortable around peers with visual impairments; hence, they do not want to be acquainted to them. Lee and Lo (2007:48) showed that negative attitudes and misunderstandings towards learners with disabilities often hinder full inclusion and their acceptance into society. The National Federation of the Blind (NFB) (1999) cited in Kabeto (2015) argued that attitudes towards people living with disabilities tend to be negative. Prejudices, perceptions and negative attitudes are some of the problems that are faced by LVI. There is a major role that could be played by sighted learners for their peers with visual impairments that could cushion these learners and better their lives.

### 1.6.3 Experiences of Educators in Inclusive Schools

Educators in any classroom are the pivotal figures that ascertain that the teaching and learning process is successful. In inclusive schools, it is important that the educators are trained and have requirements in dealing with the learners' with SEN to ascertain that there is learning and teaching taking place.

Educators must be prepared and capable of teaching learners with SEN in an inclusive environment for the successful teaching process. Educator training is the fundamental and most important need for educators. Once trained, the educators' knowledge of inclusivity is broadened and it equips educators with relevant skills to be able to handle learners with a variety of needs and further meet their needs (UNESCO-International Bureau of Education (IBE), 2008). Educator training can be done through pre-service education, in-service training and staff development. Zwane (2016) argued that, in the Kingdom of Eswatini, there is little evidence to prove that there have been in-service training programmes to sensitise educators on inclusion and inclusive learning institution. For the five years that I have been based in an inclusive school, there was never any in-service capacitation programme that was meant to capacitate the educators.

Bagree and Lewis (2013) believed that educators in most schools are neither trained nor supported to teach learners with disabilities which therefore makes these learners to be marginalised in terms of educational attainment and policy. Bagree and Lewis (2013) maintained that there are national standards for different educator capacitation

institutions that are inadequate and differ amongst countries. Educator training rarely prepares the educators with skills, knowledge and confidence of dealing with diverse classes especially those with learners with disabilities. This thus leads to the exclusion of learners with disabilities from the learning process or to remain out of school. Educators should be awarded with adequate initial and on-going training from trained specialists and professional development.

Fakudze (2012) suggested that there must be an organised way of checking the competencies and the status of educators to establish the level of educator training in the Kingdom of Eswatini. He believed that in-service and pre-service programmes may not necessarily address the challenges in effective teaching. In the Manzini region, for example, there are only two regional inspectors for IE whose primary role is observing educators at work rather than to provide support. The feedback that the inspectorate gives often shows a lack of effective teaching but remains filed and is not acted upon (Zwane, 2016). Educators' development is expected to be done by the subject associations, subject panels and the inspectorate. All other school subjects have subject associations but IE has a panel that works closely with the special schools. The panel has a responsibility of ensuring that the right curriculum is taught and that the right texts are available. Sadly, this panel only works closely with the special and inclusive schools; hence, it is unknown to other schools countrywide.

#### 1.6.3.1 Educators of LVI

Educators of LVI have a job that requires them to be capacitated in skills that are not usually addressed in normal educator evaluation tools. The following are skills that are necessary to an educator for the visually impaired as stated by Willings (2019).

- **Professional knowledge**

- Understand and successfully communicate the role of the educator for LVI with Orientation and Mobility (O & M) and other professionals.
- Have cohesive, in-depth and accurate knowledge of VI laws, procedures and policies.
- Understand the relationship between other disabilities and visual impairment.
- Can explicitly explain principles that are vision specific, methodology terms and concepts.

- Knows about options and issues for learners with progressive eye conditions.
- Understand the developmental patterns of learners with VI across all developmental realms.
- Understand low occurrences of disabilities.
- **Assessment strategies**
  - Give professional feedback and reflect on information from other evaluations.
  - Design diverse tasks for the learner with VI to demonstrate skills.
  - Observe LVI in the classroom to assess and monitor skills.
  - Ascertain proper recommendations of learners and use appropriate evaluations for LVI.
  - Update the Functional Vision Evaluation (FVE) to document the current use of vision and further observe and note the progress.
  - Read and understand eye reports and their contents and implications.
  - Maintain actual data that is up-to-date.
  - Understand tools that are specific to visual impairments and their intended use.
- **Instructional Practice**
  - Know Braille literary codes and understand Braille codes.
  - Teach the use of the Cranmer Abacus.
  - Use wait-time appropriately.
  - Alter the pace and deliver instructions that help learners' responses.
  - Collaborate efficiently with classroom educators and therapists.
  - Maximise instructional time.
  - Limit interruptions and disruptions as possible.
  - Know the development and structure of reading Braille.
  - Link learning activities and learning objectives.
  - Emphasise learners' accountability and responsibility.
  - Be persistent and supportive in keeping the learner on task.
- **Communication**
  - Use holistic communication behaviours that are appropriate.
  - Record all team communications.
  - Give frequent reports that are constructive and on time.

- Network and collaborate with teams to arrive at educational decisions.
- Engage in collaborative problem-solving and share knowledge with teams.
- **Educator impact**
  - Be consistently involved as a leader of LVI and contribute to a positive climate.
  - Seek out professional growth.
  - Engage in professional presentations, mentoring other educators and the community about LVI.
  - Analyse and reflect results of actions and share information with all stakeholders.

#### **1.6.4 Services for LVI Including Orientation and Mobility**

Orientation and Mobility (O & M) is a profession that started in the period before and after World War II. This was when many soldiers who were visually impaired in the battle were sent to get better. O & M is a profession that specifically aids persons with low vision and blindness. It teaches them safe, effective and efficient mobility skills (Vision Aware, 2019).

Orientation is a person with blindness' ability to know where they are and where they want to go. Mobility is a person's potential to effectively move safely from one environment to another. O & M is often provided individually and takes place where one lives, works or attends school. O & M services provide instruction that can assist re-learning or development of concepts and skills that one needs to travel independently and safely at school, home or community. These services are provided throughout one's life, from teaching pupils in kindergarten and school programmes as well as adults in different rehabilitation centres. It is pivotal in a school setting for the LVI as it allows the learners to gain confidence of their environment and further assist them to be independent while ensuring their safety (Vision Aware, 2019).

#### **1.6.5 Vision Rehabilitation and Counselling**

Many people reach a point where no treatment, medication or surgery can correct their vision. They are then referred to Vision Rehabilitation Services which helps them to make use of their remnant vision (University of IOWA Healthcare, 2019). If someone fails to do a simple task because of vision loss, then vision rehabilitation and



counselling services are recommended. Vision rehabilitation and counselling allows people to lead a more productive life. To access this, devices are employed to improve the life of persons who has experienced a vision loss. Individuals with visual impairments are encouraged to utilise their remnant vision, similarly to how occupational and physical therapists assist a stroke patient.

### **1.6.6 Opportunities for Learners with SEN**

There are many challenges that hinder the normal teaching of the visually impaired. Most countries have enacted policies and laws that underpin the education of people living with disabilities. In Rwanda, for an example, the Special Needs Education Policy was established in 2007 (Republic of Rwanda, 2007). LVI are protected from discrimination and awarded equal opportunities in Rwanda. The state in Rwanda is doing its best to ensure that learners receive education that is enhanced. There are several policy statements that were enacted to ensure that these learners are afforded equal opportunities like all normal learners.

LVI are fortunate to have opportunities for rehabilitation in Rwanda. They are also in associations that aid them to disclose their disabilities and further ensure that they are integrated into society. Mberimana (2018) highlighted that in Rwanda there is the Rwanda Union of the Blind (URB) and National Council of Persons with Disabilities (NCPD). Through the Disabled People Organisation (DPO), some challenges are removed and persons with disabilities are considered as normal.

ICT contributes in imparting a high quality of educational standards for learners living with disabilities. Around the 1970s in the Kingdom of Eswatini, a couple of philanthropists established organisations that would work on addressing issues of people who were living with disabilities. They formed the National Society for the Handicapped which is run on a charity basis. The organisation raised funds to support people living with disabilities in paying school fees, buying wheelchairs, gaining decent mobility among other things (Heide & Jele, 2011).

Thurlow, Quenemoen and Lazarus (2011) argued that in the United States of America (80-85%) of learners could successfully learn and be successful like other learners if they were given adequate time, appropriate access, clear designed instructions and support needed by the Individuals with Disabilities Education Act (IDEA).

In the Kingdom of Eswatini, there is the Federation of Organisations of the Disabled in Swaziland (FODSWA) which is an umbrella body for all associations of persons living with impairments. There is an organisation of VI persons that offers advocacy and development at work that is aimed at empowering persons with visual impairments. This is the Swaziland Association of the Visually Impaired Persons (SAVIP).

## **1.7 THEORETICAL FRAMEWORK**

This research is rooted on the concept of normalisation which was postulated by Wolf Wolfensberger in the 1970s. This theory is of the idea that ‘the dignity of risk’ supersedes that of ‘protection’ and it is based upon integration in community life. The theory undergirds the community integration and deinstitutionalisation movements and forms the legal structure for affirming rights to citizenship, medical care, education, work, medical care and community living. Worth noting is that the conceptual academic base to critique and build-on could not be developed without the self-determination theory. This theory advocates for embracing all people living with disabilities and ensuring that they too enjoy normal life like having employment, accommodation, recreation, school, exercise and freedom of choice that had not been accessible to people with significant, profound and severe disabilities in the past (Wolf, 1980).

The theory of normalisation is relevant for this study because LVI have for long been rejected, socially excluded and segregated from mainstream society and education thus they could not experience the normal patterns of daily living (Hall, 2019; Simpson, 2018). Through education, LVI are afforded a life that has been turned normal just like any other sighted learner.

## **1.8 METHODOLOGY**

This section unpacks the process of research that enlightened this research and further explicitly explains detailed choices of applied methods, research strategy, data gathering tools, location, sampling and ethical considerations.

### **1.8.1 Research Paradigm**

A qualitative approach was used in this research. It was selected based on the qualitative characteristics of a study that are expected in a research with a nature and

type of this research problem. The researcher aimed to scrutinise matters that are connected to the oppression of individuals. In this research, these are challenges that are faced by the LVI in inclusive schools. A qualitative approach to this study demands a comprehensive portrait of a series of human interactions thus comprehending social realities and of a range of perceptions, human interactions, endeavours and situations (Creswell, 2003:79).

### **1.8.2 Ontology**

An interpretative paradigm was used in conducting this research. The ontology underlying this research was subjective and considers that there are multiple versions of reality. It was based on relativism.

### **1.8.3 Epistemology**

The epistemology surrounding this study is that the researcher has to be allowed access to an individual's reality by interacting with them. While interaction with the participants, the researcher aimed at understanding them and further made informed decisions. This research used an emic epistemology.

### **1.8.4 Axiology**

The researcher values human dignity and believes that everyone, irrespective of disability, race, age, health, gender, financial circumstances or any other factor, deserves fair and equal chances in life. This research seeks to change the attitudes and beliefs of society into understanding, accepting and embracing learners living with disabilities. Through this research, I hope to share my beliefs in a bid to influence all stakeholders that are involved with the learners living with disabilities.

### **1.8.5 Location**

This research was conducted in three high schools in the Kingdom of Eswatini. For the purpose of this study, these schools were named School A, School B and School C, respectively.

School A is in the Manzini region, about 16 kilometres from Manzini city. School B is situated in the Shiselweni Region, one kilometre from Nhlanguano town. School C is situated in the Hhohho region, 3 km from Mbabane City. The researcher proposed

these locations since they were all easily accessible and were within a close proximity to cities in the Kingdom. All three schools are public inclusive schools. School A and School C are mission schools. School A and School B are boarding schools that allow boarding for both boys and girls. School B and School C are urban schools while School A is a semi-urban school. School A had an overall enrolment 328 learners. School B had a total enrolment of 814 learners and School C had a total of 583 learners.

### 1.8.6 Sampling

Purposive sampling was used in this research. This method involves purposely selecting a minimal number of cases that are information-rich from a large population (McMillan & Schumacher, 2010). Purposive sampling often increases the richness of the data that is obtained from a smaller sample, like in this research study.

In this study, 10 educators were selected from three schools: six (6) participants from School A, two (2) from School B and another two (2) from School C. Three (3) administrators participated in this study; one (1) was from school A, one (1) was from School B and one (1) was from School C. Six (6) LVI participated in the study. These learners live with low vision and the others are blind. Four (4) were selected from school A, one (1) from School B and one (1) was from School C. The overall total for all the selected participants was 19.

Table 1.2: Educators' profiles

EDUCATOR	QUALIFICATION	TEACHING EXPERIENCE	AGE	GENDER	MARITAL STATUS	HOME LANGUAGE
T1	Secondary Educators' Diploma + Bachelor of Education	12	35	F	Single	SiSwati, English
T2	Bachelor of Arts + Post Graduate Certificate in Education	20	41	F	Married	SiSwati

EDUCATOR	QUALIFICATION	TEACHING EXPERIENCE	AGE	GENDER	MARITAL STATUS	HOME LANGUAGE
T3	Secondary Teachers' Diploma	34	58	M	Widowed	SiSwati, English
T4	Bachelor of Science	12	36	M	Single	SiSwati
T5	Bachelor of Education	32	55	M	Divorced	SiSwati, English
T6	Bachelor of Education	4	26	F	Single	SiSwati
T7	Secondary Teachers' Diploma	2	25	M	Single	English
T8	Secondary Teachers' Diploma Bachelor of Education Honours in Special Educational Needs	25	49	F	Married	SiSwati, English
T9	Bachelor of Education	23	46	F	Married	SiSwati
T10	Secondary Teachers' Diploma	4	29	M	Divorced	SiSwati

Table 1.3: Principals' profiles

PRINCIPAL	QUALIFICATION	EXPERIENCE	AGE	GENDER	MARITAL STATUS	HOME LANGUAGE
P1	Bachelor of Science Post Graduate Certificate in Education	27	52	M	Married	SiSwati

PRINCIPAL	QUALIFICATION	EXPERIENCE	AGE	GENDER	MARITAL STATUS	HOME LANGUAGE
P2	Diploma in Education Bachelor of Science Post Graduate Certificate in Education	33	56	M	Married	SiSwati
P3	Secondary Teachers' Diploma Bachelor of Education	20	43	F	Married	SiSwati, English

### 1.8.7 Research Approach

A qualitative approach to research was used in this study. It was selected based on the nature of the study problem and the expectations of a qualitative approach that were applicable to this study. A qualitative research seeks to thoroughly examine an issue or issues that are similar to oppression of particular groups or individuals. In this study, these are the challenges and hindrances faced by the LVI in inclusive schools. A qualitative approach grants the researcher a deep comprehension of social realities and derives a detailed portrait of a range of perceptions, human interactions, endeavours and situations (Creswell, 2003).

An advantage of qualitative research is that it can take into account the changing attitudes within the participants (Queirós, Faria & Almeida, 2017). It allows the researcher to be speculative on their chosen study and has a more flexible approach. The qualitative approach is focused on gathering meaningful data.

Disadvantages of using qualitative data are that it is taxing to sample a larger population, thus raising the question of whether the research is a true reflection of the studied phenomenon (Queirós et al., 2017). The chosen samples may be biased thus weakening the quality of the study or the researcher may choose participants that favour the anticipated outcome. Self-selection bias is also a disadvantage of qualitative approach as participants are asked to volunteer their views. The kinds of

questions that are asked may also disadvantage the collected data in qualitative research.

### **1.8.8 Data Collection**

This is the exercise of measuring and gathering data on variables that appeal in an organised way. It allows a person to respond to research questions that are stated, thus evaluating outcomes and testing hypotheses (Walliman, 2006).

The data for this research was gathered qualitatively using document analysis, observation and semi-structured questionnaires. Johnson and Christensen (2012) argue that a case study researcher advocates for several instruments of data collection. This is the main reason why this researcher will use three qualitative instruments of data collection for this study.

#### **1.8.8.1 Semi-structured questionnaires**

I designed semi-structured questionnaires to collect data from three groups of interviewees (Appendix I, J and K). They comprised predefined closed and open-ended questions. I had the role of anticipating all possible answers with pre-coded responses. Prepared questions answered by the school principals, the educators and the LVI assisted in answering the research questions. Similar views were put into categories according to their reflections on the research questions.

#### **1.8.8.2 Observation**

Kumar (2005) described observation as a selective, planned and purposeful procedure of critically monitoring a condition as it happens. Observation is suitable in situations where questioning cannot elicit all the necessary information because the participants are either unaware of the answers or they are not cooperative. Taye (2008) advocated for observation as it assists in collecting credible and rich data.

In observation, the researcher had an opportunity to see the real experiences of LVI in an inclusive classroom. In this research, I was a non-participant observer. This is the observer who monitors the condition without actively participating in the activities. This kind of observation does not need a prolonged time to engage with the phenomenon that is being studied (Bryman, 2004). I opted for observation in this study because time for data collection was limited.

### 1.8.8.3 Document analysis

Data collection used another technique called document analysis. The documents in this research were the mission statements and the vision statements of the three high schools where I did the research. The mission and vision statements were scrutinised with the aim of seeing if they embraced IE for the LVI. McMillan and Schumacher (2010) described documents as past records of written or printed records. They may appear as like paintings, written documents, monuments, a statistical table, video or film. Best and Kahn (2006) affirmed that documents are necessary in proving findings made through other methods of research.

### 1.8.9 Data Analysis

De Vos et al. (2011) described data analysis as a method of summarising, categorising, ordering and manipulating data to get different responses to different research questions. Data analysis describes and interprets raw data to access the patterns and meanings from it (Bell, 2005). Qualitative data analysis succeeds the data collection process in order to determine any missing information. This assists the researcher in restructuring data collection tools, understanding the studied phenomenon and reviewing the data to access data that aligns with the research questions. The process of interchanging data analysis and data collection in qualitative research is called interim analysis (Miles & Huberman, 1994). It was unavoidable in this research and it was done after each observation and interview to check if any further information needed to be collected.

Once the data collection process had been completed, raw data was then interpreted. Transcription means transforming audio recordings, interview notes, document analysis notes and observational notes into texts (Johnson & Christensen, 2012). Thematic analysis was then used to prepare the data. This is the analysis, identification and reporting of theme occurrences from the collected data (Braun & Clarke, 2006). Braun and Clarke (2006) set out six thematic steps that should be adhered to. These are:

1. Reading the transcriptions to be acquainted with the data to help the researcher to know the data.
2. Generating initial codes by labelling the list of developed ideas on them.



3. Looking for relevant codes under different themes.
4. Reviewing the themes to check for their authenticity and relevance.
5. Defining and naming themes before extending the report.
6. Producing a report and signalling that the researcher is content with the themes.

Observation reports and interview responses of all participants were presented and were aligned to the research questions. It is essential to record direct statements from the participants because it reflects original data (Cohen et al., 2007).

#### **1.8.10 Trustworthiness**

Trustworthiness of findings and interpretations rely on showing how they were attained (La Blanca, 2004). Trustworthiness is important as it proves and grounds the credibility and validity of results of a research while also ensuring that acceptable standards are met (Bowen, 2005:214). The researcher ensured that the findings of the study were trustworthy.

#### **1.8.11 Credibility**

Credibility is the level of ascertaining if the research findings mimic reality and are believed to be true, reasonable and trustworthy (McMillan & Schumacher, 2010). To prove that the study was credible, I observed lessons and assumed the position of a non-participating observer. I also administered semi-structured questionnaires to willing visually impaired learners, educators and principals. The semi-structured questionnaires granted me the opportunity to gather enough data from the participants.

#### **1.8.12 Transferability**

Transferability is described as the level to which findings of a study's findings can be used in another context (Zhang & Wildemuth, 2009). The task of the researcher is to show accountability for sets of descriptions and data that are rich so that succeeding research studies can make judgements about the results and recommendations in different settings and contexts. I hoped that the experiences and views of the learners, educators and principals of the three sampled inclusive schools would represent the experiences and views of others regarding the education of the LVI. I ensured that all data was supported by adequate evidence.

### **1.8.13 Dependability**

Dependability can be shown by checking how consistent the research process is. It is the coherence of the way a researcher is accountable for the alternating conditions in the phenomena and internal process (Bradley, 1993). To attain dependability, I used observation, semi-structured questionnaires and document analysis to ply into the present situation regarding the education of the LVI in three high schools in the Kingdom of Eswatini.

### **1.8.14 Confirmability**

Confirmability is the level to which data characteristics, as unveiled by the researcher, can be approved by other researchers as a true record of the study findings (Bradley, 1993). The main approach for demonstrating confirmability and dependability is the use of audits and findings of the processes of the research. Confirmability can be confirmed by ascertaining the internal coherence of the study product namely, the interpretations and recommendations, the results and the data.

To ensure confirmability, I took notes during observation as recommended by Gay et al. (2009) to avoid distortion of information or forgetting some information. If the data is recorded after observation, it may be distorted.

## **1.9 ETHICAL CONSIDERATIONS**

### **1.9.1 Institutional Approval**

To uphold legal and ethical considerations, I first obtained ethical clearance from UNISA (Appendix A) and acquired authority to direct a research from the Ministry of Education and Training (Appendix B and C). I also sought permission from schools principals (Appendix D), educators (Appendix E), parents of participating learners and from the learners themselves (Appendix F and G) to conduct a study in their schools.

### **1.9.2 Voluntary Participation and Informed Consent**

For this study, I was cognisant of the legal and ethical obligations the research had to the participants. These obligations incorporated voluntary participation of respondents and informed consent and assent (McMillan & Schumacher, 2010). I was obliged to

protect the participants' privacy and further ensure that anonymity, confidentiality and correct data storage was adhered to.

I ensured that all the participants were aware that they were voluntarily participating and that if they needed to pull out at any point, they could do so without consequences. Informed consent forms were signed by all participants to acknowledge their participation. Assent forms were also signed by the parents. The aims and objectives of the study were explained to all participants and why they had been chosen. Gains of the research were relayed to the participants.

### **1.9.3 Anonymity and Confidentiality**

I noted questions and further attend to misunderstandings, if any, from the population in relation to the study. Confidentiality of the participants was guarded by ensuring that their identities were kept anonymous. Sensitive questions were avoided and the research questions were designed not to violate participants' rights. Personal names and information provided did not appear in the study but identification numbers or codes were used instead.

### **1.9.4 Respect for Human Dignity**

I understood that my role must be based on a fundamental respect for human dignity and personal integrity. I understood that human dignity cannot be set aside in order to achieve greater understanding. This study preserved individual freedom, respect, and privacy and protected personal integrity and avoided any harm.

### **1.9.5 Beneficence and Justice**

I was fair and treated all participants equally. I hoped to find out and make valuable recommendations to policy makers, curriculum designers at the National Curriculum Centre, education planners, educators and all stakeholders by providing input into their plans for development to address gaps in IE provisioning.

I hoped to benefit educators so that they may understand and have insight into the difficulties that face them, in turn address the challenges faced by LVI. I also strived to establish ways to relate to the learners' needs and their personal needs in an adaptive and adequate manner. I aimed to get to the root cause of the poor academic performance of the LVI and how best they can be assisted.

### **1.9.6 Avoid Deception**

Deceiving someone is making them believe something that is false (Hornby, 2010). Deception is compromising the truth or telling lies (Manion & Morrisons, 2011) as cited by (Chauke, 2017: 18). I was honest about the aim and purpose of the study, and with regards to where there was potential risk to the participants existed. Sometimes researchers compromise the truth to the participants because they are afraid that if they divulge information, they may then not be able to unearth important information. This did not happen in this research. The researcher provided feedback during and after the research session to the participants. This lowered ethical dilemmas like withholding information about the true nature of the study.

### **1.9.7 Protection from Harm**

The participants were safeguarded from mental and physical harm in taking part in this research and will further monitor that they are not distressed. The researcher will not offend, frighten, embarrass or harm the participants.

The researcher will ensure that the visually impaired learners will receive special care and that their participation is brief.

## **1.10 SCOPE AND LIMITATIONS OF THE STUDY**

- The Kingdom of Eswatini has four regions and this research covered only three out of the four regions. This is because the fourth region has no high school that caters for LVI. In my view, this is a limitation.
- There is minimal research that has been conducted on IE especially LVI in the Kingdom of Eswatini. This thus implies that there is limited literature available on this phenomenon.

## **1.11 SIGNIFICANCE OF THE STUDY**

This research will positively contribute to understanding IE in the Kingdom of Eswatini especially in finding lasting solutions to the challenges faced by the LVI.

It will add valuable information in this domain by assisting educators, parents and other stakeholders on how best they can handle these challenges while assisting these learners. This would therefore enable all stakeholders to establish appropriate programmes and interventions that can assist LVI, sighted learners and educators.

This study hopes to benefit educators by assisting them to gain an understanding and insight on the difficulties that face them, hence addressing the difficulties that face LVI. It further hopes to establish means and ways to assist the learners in embracing their needs in a more adaptive and sufficient manner. It aims to get to the root cause of the poor academic performance of the LVI and how best they can be assisted. It will address the daily difficulties faced by these learners by observing them during learning, listening to how they experience education and sensitising stakeholders on how best they can assist these learners in achieving a better academic performance.

The study will offer valuable recommendations to policy makers, designers of the curriculum at the National Curriculum Centre (NCC) and education planners while assisting them to improve their plans for development to address the gaps in IE provision.

## **1.12 DEFINING CONCEPTS**

### **1.12.1 Visual Impairments**

This is a limitation of the visual system or eye(s) and can manifest as visual perceptual difficulties, photophobia, reduced visual acuity, visual field loss, contrast sensitivity, visual field loss, diplopia, visual distortion, or any combination of the above (Freeman et al., 2007). Persons living with visual impairments face many challenges like failure to read printed texts, mobility and others (Alemayehu, 2005).

### **1.12.2 Inclusive Education**

Inclusive Education (IE) is a method that considers all learners' needs irrespective of their capacity to learn, disability, health state, financial status, level of achievement, stage of development or gender. It allows schools to accommodate and serve all learners. IE is deeply influenced by basic human rights to education and advocates for many approaches and goals of the EFA movement (DPMO, 2011).

### **1.12.3 Special Education**

The concept of special needs advocates for every learner to be in a mainstream classroom, as far as physically possible (DPMO, 2011). Learners with SEN usually have a challenge with progressing normally according to their natural capability because of several challenges in their homes, their education and environment

(DPMO, 2013). Learners with SEN often have challenges for shorter periods during their academic time.

#### **1.12.4 School**

This is a place where learners go to be educated (Hornby, 2010). It is an educational institutional that provides learning environments and learning spaces to teach and to allow learning under the educators guidance.

#### **1.12.5 Learner**

Hornby (2010) defined a learner as someone who is finding out about a subject or how to do something. It is someone who is in the process of modifying or acquiring existing skills, knowledge, preferences and behaviours.

### **1.13 STRUCTURE OF THE THESIS**

Chapter 1 is an introductory and tables the basis and main reason of the research. It provides an in-depth background to the research problem and further sets the stage for the succeeding chapters.

Chapter 2 presents the literature on learners living with visual impairments. It presents the views of other researchers for a deeper comprehension of the daily encounter of LVI, challenges that hinder learning achievement and the opportunities that are available to these learners in education.

Chapter 3 is the methodology chapter thus it gives an outline of the research design, the methodological approach, sampling, research instruments, data collection, analytical strategies, procedures, data analysis, and ethical issues. It discusses the fundamentals of the study's paradigm involving epistemology, ontology and axiology.

Chapter 4 presents the findings which were organised around the research questions and the purpose of the study. This chapter looks at unitisation, data coding, categorising and presenting the emerging themes.

Chapter 5 summarises the results of the research, makes suggestions on the results gives an outline of the strengths and limitations, draws conclusions and suggestions for further fields of study. These recommendations can improve the education of the LVI in inclusive schools in the Kingdom.

## **1.14 CHAPTER SUMMARY**

Chapter 1 introduced the main reason for conducting this study. It set the stage for the succeeding chapters and oriented the readers to the present state of education for the learner with visual impairments in schools in the Kingdom of Eswatini. Chapter 2 reviews and analyses literature, while discussing different views of other researchers for a deeper comprehension of the daily experiences of LVI. It also considers the attitudes of educators, parents and other learners towards the LVI, and the barriers that are faced by learners.

## **CHAPTER 2:**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

Chapter 2 aims to give information on learners living with disabilities, particularly those living with visual impairments. There are certain characteristics that clearly are said to earmark all Learners with Visual Impairments (LVI). This chapter reviews and analyses the literature while following different views of other researchers for a deeper understanding of the daily experiences of LVI, challenges that hinder learning achievement and the opportunities that are available to these learners in education in the Kingdom of Eswatini. This chapter also looks at the attitudes of educators, parents and other normal learners towards the LVI, and the barriers that are faced by these learners. It looks at the theoretical framework that embody the research and the justifications.

A literature review is the core framework of a research that organises all relevant literature (Merriam, 1998). Maguvhe (2015) posited that inclusion is mainly grounded on the rights perspective. This can be understood to mean gender equality, access, and other matters that relate to equality. The EFA initiative concurs and further discusses education as a basic human right” (International Agency Commission, 1990, cited in Dyson, 2001).

The reasons behind the implementation and need for inclusion was revealed in the research by Ahmad (2015) who believed that IE helped one to be sensitised on diversity, to experience using different learning materials, to have knowledge, awareness of diversity, assistive devices, flexible curricula and the services that support learners living with disabilities. It allows them to learn and be at the same level with other normal learners in the common classroom. IE should encourage positive attitudes, improve the environment, inputs and processes to inculcate learning both in the school and the learner and to support a holistic learning experience.

Needs of learners with disabilities must be at par with the needs of other normal learners. Furthermore, learners with disabilities should learn in inclusive classrooms to the best possible extent (IDEA, 20 U.S.C. 1412 [a] [5]). Placement procedures and evaluation are pivotal in guarding against inaccurate classification and inappropriate



placements; thus, there is a need to establish processes and procedures that provide rights to guardians and parents (Sapp & Hatlen, 2010).

## **2.2 EXPERIENCES OF LVI IN INCLUSIVE CLASSROOMS**

IE is the process of granting learners the chance to participate fully in normal class activities irrespective of their disability, race or other characteristics. IE is often used in SEN. It includes providing numerous experiences and activities to ensure that learners can successfully be involved in the normal classes of their neighbouring schools (Stainback, 2006).

Inclusion encompasses providing meaningful opportunities for learning to all learners in the normal school system. It grants all learners opportunities to attend peer-appropriate classes at the nearest school, with extra tailored assistance to meet the needs of the individual learner as necessary (Government of Swaziland, 2015).

Learners spend more time at school than they do anywhere else. This thus makes the school setting their key place of interaction. The educator is the principal educator of the learner. The educator's task is ascertaining that all learners are involved in the teaching and learning process including those with visual impairments (Mberimana, 2018). LVI often have challenges in their day-to-day living. They are often teased, bullied, have to deal with poor infrastructure and an unmodified curriculum which often is only the tip of the iceberg for these learners. This is another reason why Human (2010) argued that IE is often not the best choice for LVI mainly because these schools currently lack resources to support the curriculum. Most of them are discriminatory. Learners with SEN may need changes to the following (Special Education Policy Statement, 1999, cited in Kabeto, 2015):

- Educators' staffing;
- The normal curriculum;
- Infrastructure;
- Strategies for evaluation and instruction; and
- Resources and materials.

Minerva (2017) relayed that earlier research on the experiences of learners' with special needs in tertiary institutions predicted that the learners had negative and positive experiences. Participants in these studies relayed that their peers were mostly

helpful and open though they were uncertain at the beginning. The participants reported that many educators sacrificed their spare time to assist the severely visually impaired and were supportive. Sadly, this was not universal. Some learners reported that some of the educators had negative comments and did not support them. Educators sometimes need time to adjust and adhere to demands of the learners with profound visual impairments and these adjustments occur with varying success and at different rates.

This directly speaks to the need for more support and staff capacitation for the educators. Some of the negative experiences were a result of the challenges that were a result of inaccessibility of material, IT services and rote learning. Disability awareness is necessary for both learners and educators.

Some learners hinted that they had structures that they depended on for support in the general education classroom and this emerged under peer support. Participating learners shared positive experiences that related to their peers assisting them in the classroom. They also relayed how they had a network of close friends that they truly could rely on (Johnson & Kerri, 2017). These friends assisted them in different ways that ranged from reminding them about tasks, providing verbal instructions, giving verbal cues, descriptions and assisting them to move through the classroom. One of these female LVI talked about her friends who assisted her as her 'BFFs', or 'Best Friends Forever'. However, two learners did not share the same sentiments. They spoke sparingly about their friends and they also did not share or depend on their friends as much as their female counterpart. I believed that this could be differences in personalities or age difference as the female LVI was younger.

Johnson and Kerri (2017) stated that learners reported that they relied on others for assistance in general education environments because of their visual impairments. Learners also stated that they also depended on their peers, educators and families for support. However, learners shared their experiences whereby assistive technology was unavailable to provide the access needed. Learners also deliberated on ways in which they experienced inadequate support from educators. These learners also expressed that their biggest desire which was to be normal and be like the others.

Some LVI were not comfortable in having normal sighted learners read for them. They would prefer to read for themselves. Sadly, they were often read for by other learners

under duress. They preferred to have large print, Braille or an audio version of what they have to read. The audio version is excellent as they can easily listen to texts and prescribed materials. Audio recordings grant these learners liberty to re-play and fast-forward the recorded materials thus allowing them to be on the same page as other normal learners who can read any part of their normal print materials. They prefer having magnifying glasses and bright light to assist their sight (Kabeto, 2015).

The Constitution of Swaziland (Swaziland Government, 2005) and the EDSEC policy (The Government of the Kingdom of Eswatini, 2011) both contain provisions that address disability and directly speaks to the educational needs of people living with disabilities. Heide and Jele (2011) reported that many Swazis were of the idea that staying with people with disabilities might bring bad luck. This led to friends and families of the people living with disabilities choosing to hide them, in turn denying them a normal life and a chance to be part of activities within the society. This concurs with what Leshota and Sefotho (2018) mapped out as the African ontology of disability. They stated that persons living with special needs often live a life that is below average in life compared to other human beings; thus, they are often excused from rites that belong to the society and other normal ventures. Leshota and Sefotho (2018) further argued that Africans often see impairments as a bad omen, unwelcome and brings adversity to the affected. This possibly explains why some disabled people are hidden by their families and relatives in the Kingdom of Eswatini. Heide and Jele (2011) stated that the absence of policies and laws that speaks to persons with impairments' access to fair and equivalent possibilities is a reflection of a lack or neglect of their rights to be recognised as human rights.

A major basic objective of inclusion is to ascertain that all learners have full education access across all levels of education. In an endeavour to ascertain that this objective of an IE is met in Eswatini, The Government of the Kingdom of Eswatini (2011) proposed strategies that include ascertaining that the necessary learning and teaching materials are made accessible to all learners across all levels and ascertaining that all educational institutions are accessible to all learners. It further advocated for the facilitation and development of programmes that would capacitate all educators (The Government of the Kingdom of Eswatini, 2011)

Dube, Ongolo and Jele (2012) in their study for the Secretariat of the African Decade for Persons with Disabilities (SADPD) for Eswatini perspective stated that existing challenges for the Kingdom include the limited number of employees in the Ministry of Education to reinforce the application of IE and the insufficient number of adequately qualified educators in schools.

Ainscow et al. (2012) maintained that the time they spent working closely with schools gave them an opportunity to experience the complexities that are involved. These processes, they believed, are networked with an aim of preserving equal rights for all. Ainscow et al. (2012), were of the idea that the level at which learners experience and achieve outcomes are equitable does not solely rely on education practices of the schools or educators.

This relies on a myriad of influencing factors that affect the school from outside. This includes the culture and history of the particular population, the demographics of the region, the economic status of the people and socio-economic status. Politics that engulf the education sector, policy-making, and the way decisions are made at regional level and impact individual schools are other issues. In addition, parental choices and exclusion complicate matters.

Ainscow et al. (2020) were of the idea that individual schools can assist in resolving issues within their organisations and this could provide learners with the kinds of experiences that they need in schools. It is true that that these ideas cannot assist in inter-schools and out-of-school issues but can hugely influence in-school practices.

### **2.3 BARRIERS TO LEARNING ENCOUNTERED BY LVI IN INCLUSIVE CLASSROOMS**

Persons living with visual impairments are sometimes not acceptable because they are often regarded as abnormal in social circles. This is one reason that has led to many blind learners lacking in play skills, engaging in inappropriate acts of affection and asking irrelevant questions. Some of these learners show signs of inappropriate social behaviours like rocking their heads back and forth and raising their hands strangely into space (Tirago, 2012). Cognition is mainly about developing concepts and most of these concepts are learnt visually. This explains why most LVI have challenges understanding most concepts. Learners with blindness are often passive

and less inclined to look out for new experiences. They often have fewer learning experiences as compared to other normal learners.

The Education White Paper 6 (Department of Education, South Africa, 2001) states that diverse learning needs may come as a result of:

- Stereotyping and adverse attitudes;
- Languages of teaching and learning that are inappropriate;
- Inadequately and inappropriately trained educators and support staff;
- A curriculum that is inflexible;
- Inadequate legislation and policies;
- Inadequate and inappropriate support services;
- Communication that is inappropriate;
- Buildings that are unsafe and Inaccessible;
- Not involving and not recognising the parents.

The Ministry of Labour and Social Affairs (MOLSA) (2004:16) echoed the idea that quality learning for learners with visual impairment is often affected by inconvenient classrooms, physical seating arrangements, lack of teaching aids, furniture and an inflexible curriculum. In the Kingdom of Eswatini, some educators felt it was inappropriate for the Ministry of Education and Training to mainstream LVI because the current curriculum was not intended to be inclusive. This justification by the educators looks realistic and valid because a curriculum requires consideration of the lesson planning, assessment methods, teaching methods and lesson structures. This, to a large extent, is a barrier to the LVI in the Kingdom. The present curriculum does not recognise diversity or unique abilities thus hindering efforts towards inclusion (Zwane, 2016).

While the need to formulate IE is appreciated in the Kingdom of Eswatini, it cannot be achieved successfully without development at national, community, family level and the allocation of substantial funds and resources (Government of Swaziland, 2015). Even though there is an IE policy in the Kingdom of Eswatini, many learners with disabilities are not accepted into elementary primary school education. This is a result of dynamics like an absence of transport, inaccessible school buildings and the environment, shortage of resources and equipment in schools, large class sizes, unqualified educators and negative attitudes within communities and families. Some

learners were granted entry into mainstream and special schools but the level of education they received was questionable. There is a need for a relevant and appropriate competency-based curricula, which will accommodate all the learners' needs and a tailor-made assessment methods (Government of Swaziland, 2015).

A number of other challenges impede the academic progress of learners. They are discussed below.

### **2.3.1 Unique Curriculum Needs for LVI**

UNESCO (2004) stated that failure of the curriculum to embrace the necessities of the LVI and the poor and the rigid teaching methods further aggravates the plight of these learners. This therefore results in the school being unable to embrace learners with SEN, thus compelling the learners to suit to the learning institutions rather than having these institutions suiting to the needs of the learners.

Lofomsky and Lazarus (2001) argued that a flexible curriculum is necessary to assist learners' unique and miscellaneous potentials. This thus implies that the curriculum should embrace all learners' needs. An inflexible and rigid curriculum disadvantages learners with SEN. IE requires a curriculum that is learner-centred and one that will represent the full range of all citizens, not just people living with disabilities, and clearly embraces the needs of all (Government of Swaziland, 2015).

Loreman and Harvey (2005) are convinced that IE often fails because the educators fail to modify and deliver the appropriate curriculum to learners of diverse needs. Educators themselves can experience feelings of a lack of training and uncertainty with regards to the curriculum. Some of the important challenges to the learning in special and mainstream schools emerge from separate dimensions of the curriculum that include the following (DoE, SA, 2001):

- The syllabi or content to be covered;
- The language of instruction;
- Assessment to learning;
- The classroom or lecture is managed and organised;
- The usage of learning equipment and materials;
- The processes and methods used to teach; and
- Available teaching periods to complete the curriculum and the pace of teaching.

The mammoth task in adapting instructional materials to suit LVI adds to the normal educator's anxieties and workload. Teaching materials should be used by educators to simplify and aid the learner's performance. The resources should therefore be competent to meet the needs of disabled learners in the classrooms. Educators face challenges of adjusting equipment and materials in an endeavour to adapt to the learners and to match the objectives of the academic subjects to be taught (Obi & Mensah, 2005).

It thus becomes extremely difficult for LVI to have access to the education curriculum (Obi & Mensah, 2005). Teaching learners with unique needs demands the curriculum to be adapted. It comprises adapting and planning of guidelines to meet each learner's needs. Educators have the task of tailoring their guidelines to meet the needs of each individual learner. The Australian IE policy states that learners with disabilities should learn together with their age-mates while also being presented with a curriculum that embraces, supports and effectively meets their needs (Department of Education, Tasmania, 1997).

Wium et al. (2015) asserted that a curriculum that is differentiated is required to respond to learners' unique needs and to adapt assessment and teaching methods and the learning environment. Educators' abilities to respond to learners and appropriate learning can be influenced by their skills and knowledge. Maguvhe (2005) indicates other methods of curriculum delivery and adaptation that have been used to teach the LVI. These are:

- Using teaching and learning aids, technology or making special provisions to carry out assessment tasks;
- Setting substitute tasks of demand and scope;
- Granting learners permission to undertake tasks at a later time;
- Substituting one unfriendly or difficult task with one that is different;
- Giving extra time to the learner to complete given tasks;
- Estimating learners' grades centred on previous assessments that were done by the learner.

Bruwer et al. (2014) found that educators felt that learners were not prepared for the curriculum. They also felt that the curriculum was unreachable and that the expectations and pace were far-fetched since there was coercion on the educators to

apply the curriculum. They recommended that the personnel who compiles the curriculum must be prepared and flexible to adapt the curriculum to meet the learners' needs.

Malehlanye (2016) reiterated that adapting the curriculum would be difficult if the curriculum were examination-based, centralised and rigid. It is very important for the curriculum to be tailored and grant the educators a chance to make it appropriate for individual learners needs. The NCC, on the other hand, should focus on curriculum development. This includes areas like sports, literacy, manual work, technology and should only act as a guideline to which schools can use considering their specifications and needs. Indeed, this will improve the Individualised Educational Plan (IEP) while improving the quality of education. It will allow educators to use different methods of assessment based on individual capabilities and needs of the learners.

Zimba (2011), in his study on inclusion in the schools in the country, concurred that a rigid curriculum is a challenge in inclusive schools. In conducting his study, he found that the curriculum that was used had not been tailored-made to meet the needs of the individuals with SEN, which underpins inclusion. Teaching learners with SEN using techniques for mainstream classes makes the teaching and learning process difficult in an IE class. Curriculum adaptations for normal learners can assist these learners positively in the learning process. This is often a challenge with LVI. Therefore, this is proof that the use of tangible objects is necessary when designing a curriculum that is inclusive to ensure that all learners benefit (Zimba, 2011).

#### 2.3.1.1 Learners' readiness

In his theory on learner readiness, Vygotsky (1978) proposed that educators must teach learners within each child's zone of proximal development, which is the variance between what learners can do on their own and what they can do with other learners support or scaffolding. Tomlinson and Imbeau (2010) cautioned, however, that ability and preparedness are different; thus, they should not be used interchangeably. Ability is a rigid state grounded on a form of inborn or innate capability, whereas readiness is a condition that is temporary and that should change often because of high-quality teaching.



#### 2.3.1.2 Learners' interests

Learner interest is what promotes involvement, inquisitiveness and attention of a learner (Tomlinson & Imbeau, 2010). Educators should interchange instruction delivery according to learners' hobbies and interests. Such learners are inspired to link their interests to what is being taught. Interest-based differentiation helps to stimulate new interests in learners (Santangelo & Tomlinson, 2009).

#### 2.3.1.3 Learners' learning profile

The main factors in learners' learning profile are intelligence choices, cognitive styles, group orientation, and learning environment preferences (Santangelo & Tomlinson, 2009).

#### 2.3.1.4 Content differentiation

Santangelo and Tomlinson (2009) maintained that it is fair and just that once educators understand learners' interests, preparedness and their academic and extra-curricular profiles, they will possibly engage in appropriate and effective process, content, and product differentiation. Content is not only what learners are taught, but how learners access teaching materials. What the learners are taught must remain constant, with educators interchanging how learners access to specific contents (Tomlinson, 2005a).

#### 2.3.1.5 Process differentiation

Process differentiation is the feedback to interest, preparedness, and learning profile (Tomlinson 2005a, 2005b). Anderson (2007) stated that lesson differentiation is how the learners assimilate and comprehend skills, concepts and facts.

#### 2.3.1.6 Product differentiation

Tomlinson (2005a, 2005b) described product differentiation as one that should offer a series of options to show that the learner has mastered common learning goals. Adequate product differentiation should provide learners with clearly defined criterion for success. Santangelo and Tomlinson (2009) also advocated for educators to provide learners with adequate support and scaffolding plus opportunities for self and peer-evaluation.

### 2.3.1.7 Modelling differentiation

Tulbure (2011) posited that in higher education, differentiating instructions poses a challenge both for researchers and educators. She argued that both the differentiated instruction and the whole-class instructional approach are an assured success. Table 2.1 summarises challenges and successes experienced by educators while teaching learners in a classroom environment that is differentiated as postulated by Joseph et al. (2013).

Table 2.1: A summary of challenges and successes

SUCSESSES	CHALLENGES
1) Motivation is extended from learners in handling educational roles.	1) This exercise is tedious and includes a lot of organising, planning, and scheming learners 'in larger classes.
2) Learners' problem-solving and study habits are Improved.	2) Difficulty in attending to individual preferences and needs particularly individuals who choose to work alone.
3) Learners realise the importance of diverse styles of learning and tend to apply this approach practically in their classrooms.	3) The culture of the examination which has spread through educator training institutions seemingly has a great impact.
4) Assuming real life connections with curriculum increases understanding and meaning.	
5) Improved group collaboration and cooperation.	
6) Better understanding, involvement and learners' enhanced academic performance.	
7) Improved relations between educators and learners.	

### 2.3.2 Unqualified and Under-Qualified Educators

Savolainen (2009) stated that educators have an important role in ascertaining that the standard of teaching and learning is of expected standard and further asserted that the standard of educators in the schools resembles the standard of the education system. Studies have shown that once educators are capacitated in IE, they then become willing and active participants who see themselves as prepared and competent to teach. The majority of schools share the problem of having educators who are under-qualified. Van Rensburg (2015) believed that educator training is

pivotal to the attainment of adequate learning and teaching. He further argued that qualified educationists adhere to an education approach that is rooted on knowledge of the development and learning of children. A qualified educator should be able to adapt materials, restructure the environment, determine how the child learns and be able to select methods of teaching that are suitable for the learners.

Lee and Low (2013) argued that most Malaysian educators were unqualified to teach learners with disabilities in tertiary institutions. Exacerbating the situation is that they had no courses that exposed them to special and IE during their pre-service training. They further argued that the educators' lack of training was prevalent in schools without SEN programmes because these programmes were accessible to selected national schools and none in other schools. This suggests that the special education programmes should have been made available to all schools – not selected ones only – in order to accommodate all learners countrywide.

Children learn and develop best in an environment that is emotionally and physically safe and where their fundamental emotional and physical needs are met. Wium et al. (2015) argued that as educators are the main people that should ensure the expected implementation of an IE system. This implies that their skills and knowledge need to be developed and refreshed; hence the Curriculum and Assessment Policy Statement (CAPS) requires support from educators through mentoring, training, consultation and monitoring. It is very important for all educators to interpret and understand what they are teaching.

Anin (2016) recommended the training of educators for IE. She further suggested that the government should give scholarships to educators to further their education in IE. There is a great need for human capital and, if it is adequate, it would enhance the success of IE. She further advocated for all educators to be provided with in-service training to improve their teaching art and manage resources for learners with low vision (Anin, 2016).

In his study, Kabeto (2015) noted that most educators who are assigned to an inclusive school can neither read nor write Braille. This means that they cannot make instant educational assessments to assist in locating the academic needs of the LVI. Educators who deal with learners who are visually impaired need to be proficient in reading and writing Braille as they can correct learners instantly instead of waiting for

the lengthy transcribing process. If the educator is not fluent in Braille, by the time the transcribed Brailled scripts are returned, the class has moved on to the next lesson; thus, the LVI are always left behind.

The Draft IE Policy (Kingdom of Swaziland, 2008) explains that for a fruitful enactment of IE in Eswatini, educators should be awarded in-service and pre-service workshops. This means that the Ministry of Education and Training acknowledges that for effective implementation of IE in Eswatini, it is necessary to train all educators. The Government of the Kingdom of Eswatini (2011) accepts that it is necessary to facilitate and develop programmes for capacity building that will assist the educators. Sadly, this is not in line with studies that have been done on Eswatini.

Studies done in the Kingdom of Eswatini after the inception of IE confirm that most educators are not capacitated in IE thus making it difficult for them to teach in inclusive schools, (Zimba, 2011). Lack of training and capacitation in some academic institutions led to challenges in handling some administrative problems. In most schools, neither the principals nor the educators are trained in IE. The one-week training that was provided for educators and principals in these schools was deemed to be insufficient (Zimba, 2011).

The lack of qualified educators in the schools is another challenge in the Kingdom of Eswatini. Zwane (2016) argued that the mathematics and science departments in the schools face major challenges. Some educators who teach Integrated Science, Physical Science, Biology and Mathematics are unqualified. Some of them studied Agriculture and are not qualified to teach any school subject. They specialised in animal science and agronomy. While awaiting a break-through in their relevant professional areas, they while away time by teaching mathematics and science to learners in the schools.

Zwane (2016) revealed that there is a series of challenges faced by the LVI in the Kingdom of Eswatini and a majority of these learners are in mainstream classrooms. Most educators in inclusive schools are unqualified in SEN and have a different comprehension of IE. Some are not aware of the Ministry of Education and Training's policy on educator training options on inclusive schools in Eswatini (Zwane, 2016).

### **2.3.3 Inappropriate Teaching, Learning and Assessment Methods**

Watkins (2007) noted that most countries are challenged to develop systems to identify the initial special needs of learners, allocating class educators and the necessary tools for evaluating the teaching and learning of SEN with on-going and formative assessment. Babić-Čolaković, Pasalic and Memisevic (2015) found that most children fail to receive the needed support like early special education, occupational therapy and speech therapy in most regular kindergarten institutions because of the scarcity of resources. It is, however, crucial to receive support for learners to ensure adequate teaching and learning and the aforementioned specialists have a hand to play in the success of the learners.

There are a number of alternative routes to evaluation of special needs for inclusion in the normal classes. These include real-world-oriented, performance-oriented, interactive, contextual, holistic and multi-perspective approaches (Hockings et al., 2012). The process of assessment is broad and it is intended to provide opportunities to gather subtle and accurate signals of performance globally.

Mukhopadhyay (2013) did lesson observations that revealed that the majority of educators in Botswana used methods of instruction that were educator-centred which did not provide for all learning styles and modifications. Their lesson notes were scanty and there was no clear proof that learning needs for SEN were met. None of the educators used teaching methods that would accommodate all learners during teaching and learning. The key focus should not simply be on assessing the learner but it should be on assessment for learning (Landsberg et al., 2005).

Scherman, Zimmerman, Howie and Bosker (2014) asserted that a number of different performances have to be identified so that in each level the skills and knowledge that learners are able to accomplish can be distinctly described. Learners learn differently, thus it is important that educators should know their classes and learners well. They should also know how their learners learn and further know their learning level so that appropriate teaching methods that suit different levels can be identified and applied correctly. The DoE (South Africa) (2008:91) maintained that learning materials and programmes as well as assessment methods must be available to all learners and they must embrace their diverse learning needs to nurture learners' learning achievement to the fullest.

Assessment can either be formative or summative. When it is formative, it helps one understand how learners are to be taught and what they are expected to learn. When assessment is summative, it helps one understand how the learning is measured and tracked. Assessing shall be seen holistically in the setting of the education system and the expectations that embody it together with the capacity and educator training, the curriculum, and other conditions and service ratios (The Government of the Kingdom of Eswatini, 2011). Educators should learn to break away from a perception that assessment is performance-oriented especially if they are interacting with a learner who has had learning difficulties. The Kingdom of Eswatini should have a curriculum that embraces IE to ensure that educators countrywide use teaching methods that take the needs of the learners into account (Zwane, 2016).

### **2.3.4 Class Size**

The total number of learners allocated to a class is the class size. Horning (2007) described a class of 15 learners or below as a small class size. Slavin (1989) described a class with an average of 27 learners as a large class size.

For any educator to successfully teach a class, it is necessary that the educator-pupil ratio is the right size. Class size is of paramount importance especially for successful IE. The right class size is key in ensuring effective teaching of all learners.

Pedder (2006) postulated that studies in education should focus on factors that have a potential of significantly affecting the excellence of classroom learning and teaching. Some of the most crucial components that can significantly influence teaching and learning is the class size. Shin and Chung (2009) argued that class size reduction (CSR) is another factor that can affect normal teaching and learning. Classes that are smaller have been put forward as an explanation for low academic performance (Robertson, 2005). Graue and Rauscher (2009) cited three major points that can help in comprehending CSR:

- The learner-teacher ratio (PTR): This approach relates to documented expenditures on a learner-teacher ratio and determines the sum of staff members who are salaried and who serve a set of learners.
- The class size: This is the sum of learners in one class.

- CSR: It focuses on particular programmes that reduce the sum of learners in a classroom beneath a stated threshold. CSR involves a distinct restructuring of changes that could show between educators and learners in smaller groups.

Pedder (2006) further argued that in classes that are larger, more time is needed for discipline and non-academic purposes. Most educators find it cumbersome and often impossible to complete the entire syllabi as the class size increases. In classes that are larger, work that is unsupervised increases which often leads to learners' loss of concentration. In classes that are smaller, educators often relate socially to the learners. Finally, learners in smaller classes show less off-task behaviour.

Gachocho (2017) stated that large class sizes are a huge challenge for both the educators and learners. They hinder their ability to make instructional adjustments. These results were consistent with those found by Yaman and Uygulamada (2009) who stated that an overcrowded class hinders the teacher's attention. An overcrowded class also slows down the progress of the class.

Save the Children (2002) stated that the school principal has a responsibility of planning carefully for educators to have workloads that are manageable and realistic. The principal should also ensure that learners with SEN are manageable within a class.

Dimitriadi (2015) argued that classrooms increasingly consist of groups of learners with unique needs which, amongst others, includes unique capabilities. These educators have a responsibility of providing a platform to inculcate values and nurture future leaders. The school is an environment in which learners are taught to appreciate and respect one another, to listen to other people's ideas and to socialise with others.

Large classes tend to cause educators to spend a lot of time marking learners' work; thus, they end up having minimal time to prepare for lessons. An easy calculation shows that if an educator has 45 learners in his class and on a particular day gives these learners assignments in three separate subject areas, then he has to attend to 135 exercise books. If he uses at least six minutes to mark each exercise book, then he needs a total of 810 minutes or 13 hours 50 minutes to complete this daily. That is the reason why most educators tend to give less work to the learners and they also often delay giving feedback. This is not helpful in the IE context because educators

may be exhausted and fail to award enough attention to the learners with impairments or SEN during class time (Hayford, 2013).

The National Education Sector Policy (2018) has a primary objective of having a teacher-pupil ratio of 1:40 in all schools. Sadly, the policy is silent on the average pupil-teacher ratio in inclusive schools in the Kingdom of Eswatini.

### **2.3.5 Extra Time Allowance**

LVI often take longer to complete their work because of the nature of their impairment (Mastropier & Scruggs, 2010). This implies that the extra time allowance granted to them is very important in ensuring that they write their work (Salisbury, 2008). Learners with low vision, for example, deserve extra time to read and complete any given work compared to normal learners. Writing and reading Braille also consumes a lot of time and is tedious.

Some LVI need special arrangements for examinations that could include extra time and a different format of questions. Some prefer to be secluded from normal learners because they can be disturbed when the normal learners finish writing. Often educators are not happy about adjusting assessments, as they say that it is cumbersome and difficult to ensure that the standard of the assessments will still be the same for all (Rowlett, 2011). Educators who do use other ways of assessing feel that it is just and fair and most learners are content about the awarded extra time during tests and examinations (Rowlett, 2011).

LVI need more time to access and assimilate information that comes through hearing (Mastropier & Scruggs, 2010). In most schools, it is normally standard to add twice as much time for learners with blindness and 50% extra time for learners with low vision (Spungin, 2002). The majority of external examinations grant this necessity and awards learners up to 100% extra time for LVI (Salisbury, 2008).

The Director of National Examinations and Assessment (DNEA) has made recommendations with regard to the execution of national examinations for LVI (Ministry of Education, 2010). The recommendations include:

- 25% extra time for all LVI;
- 100% extra time for learners using Braille;



- Allowance for candidates to get supervised rest breaks; and
- Access to a reader for candidates that cannot use Braille.

The DNEA is also in a position to provide examination scripts in the following setup:

- Braille scripts;
- A3 size enlarged print; and
- Enlarged modified texts (Ministry of Education, 2010).

There are a number of alternative curriculum adaptation approaches that have previously been used in the teaching of LVI. Fraser and Maguvhe (2008) listed the following approaches:

- Making additional tasks using the same demand and scope;
- Substituting complicated tasks with tasks of a different type;
- Permitting learners to work on tasks and submit them at a later date; and
- Awarding extra time to learners so that they may complete the given tasks.

In the Kingdom of Eswatini, LVI and other learners with disabilities can be awarded extra time during assessments. Learners using Braille papers can be awarded 100% extra time and 25% extra time for learners with low vision. The responsibility of the Head of centre is to apply in advance for the relevant extra time extension and suggest the time that is needed for each learner (Examinations Council of Eswatini (ECOS), 2018). When applying for extra time extension from the ECOS, they need evidence in the form of a medical certificate from a registered practitioner that clearly states the form of visual impairment and the doctor's recommendation (ECOS, 2018).

### **2.3.6 Attitudes of Educators**

A determinant factor for successful IE is the attitudes of the educators in accommodating LVI (Mastropier & Scruggs, 2010). The majority of educators are positive about inclusion, but some have ill feelings about it. They become emotional and stressed about extra resources and additional training for IE.

The classroom educator is the fundamental educator in a class with a learner with visual impairments. Therefore, it is the duty of the educator to teach all learners including those with visual impairments (Kabeto, 2015). Studies on attitudes of professionals towards inclusion and mainstreaming (Pottas, 2005) showed that in

Canada, Australia and USA, most educators concur with the idea of inclusion, but anticipate challenges in the implementation process.

A study, which explored the views of mainstream educators towards IE in Victoria, Australia, showed that, while educators seemed positive and seemed to be compliant with inclusion programmes, there was a concern about implementing IE in mainstream classrooms (Subban & Sharma, 2005). Akinsola and Chireshe (2016) stated that incorporating all learners with SEN in mainstream classrooms could grant them a chance to be taught in a restorative and natural setting and to further obtain fundamental motor and communication skills through interacting with other learners. This may lead to an improved appreciation and acceptance of differences. It is necessary for educators to be considerate when applying IE policies in their classrooms. Chhabra et al. (2011) realised that Botswana educators have negative concerns about IE. This study showed that most educators were afraid and not prepared to work with learners living with SEN in mainstream classrooms. They end up being angry, frustrated and sometimes have negative attitudes towards IE because they are of the idea that it may lower the academic performance of the class (Chhabra et al., 2011).

It has been found that a majority of educators are against admitting LVI in schools (Beyene & Yinebeb, 2010). They also refuse to have learners with disabilities to be placed in their classrooms. This is often because the educators are unqualified in handling learners with disabilities; hence, they feel that a learner with visual impairments will slow down the progress of the entire class.

Educators often do not prepare to accept the needs of the learners with disabilities. The most prevalent concerns range from the teacher-pupil ratio, shortage of resources, training and that educators' time will be reduced for the remainder of the class (Kabeto, 2015).

Several research studies have been written to analyse and explain educators' attitudes. Geduld (2015) mentioned that through a collegial teaming approach, experienced educators and learner-educators accepted responsibility for improving their practices in the Eastern Cape. Geduld (2015) asserted that collegial teaming cultivates fresh avenues for sharing responsibility for group learning, educator collaboration and working together which all enhances effectiveness. Wium et al.

(2015) maintained that, in spite of the importance of collaborative methods in schools, inter-professional collaboration is still a challenge because a systematic change is required whereby outsider specialists that are professional are welcomed into the classes and institutions as insider professionals. Inter-professional collaboration with experienced individuals or subject specialists either in the same school or from other schools will help in overcoming challenges.

Nguyet and Thu Ha (2010, cited in Zwane, 2016:34) suggested that for successful IE, all educators, principal and other stakeholders must have an attitude that is positive towards IE. It is necessary that they are convinced of the lifelong benefits that come with inclusion. The country has the responsibility of enacting laws and policies but the success of IE is not guaranteed without the ultimate backing of its specialists. Successfully achieving support demands attitudinal and behavioural change which cannot be an overnight process.

### **2.3.7 Attitudes of Parents**

Most people do not recognise the challenges of parenting until they personally start parenting. Parenting a child with SEN is challenging. Parents that have children with SEN have the same expectations like other parents. They wish for normal growth and expect them to bloom to their full potential. These families also hope for acceptance and inclusion from their neighbourhoods and communities; hence, they too deserve an opportunity to enjoy life and be happy (Baker & Fenning, 2007). To ensure that this happens, specialists should identify each learner's potential before they focus on the disability. They must also acknowledge the expertise and value of parents and families of these children. Parental involvement is of fundamental importance in maintaining a productive educational programme for LVI. Professionals who work with these learners are encouraged to establish and maintain a good professional-parent relationship for the learners' welfare (Tanzila, 2012).

Most parents experience various emotions upon realising that their child has special needs. These emotions range from fear, blame, guilt, anger, surprise, anxiety and later, they may experience relief, hope and acceptance (Brown & Lowis, 2002; Frosh & Baraitser, 2008). In their misery, parents often fail to understand the discovery and how best they can be of help to their child. Parents of children with SEN are sometimes frustrated and overwhelmed by the level of attention these children demand from them

(Tshabalala, 2011; Wang, 2009). Most parents undergo stress because they sincerely did not get the ideal child that they had expected. They may tend to envy other parents. This often affects parents irrespective of whether they are educated or not. Blackburn et al. (2009) advised that for parents to overcome this challenging period, they need a lot of support.

Parents who have children with SEN often face other challenges with regards to their roles as caregivers to their children (Pather & Nxumalo, 2013). Studies also display these difficulties as repercussions that show in different dimensions, pertaining to the excellence and style of care-giving that can be offered by the affected parents to their children (Geldenhuys & Wevers, 2013).

Sharma (2015) revealed a significant contrast with parents' of LVI towards SEN institutions. It was noted that the parents of LVI schooling in SEN schools have limited information about the role of IE, mainly because their children have only had exposure to special schools. Most of these parents were relieved that these learners could reside in boarding facilities, and often the boarding is free of charge. Parents also stated economic factors as a factor in enrolling these children in SEN schools. Some parents were misled into believing that enrolling their children in normal schools would be costly. Contrary, parents of LVI in inclusive schools believe that inclusive schools are better than special education. They stated that in an inclusive school, the visually impaired learners read and learn with other normal children.

Sharma (2015) further stated that there is a distinction in LVI parents' attitudes towards schooling in special boarding schools and those schooling in inclusive schools. IE is an educational practice whereby learners with SEN are schooled together in with normal learners. Inclusion aims to ascertain that learners with disabilities perfectly fit into mainstream classes to succeed successfully.

Parents of the LVI must be available at every stage of the school lives of their children. Research has shown a distinct difference in academic and social outcomes when the parent is involved in a child's education (Kabeto, 2015). A child with visual impairments not only needs the physical presence of the parent, but it also means that there is an emotional and social relationship and contact. This implies understanding the world through the eyes of the child, solving problems, communicating experiences and perspectives with their children. A major challenge that arises in assessing vision is

that the learners with impairments do not understand what they actually are supposed to see. They may not know if what they see is what is what everyone else sees.

Every parent is an integral part of their child's education and thus must be included in all education decisions that affect their children (Đurišić & Bunijevac, 2017). The first decisions about inclusion are made within the home during the first years of life. If a child with SEN does not feel loved and does not get proper healthcare, sensory stimulation, and social inclusion, they will most probably be delayed vital milestones for development and may not reach their full potential. A child whose developmental delays are recognised early in life often has improved chances of attaining their full ability in life (Government of the Kingdom of Eswatini, 2015).

A research was done in the Shiselweni Region of the Kingdom of Eswatini to clearly distinguish the psychosocial needs and training of families and parents of learners with SEN. The study showed that parents had come across difficulties particularly at school. The study also highlighted that most parents of learners with disabilities had not organised themselves for these learners in the general education classrooms.

Another research showed that as parents spend more time with their children, they learn to cope (Mazibuko, 2011). This study further showed that parents were not trained for the expected role that they need to play in decisions about their children's education. In the Kingdom of Eswatini, there is no proof to show that acceptable support and training has been awarded to the affected parents and families. Mazibuko (2011) further claimed that the Government of the Kingdom of Eswatini (2011) is silent on the preparation and capacitation of parents of learners with disabilities in a bid to assist them in making solid and informed scholastic choices for their children. It appears that minimal consideration has been given to concerns about the parents of LVI. It seems that there are no policies or legislation that focus on involving parents in the education of their children (Government of the Kingdom of Eswatini, 2011; Zimba, 2011).

### **2.3.8 Attitudes of Sighted Learners**

The US Individuals with Disabilities Education Act (IDEA) asserts that educating learners with impairments in the same classes as other normal learners instils tolerance and understanding by equipping all learners with unique needs to survive

anywhere beyond school (Bolanle, 2014). This would therefore promote and inculcate a society that understands and embraces all people living with disabilities globally.

Most sighted learners are not comfortable around peers with visual impairments; hence, they do not want to be acquainted to them. Lee and Lo's (2007) research findings showed that negative attitudes and misunderstandings towards learners with disabilities often hinder full inclusion and their acceptance into society. The National Federation of the Blind (NFB) (1999) as cited in Kabeto, 2015: 32) argues that attitudes towards people living with disabilities tend to be negative. Prejudices and negative attitudes are some of the attitudes that are faced by LVI. There is a major role that could be played by sighted learners for their peers with visual impairments that could protect these learners from injuries and better their lives.

Regularly educating learners may provide examples that depict suitable social and class behaviour for learners with disabilities. This demonstration usually occurs naturally. Inclusion allows learners with special needs to cultivate relationships with other learners, which often leads to approval by their peers in the school and beyond. Through IE, learners with SEN gain self-esteem and their self-respect is enriched. When they start making acquaintances with educators and other learners, learners with special needs experience a feeling of self-worthiness and begin to see themselves as beings who are awarded similar opportunities and experiences like other learners (Shannon, 2004).

### **2.3.9 Attitudes of LVI Towards Inclusive Education**

Research that investigated the attitudes of people with disability towards IE showed that, in general, people with disability showed less positive attitudes towards IE.

A study by Dimitrova-Radojichikj and Chichevska-Jovanova (2016) showed that persons living with special needs expressed concerns about the way learners with special needs learn in inclusive classes. Most participants believed that special schools were a better option for the education of learners with disabilities. However, learners seemed to appreciate the idea of attending classes with classmates that had disabilities as it enhanced their self-esteem and confidence.

### **2.3.10 Attitudes of LVI Towards Themselves**

The development of an individual's self-esteem is believed to be the first step in the child's life in readiness for a meaningful life. Traditionally, in many societies globally, the attitude towards people living with visual impairments has negative connotations. They are often stigmatised which impacts their economic and social welfare (Ndinda, 2005) and LVI often feel ostracised by other sighted learners. The evaluative component of self-concept is basically one's self-esteem (Pope et al., 1988, cited in Augestad, 2017:3). Low self-esteem may surface as a result of an inconsistency between a learner's perception and their expectation of adequacy. LVI often suffer from low self-esteem as a result of the difficulties they come across in life which are different from those met by normal learners (Hadidi & Al Khateeb, 2013; Konarska, 2007, cited in Augestad, 2017:9).

Alexander (1996, cited in Augestad, 2017:3) asserted that a change in approach to vision loss with a partial introduction of the social model of disability should help a learner to positively adapt to the demands of life and successfully preserve a constructive self-concept. For inclusion to be successful, LVI must understand the psychological challenges that they will face at some point in their lives.

### **2.4 ADAPTIVE TEACHING METHODS FOR LVI**

Learning has for long has been regarded as a result of being teaching. Educators often use strategies that are non-participatory. These strategies are often ineffective. Effective teaching is not simply transferring facts and materials from educators to learners but is a multifaceted collaboration of the two (Webster & Roe, 1998). This then shows a paradigm shift that is necessary from the traditional and non-participatory ways of schooling to modern trends that promote collaboration between a learner and an educator (Bowring-Carr & West-Burnham, 1997). Nevertheless, being an educator in inclusive schools is often difficult, because teaching demands a more personalised approach than in mainstream classrooms (Peters, 2003).

The level of visual abilities are said to vary among the learners hence the need for a variety of learning strategies and needs for the learners (Salisbury, 2008). This has led to LVI to require exclusive strategies in addressing their scholastic problems. It is vital for educators to comprehend this need to develop diverse approaches to teaching

that can be used for positive teaching (Salisbury, 2008). The backing that these educators should give to LVI must be based on the use of varied sensory stimulations to assist them to formulate their image of the world (Webster & Roe, 1998). Studies show that good educators are those who are able to incorporate learners with SEN into their teaching approaches (Mastropieri & Scruggs, 2010). IE contends a good educator is able to make the necessary adaptations for the learners. Sometimes learning and teaching adaptations are not necessary and the same learning and teaching strategies that are used for sighted learners can still be used with LVI (Raymond, 1995; Spungin, 2002). The following methods may be used by educators to teach LVI in IE. Some are used as they are, while others need to be tailored to suit the needs of LVI.

#### **2.4.1 Encouraging Collaborative Learning**

Cooperative learning is when learning takes place in manageable groups. It is an excellent approach for teaching LVI as learners can help one another when doing tasks. It is particularly imperative in third world countries where the class sizes are big (Mitchell, 2008). LVI must be paired with sighted learners in groups that will help them in finding the right pages, thus allowing them to follow a repeat educators' instructions (UNESCO, 2001).

It is alleged that learners' capabilities differ in the learning process. Learners who have low abilities often learn from their peers. Cooperative learning is effective in that learners with diverse abilities and learning needs may develop improved attitudes and academic achievement in a subject and improve social interactions among learners (Mastropieri & Scruggs, 2010; Vygotsky, 1978).

#### **2.4.2 Using Questions and Answers**

The verbal cue of getting answers and handing out instructions from learners may assist LVI. An educator of LVI may choose to note down the responses given out orally by LVI. An audio recorder records the responses of the learners which would allow learners to evaluate their answers for possible corrections. Spungin (2002) advised that LVI must be allowed to give an opinion on the work before the assessment is submitted for evaluating.



### **2.4.3 Sound Projection and Calling Learners' Names**

LVI totally rely on the educator's voice as their major source of information for learning. This therefore implies that educators should do some or all of the following:

- The educator's voice must be pleasant. It should exhibit a relaxed pitch and tone. The educator's voice should be motivating to listen to. The pitch, volume and speed of talking are vital (Best, 1992).
- Educators must refrain from uttering vague proclamations (Mastropieri & Scruggs, 2010).
- While teaching their classes, educators should read out the notes that they write on the projector or board (Spungin, 2002).
- When addressing individuals in their classes, educators should call out the names of the specific individuals before they can relay what they want to say. This is to allow the LVI to know exactly whom the educator is talking to. This is vital as it makes these learners involved while teaching (Mastropieri & Scruggs, 2010; Salisbury, 2008).
- The language that the educator uses for delivering the content has been among one of the major challenges for LVI (Grace & Gravestock, 2009; Hannell, 2007). Good educators are those that communicate using easy words and give presentations that are easy to understand. Good educators follow up on individual learners' work to ascertain whether they have understood the lesson (Westwood, 1995).

### **2.4.4 Adapting Written Texts**

Educators should take the initiative of adapting teaching materials so as to assist LVI. Adapting teaching materials can be done through bolding key parts, adding different bright colours, adjusting in-text spaces and increasing the font size. These changes depend on learners' needs of the learner and the severity of the defect (Bishop, 1996; Mastropieri & Scruggs, 2010). It is therefore vital to prepare in advance with the specialist educator because learner' tastes are different and mainly rely on the level and severity of their VI (Spungin, 2002).

It is advisable to provide copies of notes that are written on the projector or chalkboard for learners with low vision. A trained educator should help these learners by

explaining the notes to them and where possible this should be done before the actual lesson commences (Spungin, 2002). When writing on the board, educators are advised to use large writing and coloured chalks where possible (UNESCO, 2001).

#### 2.4.4.1 The use of optical, non-optical and audio devices

LVI mostly rely on hearing spoken matter to learn. Audio devices may be used to supplement learning. Sadly, the contents of lessons sometimes have diagrams, maps and tables that would be difficult to explain in an audio-recording (Salisbury, 2008). Lessons can be audio recorded for later playback by LVI (UNESCO, 2001). When the LVI are shown videos, it is advisable to show them with explanations so that they can understand the concepts (Spungin, 2002).

Optical devices like eye lenses, telescopes and magnifiers use lenses to magnify a person's remaining vision. These are often available by prescriptions through specialists while non-optical devices do not include lenses and may not be recommended by a professional. Braille, Braille writers, books, calculators, large print, stands for books and audio recorders are examples of non-optical devices (Simon, Echeita, Sandoval & Lopez, 2010).

Non-optical and optical devices increase the vision and expand learners' functionality by using the other senses. The educator's duty is to motivate LVI to make use of the available assistive devices to aid their visual capacity (Spungin, 2002).

#### 2.4.5 The use of tactile materials

Educators must be cognisant of the fact that most learners with blindness have a shortfall in abstract cognition and comprehension because of the lack of visual ability. Adapting teaching materials is of paramount importance especially if these learners learn all subjects like other normal learners. These learners must learn substantially by making use of tangible materials (Bishop, 1996; Pauline, 2003).

Learners must be given a chance to explore concrete diagrams. These tactile diagrams are vital in understanding concepts and images that are challenging to describe in words. They must be made available when tangible objects are unavailable to assist in the learning process (Salisbury, 2008). These tactile diagrams or images

may be sketched using a stylus and mat on Braille papers. This yields a relief diagram or image that can easily be felt (UNESCO, 2001).

#### **2.4.6 Inaccessible and Unsafe Buildings**

Many learners, parents and communities find it difficult to physically access some schools in South Africa. (Human Rights Watch, 2015). This is a challenge to many learners who are exposed to these unjust conditions as they often have to rely on others for assistance hence rendering them dependent. This is often more evident for learners, educators, parents and the community at large that use mobility devices. School buildings are often unsafe for LVI. European Agency for Development in Special Needs Education (2011) and Save the Children Fund (2002) concurred that principals of schools as visionary leaders should be able to source funds to guarantee accessible physical entry to buildings and suitable provision that includes information and communication technology (ICT) or aids for every learner.

In Eswatini, the National Disability Plan of Action (NDPA) (Government of Swaziland, 2015) is arranged into seven major themes. Each of these themes aims at achieving precise outcomes through the delivery of a number of activities, which are required from local government and the line ministries. Theme 7 of the NDPA is concerned with the infrastructure and the environment. This theme is concerned with the removal of all physical, infrastructural, social, cultural and environmental hurdles which hinder the capability of persons with disabilities to partake wholly in living with their communities.

The Government of the Kingdom of Eswatini has a plan to amend the infrastructure in schools hence alleviating the challenge of physical inaccessibility for learners with SEN (Ministry of Education and Training in Swaziland, 2012). Research shows that infrastructure is still a major challenge. Many learning institutions in the country were not built on level ground and is challenging to LVI, those in wheelchairs and those who use other mobility devices (Zimba, 2011).

#### **2.5 REQUIREMENTS FOR EDUCATORS TO TEACH IN INCLUSIVE SCHOOLS.**

Educators in any classroom are the pivotal figures that ensure that teaching and learning is a success. In inclusive schools, it is important that the educators are trained in assisting learners with disabilities to ensure that the learning process is a success.

Educators have to be prepared and capable to teach learners with disabilities in an inclusive class for the success of the learning and teaching process. Educator training is the fundamental and most important need for educators. Once trained, the educators' knowledge of inclusivity is broadened and it equips educators with relevant resources and skills to handle learners of diverse learning needs and further meet their needs (UNESCO-IBE, 2008).

A study of institutions that train educators suggested that there must be courses on IE within the programmes for all institutions at diploma, degree, honours and masters level (Franzkowiak, 2009) as cited in (European Agency for Development in Special Needs Education, 2010:27). In-service regular training is also important. Educators who took part in these in-service trainings are more competent to teach inclusive classes (Avramidis, Bayliss, and Burden, 2000). Educators must not depend on skills and knowledge obtained in their formal pre-service training only, but they should continue developing themselves to be abreast on the developments of programmes. Educators with the knowledge and skills can apply differentiated policies that can cater for the diverse needs of the learners.

Bagree and Lewis (2013) maintained that educators in most schools lack skills and knowledge needed to teach learners with disabilities which therefore marginalises learners in terms of educational attainment and policy. Bagree and Lewis (2013) stated that nationwide standards for different educator training institutions are often inadequate and differ among countries. Educator training rarely prepares the educators with skills, knowledge and confidence in dealing with diverse classes especially those with learners with SEN. This thus leads to many of the learners living with disabilities being excluded from the learning process or remaining out of school.

Educators should be provided with adequate initial and on-going training from trained specialists and professional development. Starczewska, Hodkinson and Adams (2012) stated that in Poland, two educators normally work together where one educator has had substantial training in special needs education and the other is the subject educator. In Greece, (Fyssa, Vlachou & Avramidis, 2014) stated that inclusion is enacted in various ways that represent different organisational arrangements. They indicated that the provision of the co-teaching model and an in-class support system that is used by special education educators and full placement in mainstream schools

without additional support was also introduced for early childhood teaching. In the rural schools of Spain, many educational authorities and SEN learners' families wanted to implement IE, but sadly it was not adequate because the educators failed to implement and develop the teaching and learning processes for inclusion at elementary class level (Moreno, Jaén, Navío & Moreno, 2015). Moreno et al. (2015) maintained that educators were unable to implement the proposed policies in their classrooms because of a shortage of material resources, time, teaching skills and personal support for inclusion.

There is a notion that educator training can positively affect the teaching and learning of learners with disabilities in mainstream schools (MIET Africa, 2013; Naicker, 2006). Some worries about the usefulness of in-service training programmes for the training of educators are:

- There are short courses that are prevalent but futile;
- Selection of workshop materials is often selected by people who are not practitioners;
- There is a need for follow-up on the support on practices and ideas that occur during the in-service programmes on minimal cases;
- There is limited follow-up assessment that occurs;
- The in-service workshops seldom attend to the needs of the individuals.

The primary mandate of an educator in the classroom is managing their classroom and ensuring that it is well organised so that all learners can attend and their needs are met (Carmen, 2014). The tasks of an IE educator includes using varied instructional techniques, coordinating, learning, utilising different styles and collaborating with the support staff. Instructions are modified to ascertain that all learners progress normally. The educator in a class, therefore, is in charge of all learners and their academic programmes.

Educator training can be done through pre-service education, in-service training and staff development. Zwane (2016) argued that in the Kingdom of Eswatini there is little evidence that in-service training programmes have capacitated educators on inclusion and inclusive schools. In the past five years that I have been based at an inclusive school, no in-service training course was availed to the educators on IE.

Fakudze (2012) suggested that there has to be an organised way of checking the competencies and the status of the level of educator training in the Kingdom of Eswatini. He believed that in-service and pre-service programmes may not necessarily address the challenges of effective teaching. In the Manzini region, for example, there are only two regional inspectors for IE whose primary role is observing educators at work rather than providing support. The feedback that the inspectorate gives often shows that reviews on a lack of effective teaching are simply filed and are not acted upon (Zwane, 2016). Educators' development is expected to be done by the subject associations, subject panels and the inspectorate. Most school subjects have subject associations but IE has a panel that works closely with the special schools. The panel has the responsibility of ensuring that the right curriculum is taught and that the right texts are available. Sadly, this panel only works closely with the special and inclusive schools; hence, it is unknown to other schools countrywide (Zwane, 2016).

Educators of LVI have a job that requires them to be capacitated in skills that are not usually addressed in normal educator evaluation tools. An Expanded Core Curriculum (ECC) is a key tool for educators serving LVI and optimises their right to individual attention. It further recommended that educators would benefit from an online capacitation programme that would capacitate and encourage them to incorporate features of the ECC and eliminate exclusion practices (Opie, 2018).

Educators are the most important human resource available for implementing inclusion, thus their development and practice should be guided towards IE. This implies that if an educator does not believe in IE, they often tend to stall progress on inclusion (Miles, 2005). A majority of educators often tend to be ill-prepared for inclusive teaching. Naicker (2006) insisted that for successful IE to become a reality, educators need in-service training. The contention is that the training that they have received often focuses on imparting academic skills in a lecture style to the entire class. This approach has its own pros and cons (Westwood, 2007). The recommendation is that all educator training programmes must be revised so that educators can be well prepared with essential knowledge and skills that will grant them to manage more individualised learning programmes, assess the learning needs of individual learners and be equipped with relevant teaching skills, methods and techniques (McConkey & Bradley, 2007).

MIET AFRICA (2013) proposed that modifications to pre-service educator training courses should be supplemented with in-service programmes to ensure that incumbent educators can be re-trained to adapt to the new system of IE. The Kingdom of Lesotho provides a fitting illustration of this. The MOET in Lesotho arranged training programmes on weekends for local educators to be capacitated on disability. They are capacitated by trained educators on special educator training courses. This group then passes on the information gained to other mainstream educators (McConkey & Bradley, 2007).

Providers of education must guarantee that no learner is excluded on the basis of disability. They must ensure equal and fair participation of all persons living with disabilities. Learners can demand support from the General Education System and to ensure that social development and support is constant with the aim of full inclusion (United Nations, 2006: Article 24.2). Other measures that need to be included include orientation and mobility skills, enabling the education of Braille, alternative script, formats and means of communication, facilitating peer mentoring and support (United Nations, 2006: Article 24,3). The following skills are necessary for educators for the visually impaired (Willings, 2019).

Table 2.2: Skills needed by educators for LVI

Skills	Details
Professional Knowledge	<ul style="list-style-type: none"> <li>• Understand and successfully communicate the role of the educator for the LVI, Orientation and Mobility (O &amp; M) and other professionals.</li> <li>• Have cohesive, in-depth and accurate knowledge of VI procedures, policies, and laws.</li> <li>• Understand the relationship between other disabilities and visual impairments.</li> <li>• Explicitly explain principles that are vision specific, methodology terms and concepts.</li> <li>• Know about options and issues for learners with progressive eye conditions.</li> <li>• Understand the developmental patterns of learners with VI across all developmental realms.</li> <li>• Understand low occurrences of disabilities.</li> </ul>
Assessment Strategies	<ul style="list-style-type: none"> <li>• Give professional feedback and reflect on information from other evaluations.</li> </ul>

Skills	Details
	<ul style="list-style-type: none"> <li>• Design diverse tasks for the learner with VI to demonstrate skills.</li> <li>• Observe LVI in the classrooms to assess and monitor skills.</li> <li>• Ascertain proper recommendations of learners and use appropriate evaluations for LVI.</li> <li>• Update the FVE to document the use of vision and further observe and note the progress.</li> <li>• Read and understand eye reports, their contents and implications.</li> <li>• Maintain actual data that is up-to-date.</li> <li>• Understand tools that are specific to visual impairments and their intended use.</li> </ul>
Instructional Practice	<ul style="list-style-type: none"> <li>• Know Braille literary codes and understand Braille codes.</li> <li>• Teach the use of the Cranmer Abacus.</li> <li>• Use wait-time appropriately.</li> <li>• Alter the pace and deliver instructions that help learners' responses.</li> <li>• Collaborate efficiently with classroom educators and therapists.</li> <li>• Maximise instructional time.</li> <li>• Limit interruptions and disruptions as possible.</li> <li>• Know the development and structure of reading Braille.</li> <li>• Link learning activities and learning objectives.</li> <li>• Emphasise on learners' accountability and responsibility.</li> <li>• Be persistent and supportive in keeping the learner on task.</li> </ul>
Communication	<ul style="list-style-type: none"> <li>• A holistic communication behaviours that are appropriate.</li> <li>• Record all team communications.</li> <li>• Give frequent reports that are constructive and on time.</li> <li>• Network and collaborate with teams to arrive at educational decisions.</li> <li>• Engage in collaborative problem-solving and share knowledge with teams.</li> </ul>
Educator Impact	<ul style="list-style-type: none"> <li>• Be consistently involved as a leader of LVI and contribute to a positive climate.</li> <li>• Seek out professional growth.</li> <li>• Engage in professional presentations, mentoring other educators and the community about LVI.</li> <li>• Analyse and reflect results of actions and share information with all stakeholders.</li> </ul>

## 2.6 SERVICES FOR LEARNERS WITH VISUAL IMPAIRMENTS

Two fundamental effects of visual impairments are locomotion and communication. There is a need to emphasise basic rights that include travelling independently,



learning and enjoying the environment for all persons living with visual impairments (AFB, 2013). The emphasis for this area of instruction specifically focuses on ensuring that the LVI know where they are and are able to travel safely and independently. Mobility and orientation skills are believed to be related to the level of independence that is afforded to learners as they age (McDonnall, 2011).

Strategies for problem-solving are essential as they grant the learners an opportunity to journey to unfamiliar and familiar places, rural and urban areas. Experiences during different kinds of weather are also vital for the improvement of one's self-esteem and independence. Learners with low vision must be educated on how to translate the auditory and visual data and they sometimes need optical devices to effectively access this data. A cane is necessary by learners who fail to depend on the correctness of the visual information that they get and for the learners that are totally blind.

It is important to realise that an imperative objective of education is to help learners to cope with adult life and to obtain appropriate and adequate direction to gain these ambitions. There is a specific role that has to be played by the guidance and counselling department which includes advocating for change for the youth (National Council for Curriculum and Assessment (NCCA) 2009). McGuckin, Shevlin, Bell and Devecchi (2013) stated that the backing from the guidance and counselling department is valuable to all learners with special needs. Researchers noted that some people living with disabilities are not granted career guidance, and fewer find recommendations that are inadequate compared to the opportunities accessible to people living with disabilities (Kim & Williams, 2012; Vickerman & Blundell, 2010).

### **2.6.1 Orientation and Mobility**

Orientation and Mobility (O & M) is a career that started during and after World War II. This was when many armed forces that were blinded in the war were sent to convalesce. O & M is a career that aids persons with low vision and blindness. It advocates for safe, effective and efficient mobility skills to all people across all ages (Vision Aware, 2019). Developing knowledge is linked with knowing the directionality, environment, body awareness and spatial awareness which increase the probability for learners to be involved in activities that are age-appropriate. A cane also helps in sensitising all people about the disability of the individual such as when that individual is crossing a road.

Orientation is the capability of a person with blindness to know where they are and where they want to go. Mobility, on the other hand, is the capability to move proficiently, effectively and safely from one place to another. O & M is often done on a one-to-one basis and usually takes place where one lives, works or attends school. O & M services provide instruction that can assist LVI to re-learn or develop concepts and skills that they need to travel independently and safely at school, home or community. These services are provided throughout one's life, from teaching pupils in kindergarten and school programmes to teaching grown-ups in a different places of rehabilitation. It is pivotal in a school setting for the LVI as it allows them to gain confidence in their environment and further assists them to be independent while ensuring their safety (Vision Aware, 2019).

O & M skills are equivalent to the level of independence achieved by learners as they age (McDonnall, 2011). Mobility and orientation are necessary for all people with visual impairments to comfortably and safely move within their location (Jacobson, 2012). This also involves all LVI who are being taught about the environments that they live in, learn about themselves and their bodies so that they may be able to travel independently (Sapp & Hatlen, 2010).

Developing directionality, body awareness, practical knowledge and spatial awareness is directly associated with knowing a particular place. It improves the possibility that the learners can actively partake in activities with their peers.

### **2.6.2 Vision Stimulation**

A learner with low vision's residual vision sometimes needs to be stimulated so as to help the learner to use it more efficiently. This should be done occasionally in natural activities, settings and activities. A consultant must be tasked with assessing the LVI prior to vision stimulation being involved in the learner's course (Francis & Clark, 2003). Here are some ideas on how they can further be assisted with visual stimulation as described by (Francis & Clark, 2003):

- Suggest that an occupational therapist or a physiotherapist be consulted with regards to the ideal physical position for inspecting;
- Draw up an FVE that assists in providing evidence of the sight of the learner and further reflections for the learner's level of visual functioning;

- Grant adequate time for the learner to answer to visual stimuli, as there could be a concealed answer;
- Use brightly coloured materials that will contrast with the background and give sketches that are easy to interpret;
- Ensure to twin visual information with different sensory cues, especially auditory cues;
- Design opportunities that demand the learners to look, like putting a chair in different places so that the learner must look for it; and
- Be cautious of the learner's visual choices for shape, field of vision, size of objects and colour.

Sapp and Hatlen (2010) described sensory effectiveness as the use of remnant hearing, vision, and other senses. Hearing aids, augmentative communication devices, using optical devices, and other supports enhance or enable admission to the surroundings. This is another route that could cushion and improve the lives of LVI and ensure that they have better access to teaching and learning.

LVI must be given support that is grounded in the use of diverse sensory stimulations like smell, shapes, texture and sound in a bid to assist them to understand the world better (Webster & Roe, 1998).

## **2.8 VISION REHABILITATION AND COUNSELLING**

Many people reach a point where no treatment, medication or surgery can correct their vision. They are then referred to Vision Rehabilitation Services which helps them in training to make use of their remnant vision (University of IOWA Healthcare, 2019). If someone fails to do a simple task because of vision loss, then vision rehabilitation and counselling services are indicated. Vision rehabilitation and counselling allows people to lead a more productive life and to accept their fate positively. To assist in this regard, devices are used to improve the life of a person who has experienced a vision loss. Individuals with visual impairments are encouraged to use their remnant vision, similarly to how occupational and physical therapists assist a stroke patient.

Vision rehabilitation assessment is usually two-fold. It consists of a low-vision examination that is provided by a low-vision optometrist and it includes a patient's history and assessments of colour vision, visual fields, contrast sensitivity and visual

acuity. The optometrist then makes a recommendation for the functional assessment which is performed by a vision rehabilitation specialist (Liu, 2018).

Counselling involves assistance by professional counsellors to one or more people who can either be able or disabled with an aim of understanding their life challenges and aim to find alternative solutions to these challenges and living a fulfilled life (Idowu & Esere, 2007, cited in Okonkwo, Fajonyomi, Omotosho, Esere & Olawuyi, 2017:114).

Counselling can improve the LVIs' ability to make decisions. It can assist each learner to set goals that are realistic for themselves and holistically improve themselves (Idowu & Esere, 2007, cited in Okonkwo et al., 2017:114). Counselling allows individuals to understand themselves and make appropriate vocational decisions based on their talents, aptitudes and interests. Often, LVI have difficulty in adjusting to school life. This could possibly be a result of the complexity of adapting to the school environment (Idiong, 2010, cited in Okonkwo et al., 2017:115). LVI need to be assisted to adjust to the school environment mainly because it is dependent on psychological balance. Olawale (2000), cited in Okonkwo et al., 2017:115) posited that when LVI are psychologically balanced, they can then make a realistic achievement. This implies that the success of the programmes that may be put in place for LVI is not guaranteed if they are not psychologically balanced. The school guidance and counselling team should step up and assist these learners (Nichter & Edmonson, 2005, cited in Okonkwo et al., 2017:115).

## **2.9 OPPORTUNITIES FOR LEARNERS WITH SEN**

There are many challenges that hinder the normal teaching of the visually impaired. However, when governments are proactive in providing IE, this goes a long way to solving some of the problems. For example, Thurlow et al. (2011) argued that in the USA, 80-85% of learners can successfully learn like other normal learners if they are awarded adequate time, clearly designed instructions, appropriate access and support as required by the IDEA.

Most countries have elaborately enacted policies and laws that are a roadmap of the education of people living with special needs. In Rwanda, for example, the Special Needs Education Policy was established in 2007 (Republic of Rwanda, 2007). LVI are protected from discrimination and given equal opportunities. The state is doing its best

to ensure that learners receive education that is enhanced. There are several policy statements that were enacted to ensure that these learners are afforded equal opportunities like all normal learners. LVI are fortunate to have opportunities for rehabilitation in Rwanda. They are also in associations that aid them to disclose their disabilities and further ensure that they are integrated into society. Mberimana (2018) stated that in Rwanda there is the URB and NCPD. Through the DPO, some challenges are removed and persons with disabilities are considered as the normal persons. ICT contributes to providing an excellent quality of education for LVI. To equalise the capability to access information between LVI and other sighted learners, assistive devices aid in providing access to materials that would otherwise be inaccessible (Brown et al., 2013; Sapp & Hatlen, 2010).

In the 1970s in the Kingdom of Eswatini, some philanthropists established organisations that would work on addressing issues of people who were living with disabilities. They formed the National Society for the Handicapped which is run on a charity basis. The organisation raises funds to support people living with disabilities in paying school fees, buying wheelchairs and gaining mobility (Heide & Jele, 2011).

The core curriculum helps learners to understand and identify diverse professional paths in career education. Openings to learn about work habits and careers through observation are available to sighted learners; there is, thus, a need to compensate for the shortage of visual prompts for LVI in different jobs. They are, however, rarely given the opportunity to personally experience various jobs with the aim of making independent and informed judgements (Ravenscroft, 2013; Sapp & Hatlen, 2010; Wolffe & Kelly, 2011). Currently, the Kingdom of Eswatini has the FODSWA, which is an umbrella body for all associations of persons with disabilities. There is also the SAVIP, an organisation for persons with visual impairments that offers advocacy and development at work that is aimed at empowering people with visual impairments.

## **2.10 THEORETICAL FRAMEWORK**

Theoretical frameworks are important because they are the lens through which one evaluates the research questions and the research problem. They are the detailed plan for the thesis. A framework is a map which allows the researcher to support and build a research on and also allow the researcher to decide how they will approach

the thesis as a whole (Grant & Osanloo, 2014). Merriam (1998) described theoretical frameworks as an underlying structure to any study.

The research is underpinned by the theory of normalisation which was postulated by Wolf Wolfensberger in the 1970s. It emphasises 'the dignity of risk', as compared to 'protection'. It is founded on the notion of integrating all people into the life of the community. This theory undergirds the deinstitutionalisation and the integration of the community's movements and advocates for a legal basis that can proclaim the basic rights of all to education, citizenship, medical care, community living and work. Worth noting is that the theory of self-determination fails to mature without the conceptual academic base that has a role of critiquing and laying a foundation to building on.

Normalisation commends the acceptance of all human beings living with special needs and to further ensure that they too are treated like all other citizens. Normalisation includes sensitising every person to know that the normal rhythm of a life-cycle, a year, a month, a week, a day, and an hour is also felt by all persons living with disabilities. This theory advocates for embracing all people living with disabilities and ensuring that they too enjoy a simple life like being employed, having accommodation, school, extra-curricular activities, exercise, and a choice to choose that had in the past not been accessible to people with significant and severe impairments (Wolf, 1980). There have been significant obstacles in getting community support mainly because there is resistance and ignorance from the communities who have been groomed to believe that 'those' people are 'different' and should thus be excluded from society (Wilmhurst & Brue, 2005).

This theory is concerned about returning people living with disabilities to their communities and further supporting them in ensuring that they attain a life that is as 'normal' as possible. People with special needs are not to be taken as subhuman, abnormal, ill, malformed or sick but they need support in specific areas of their lives (Ndurumo, 1993). This clearly depicts that all individuals require support at particular times in their lives but often people receive support informally or through avenues that are socially acceptable. This theory entrusts a legal direction that affirms rights to citizenship, community living, work, medical care aid and education. The main issue of supporting persons living with disabilities boils down to self-sufficiency and productivity and accepting that peoples' capabilities are diverse (Mugambi, 2011).

The theory of normalisation was found to be relevant for this study because LVI have for a long time been rejected, socially excluded and segregated from mainstream society and education thus they could not experience the normal patterns of daily living. It is relevant because this study is concerned about ensuring that the daily lives of LVI are normal and supported them throughout their lives. This theory advocates for all people to embrace learners with disabilities in a bid to heighten their livelihood. Through education, LVI are afforded a life that has been termed 'normal' just like any other sighted learner.

## **2.11 CHAPTER SUMMARY**

The literature review chapter discussed information with regards to learners with SEN, especially those living with visual impairments. It analysed and reviewed the literature while deliberating different views of other researchers for a deeper understanding of the daily experiences of LVI. It also considered the attitudes of educators, parents and other learners towards the LVI, and the barriers that are faced by these learners. It looked at the theoretical framework that embodied the research and their justifications.

The next chapter gives details of the methodological approach including data collection and analytical strategies. The research design, sampling, research instrument, ethical issues, data analysis and procedures are discussed.

## **CHAPTER 3:**

### **RESEARCH METHODOLOGY**

#### **3.1 INTRODUCTION**

Chapter 3 gives details of the research approach, data collection and the analytical strategies. The research design, sampling, research instrument, procedures, analysis of data, and ethics issues are discussed in detail. It also discusses the research paradigm involving ontology, epistemology and axiology.

#### **3.2 RESEARCH PARADIGM**

A paradigm is an abstract proposal about the society that is shared by the people of a community and leads all their activities (Engler 2009). This study adopted the interpretivist paradigm that is centred on the idea that understanding can actively be made by those who constantly interact with others and the environment (Castle, 1997).

Maree (2013) described an interpretive paradigm as one that helps to improve the researcher's understanding, unveil imparted meanings and create an understanding of the study. The interpretive paradigm aids the researcher to compare what happens at different places at the same time. Morgan (2014) described this paradigm as one that assumes that every person has unique beliefs and experiences; hence, reality cannot exist outside those beliefs. This, therefore, implies that knowledge and the truth are reciprocal and through successive sessions with the population, the values of the research are accepted as a means of participating in a process of knowledge production.

For Maree (2013), the interpretive paradigm makes human life to be understood only by those who are within by noting individuals' subjective experiences and how these experiences interact. In this research, I personally gathered data from the chosen population; thus, the interpretive paradigm helped in perceiving the participants' experiences. Lincoln and Lynham (2011) described this paradigm as one that is not concerned with either control or prediction but is concerned about peoples' lived experiences and is concerned with narrative explanations.



### **3.2.1 Epistemology**

Epistemology is the process by which knowledge can be acquired (Hays & Singh, 2012). The epistemology surrounding this study is that the researcher must be allowed entry into the participants' lives by interacting with them. Within the interpretivist or constructivist perspective, I interacted with the chosen population in an endeavour to understand their ideas and allow them to share their worlds with me. I was able to access their real lives and the results of this research allowed the participants to share their experiences with the researcher (Andrade, 2009).

This gave me an opportunity to use my experience of IE while constructing questionnaires, observation schedules and the document analysis for data collection. This positively assisted me in that it prevented a situation where I was simply passive. The researcher had the main role of constructing knowledge rooted on the discoveries of the topic under research. During the participant-interaction process, I understood them and further made informed decisions.

### **3.2.2 Ontology**

This study was carried out in an interpretative paradigm. The underlying ontology in this study is subjective and has multiple versions of reality. It has a relativist context.

Hays and Singh (2012) defined ontology as the extent that a study's paradigm believes that reality can be researched subjectively or objectively, a perception of reality. An interpretivist or constructivist paradigm looks at reality as relative (Guba & Lincoln, 2001). There are a number of realities that show a series of beliefs and experiences of different people (Morgan, 2014). This therefore implies that the life of the LVI of the in the inclusive school can vary from one participant to the next.

### **3.2.3 Axiology**

The axiology that surrounds this paradigm, the value and the influence of the researcher in this study is recognised because reality is collaborated (Creswell & Plano Clark, 2011). Since this study has adopted the interpretivist or constructivist paradigm, it then should clearly outline how continuous interplay between the participants' and the researcher's beliefs can be recognised and how to cope with these effects (Chilisa & Kawulich, 2012).

I value human dignity and believe that everyone irrespective of disability, race, age, health, gender, financial circumstances et cetera deserves fair and equal chances in life. I followed ethical protocols and ensured that trustworthiness, credibility, transferability, dependability and confirmability were all embraced and adhered to. The aforementioned ethics considerations are deliberated in this chapter.

### **3.3 RESEARCH APPROACH**

A research approach is an idea and detailed schedule for a study that begins with the wide presumptions that determine the methods of collecting data, analysing and detailed interpretation of the data (Creswell, 2014). A majority of researchers posit three methods of research that is; mixed, quantitative and qualitative research methods.

I used the qualitative approach to research. It was selected rooted on the expectations of a qualitative research that was used in this research and the nature and type of the research problem. A qualitative study uses non- numerical data like pictures and words (Johnson & Christensen, 2014). In this study, I aimed at examining issues that are related to the oppression of individuals, which involve the challenges that are faced by the LVI in inclusive schools. A qualitative approach to this study allowed me to formulate a detailed picture of a series of people's interactions thus gaining a deep comprehension of social realities and a range of human interactions, perceptions, endeavours and situations (Creswell, 2003).

The researcher in a qualitative study strives to thoroughly interact with issues that are linked to the oppression of people. This research looks into the challenges and hindrances faced by the LVI in inclusive schools in the Kingdom of Eswatini. A qualitative approach was also used because empirical data was to be collected in the field which was to be used in addressing the research questions. Creswell (2014) describes qualitative research as a way of investigating and comprehending the meanings attached by human beings to social or human problems. Qualitative research is multifaceted and is said to be naturalistic because it is concerned about the natural settings of interactions (Nieuwenhuis, 2016). I explored the education of LVI in the Kingdom of Eswatini. Qualitative research has an advantage of granting permission to the researcher to collect deep-rooted and first-hand knowledge about the phenomenon they want to study. This approach collected rich data from all the

participants to obtain a complete comprehension of how LVI are educated in inclusive schools in the Kingdom of Eswatini.

An advantage of qualitative research is it can take into account the changing attitudes within the participants (www.poppulo.com). It allows the researcher to be speculative on their chosen study and further has a more flexible approach. Qualitative approach is far more distinct in gathering meaningful data.

Disadvantages of using qualitative data are that it is strenuous to sample many participants thus raising the question of whether the research is a true reflection of the studied phenomena (www.poppulo.com). The chosen samples may be biased thus weakening the quality of the study or they may ensure that the chosen participants favour the anticipated outcome. Self-selection bias is also a disadvantage of qualitative approach as participants are asked to volunteer their views. The kinds of questions that are asked may also disadvantage the collected data in qualitative research.

### **3.4 RESEARCH DESIGN**

Human (2010) described a research design as a mixture of factors. These are:

- A design informing a research
- The research purpose
- Location where the study will be conducted
- Techniques for research that are used to collect and analyse data.

Yin (2014) described research design as a plan that logically connects evidence to be gathered and analysed to the research hence noting the types of findings that can emerge. This study will use the phenomenological research design because it is based on lived experiences of LVI.

The research design is informed by the research problem. The researcher has a responsibility of selecting the data collecting instruments, the participants and the data analysing techniques.

McMillan and Schumacher (2010) maintained that a research design includes all steps that are followed when conducting the study. The researcher spells out the procedure to be followed to obtain data to be able to find answers to the research question.

### **3.5 LOCATION**

The research was carried out in three inclusive high schools in the Kingdom of Eswatini. These schools, for the purpose of this study, were named School A, School B and School C, respectively.

School A is in the Manzini region, about 16 kilometres from Manzini city. School B is situated in the Shiselweni Region, one kilometre from Nhlanguano town. School C is situated in the Hhohho region, two kilometres from Mbabane City. I chose these locations since they were all easily accessible and were within a close proximity to cities in the Kingdom. They were also schools that catered for LVI. All three schools are public inclusive schools. School A and school C are mission schools. School A and School B are boarding schools that allow boarding for both boys and girls. School B and School C are in urban areas while School A is a semi-urban school. School A has an overall enrolment 328 learners. School B has a total enrolment of 814 learners and School C has a total of 583 learners.

### **3.6 MECHANISMS FOR SELECTING PARTICIPANTS**

#### **3.6.1 Population**

Lodico et al. (2006) described the population as the actual targeted group which the researcher is keen to investigate. The population for this study included ten (10) educators, three (3) principals and six (6) learners from three (3) inclusive high schools. The overall total for all the selected participants was 19.

Most researchers choose their research participants by looking at the researcher's intended purpose and the background of the participants (Lodico et al., 2006). Vanderstoep and Johnston (2009) stated that a few participants are chosen from a bigger population to sample.

#### **3.6.2 Sampling**

The study used the purposive sampling method. This method involves purposely selecting a few cases that are information-rich from a bigger population (McMillan & Schumacher, 2010). Purposive sampling is often used to improve the value of data collected from the smaller sample, as in this research. The participants in this research were chosen from three (3) inclusive schools in the Kingdom of Eswatini.

These schools were chosen because they were the only inclusive high schools in the Kingdom that catered for LVI. In this study, 10 educators were selected from three schools: six educators from School A, two from School B and another two from School C. Three principals partook in this study; one from School A, one from School B and one from School C. Six (6) LVI participated in the study. These learners had low vision or were blind. Four were chosen from school A, one from school B and one from school C. Three of these learners are blind and three have low vision. The overall total for all the selected participants was 19 participants.

I used purposive sampling because I wanted suitable participants for the study. I chose to use school principals as participants in this study because they are the overseers of the schools. They are also the key people who are responsible for ensuring that IE policies are implemented; thus, they were expected to be conversant with IE policies. The educator participants were chosen because they are the managers in their classrooms; hence, they have the role of ensuring that their classrooms embrace IE and, with regard to this research, particularly for LVI. The educators were also purposively chosen because of the different levels of their teaching careers. They all were educators of LVI so they had expertise and first-hand experience. All the learner participants that were used in this study were selected because they were either blind or had low vision and were thus key stakeholders in this study.

### 3.6.3 SAMPLE

The following is the demographic information of the participants.

Table 3.1: Educators' profiles

EDUCATOR	QUALIFICATION	TEACHING EXPERIENCE	AGE	GENDER	MARITAL STATUS	HOME LANGUAGE
T1	Secondary Educators' Diploma + Bachelor of Education	12	35	F	Single	SiSwati, English
T2	Bachelor of Arts + Post Graduate	20	41	F	Married	SiSwati

EDUCATOR	QUALIFICATION	TEACHING EXPERIENCE	AGE	GENDER	MARITAL STATUS	HOME LANGUAGE
	Certificate in Education					
T3	Secondary Teachers' Diploma	34	58	M	Widowed	SiSwati, English
T4	Bachelor of Science	12	36	M	Single	SiSwati
T5	Bachelor of Education	32	55	M	Divorced	SiSwati, English
T6	Bachelor of Education	4	26	F	Single	SiSwati
T7	Secondary Teachers' Diploma	2	25	M	Single	English
T8	Secondary Teachers' Diploma Bachelor of Education Honours in Special Educational Needs	25	49	F	Married	SiSwati, English
T9	Bachelor of Education	23	46	F	Married	SiSwati
T10	Secondary Teachers' Diploma	4	29	M	Divorced	SiSwati

Table 3.2: Principals' profiles

PRINCIPAL	QUALIFICATION	EXPERIENCE	AGE	GENDER	MARITAL STATUS	HOME LANGUAGE
P1	Bachelor of Science	27	52	M	Married	SiSwati

PRINCIPAL	QUALIFICATION	EXPERIENCE	AGE	GENDER	MARITAL STATUS	HOME LANGUAGE
	Post Graduate Certificate in Education					
P2	Diploma in Education Bachelor of Science Post Graduate Certificate in Education	33	56	M	Married	SiSwati
P3	Secondary Teachers' Diploma Bachelor of Education	20	43	F	Married	SiSwati, English

### 3.7 DATA COLLECTION

This is the measuring and collection of data on variables that are of interest to the researcher in an organised way that allows the research questions that are stated to be answered (Walliman, 2006). Collection of data for this research was done qualitatively using semi-structured questionnaires (see Appendix I, J and K), observation (see Appendix H for observation checklist) and document analysis (see Appendix L for vision and mission statements respectively) and (Appendix L for lesson plan for observation). Johnson and Christensen (2012) pointed out that case study research advocates for using more than one instrument for collecting data. This helped me to triangulate the results for this research. For data collection, I obtained consent from the principals of the schools and entered the sites (see Appendix D), handed out questionnaires to participants and had classroom observation. I also obtained assent from learner participants (see Appendix G) and consent forms (see Appendix F) from their parents.

Prior to collecting data, the researcher made contact with the chosen population through letters (see Appendix E) and conveyed the core mandate of the research. The duration of the classroom observation, the maximum time for answering

questionnaires, the plans for using the research and the availability of the final summary after the research were discussed as posited by Creswell (2014).

During the observations, the researcher began by introducing herself to the participants and to the classes where observation was to take place. The main task under observation was for the researcher to observe the lesson with the aim of seeing if the educator uses group discussion or any form of collaborative learning during lessons. The researcher also monitored if the educator called learners' names, used questions and answers and granted extra time to struggling learners to do tasks during lessons. Sound projection, adapting written texts, the use of learning devices and the use of other teaching materials was also noted.

While observing, I was a non-participant observer and monitored the proceedings from the back of the classroom, in order to have a clearer view while watching, avoid disturbing the classes and accurately record the actions and interactions in the classroom. Non-participant observation was conducted for two separate lessons. For this purpose, I used Appendix H.

Document review began when the school principals of three inclusive high schools were approached by the researcher with the aim of asking for the schools' mission and vision statements (Appendix M). Document analysis was used to get a view of the visions and dreams that the schools had. The mission and vision statements summarise the principles and goals of an institution and aid in decision-making. They are written documents that paint a picture of the school and further lay a roadmap that the school is expected to journey through. I expected the mission statements to have three major components: the core values that build up the institution, a vision of the institution and aims and objectives that encompass the institution. I also was concerned by looking if the mission and vision statements embraced IE.

Two lesson plans (Appendix L) of the lessons that I observed were also obtained for document analysis. When analysing the lesson plans, I expected them to be embracing of IE and particularly LVI. They were also screened for the extent to which they promoted IE in the classroom.

Schools are expected to have admission policies that guide the schools regarding to the admission of learners. These policies are policy documents that are written that



are formulated by the institutions. Ideally, these documents should improve the provisioning of IE in all school in the Kingdom. These policy documents shed light on the milestones achieved by the schools in promulgating for an IE system.

### **3.7.1 Semi-Structured Questionnaires**

In semi-structured questionnaires (Appendix I, J and K respectively), the researcher designed questionnaires to collect data from the participants. They had designed questions and contained open and closed-ended questions. I had the role of anticipating all possible answers with pre-coded responses.

Prepared answers assisted in answering the research questions that were answered by the school principals, the educators and the LVI. Similar views were put into categories according to their reflections on the research questions.

### **3.7.2 Observation**

Kumar (2005) described observation as a selective, planned and purposeful way of critically monitoring something as it happens. Observation is suitable in situations where questioning cannot elicit all the necessary information because the participants are either unaware of the answers or they are not cooperative. Taye (2008) advocated for observation as it assists in collecting credible and rich data.

In observation, the researcher was awarded a chance and monitor the LVI in a classroom. The researcher took the position of a non-participant observer. This kind of an observer observes and monitors without participating. Observation does not require prolonged monitoring periods to engage with the studied phenomenon (Bryman, 2004). Observation was ideal in this study because time for data collection was limited.

### **3.7.3 Document Analysis**

McMillan and Schumacher (2010) described documents as written or printed reports of scenarios that have passed. Documents may appear in varying formats like paintings, hard copy documents, monuments, a statistical table, video or film. Best and Kahn (2006) indicated that documents are important sources for proving discoveries found from other methods of research.

Document analysis is the third technique that was used for the collection of data. The documents that were analysed were the mission statements and the vision statements of the three high schools where the researcher was doing her research. I analysed the vision and mission statements with the aim of seeing if they embraced LVI.

The other documents that were analysed were the two lesson plans of the lessons that I observed during observation. When analysing the lesson plans, I expected them to be embracing of IE and particularly LVI. They were also screened for the extent to which they promoted IE in the classroom.

The schools' admission policies are one important policy of admitting learners. These policy documents are formulated by the schools and they are a roadmap that clearly spell out the process followed by the schools. Ideally, these documents should improve the provisioning of IE and embrace learners with special needs. They also shed light on the milestones covered by the schools in promulgating for an IE system.

### **3.8 DATA ANALYSIS**

Creswell (2013) described data analysis as an exercise that requires unpacking the data collected with the aim of responding to the research questions. De Vos et al. (2011) described data analysis as a way of categorising, ordering, manipulating and summarising data with an aim of getting answers to definite research questions. Data analysis describes and interprets raw data to understand the patterns and meanings from it (Bell, 2005).

Collection of data was carried out by way of semi-structured questionnaires, observation and document analysis in three inclusive high schools. The first step in analysing qualitative data is completely immersing the researcher to look into the collected data with an aim of familiarising them to the collected information (Sambo, 2018). After the first data was collected, the researcher immediately began to determine if any information was missing.

This assisted me in restructuring data collection tools, understanding the studied phenomenon and reviewing the data to obtain information that addressed the study questions. During this period, I looked at the collected data from the document analysis, observation and semi-structured questionnaires with the aim of understanding all the captured data from a clearer perspective. I then assigned codes

to the collected data and conducted an analysis of the content by screening for specified words which assisted in identifying the themes.

Flick (2014) asserted that when coding, segmented data is grouped and labelled by categories. It is examined and compared between and within the different categories. I used coding categories to classify the collected data and to separate categories from others.

Creswell (2014) argued that not all data can be used in a qualitative study. Some of the rich and dense data must be disregarded by the researcher. I, therefore, had a mammoth task of focusing on some and disregarding other data.

Interim analysis is interchanging data analysis and data collection in qualitative research (Miles & Huberman, 1994). Interim analysis of data analysis was unavoidable in this study. After each observation schedule, it was done to see if there was any left out information that could be a part of the study.

After the process of collecting data has been completed, raw data was then interpreted. Transcription required altering interview notes, audio recordings, document analysis notes and observational notes into texts (Johnson & Christensen, 2012). Thereafter, thematic analysis was used to prepare the data. This is the operation that recognises, analyses and reports theme occurrences from the collected data (Braun & Clarke, 2006). Braun and Clarke (2006) listed six thematic steps that should be adhered to. These are:

1. Reading the transcriptions to be acquainted with the data to help the researcher to know the data.
2. Generating initial codes by labelling the list of developed ideas on them.
3. Looking for relevant codes under different themes.
4. Reviewing the themes to check for their authenticity and relevance.
5. Defining and naming themes before extending the report.
6. Producing a report and signalling that the researcher is content with the themes.

Observation reports, interview responses and document analysis responses of all participants were presented and they aligned to the research questions. It was essential to record direct statements from the participants so as to maintain the feel of the initial data as suggested by Cohen, Manion and Morrison (2007).

### **3.9 TRUSTWORTHINESS**

Trustworthiness of findings and interpretations rely on showing how the researcher arrived at them (La Blanca, 2004). Trustworthiness is important in that it proves and grounds the credibleness of the results of a research while ensuring that it maintains that acceptable standards are met (Bowen, 2005).

In a bid to adhere to trustworthiness, I used triangulation in analysing the semi-structured questionnaires, document analysis and observations. This was a way of checking whether what I observed was similar to what I gathered on the semi-structured interviews and the document analysis. For the LVI, their questionnaires were Brailled and transcribed as a way of ensuring that they were able to clearly understand the questions. In instances where the responses did not match in these data collection tools, I re-checked the accuracy of the responses and the reasons for the deviation.

After observation and the semi-structured interviews, the participants were re-checked in a bid to validate the accuracy of what I had noted. The observation schedule was set up in advance so that I could concentrate during the lessons which allowed me to follow the lesson well.

I had a case file that was organised and kept all notes of the research as an audit trail for future use. I also asked for assistance from my supervisor and other colleagues to confirm my interpretation of data.

#### **3.9.1 Credibility**

Credibility is the level to which the results of a research mimic real life and are seen to be correct, reasonable and trustworthy (McMillan & Schumacher, 2010). To ascertain that the study was credible and to ensure accuracy of the finding of the phenomenon under study, I insisted on honesty among the participants by allowing them to opt out in the event they were no longer comfortable to participate in the research. This would ascertain that the process of collecting data strictly involved willing participants.

Kumar (2011) suggested that to confirm credibility, the researcher should present the research findings to the participants for confirmation, congruence, validation and approval. I ensured that participants got the chance to look through the research

findings as a way of validating and approving their contributions to the study as being a true reflection. I familiarised myself with the schools where data was to be collected prior to data collection.

### **3.9.2 Transferability**

Transferability is the state in which research results can be used in a different context (Zhang & Wildemuth, 2009). My task was to be accountable for descriptions and data sets that were meaningful so that future research could make judgements about the results in separate settings and contexts. I hoped that the encounter and views of the learners, educators and school administrators of the three chosen schools would represent the experiences and views of the others regarding the education of LVI. I ensured that all data was supported by adequate evidence.

### **3.9.3 Dependability**

Dependability can be shown by checking how consistent the research process is. It is the coherence of the way a researcher is accountable for the alternating conditions in the phenomena and internal process (Bradley, 1993). Cohen et al. (2007) defined dependability as a process that suggests that the researcher must go back to the participants of the study to check if their findings are dependable. To attain dependability, I used triangulation: observation, semi-structured interviews and document analysis to look into the current situation regarding the education of the LVI in three inclusive high schools in the Kingdom of Eswatini.

There was a need to be flexible while verifying with participants to ascertain that the findings were consistent and reliable but not biased. It was necessary to let the participants know that the results of the study were correct and that their contributions to the study represented what I had observed. I allowed the participants to recheck the collected data that was collected during observation and interviews so as to alter errors that could have been made during my analysis. I allowed the participants to verify the collected information in an endeavour to ascertain if the data collection techniques were appropriate or not in order to strengthen the study as suggested by Maree (2013).

### **3.9.4 Confirmability**

Lincoln and Guba (1985, cited in Maree, 2016:125) described confirmability as the level in which the results of a study resemble the participants' responses and not driven by the interests, bias or motivation of the researcher. The main technique for establishing confirmability is by making use of audits and findings of the research processes. Confirmability can be ensured by examining the inner comprehension of the study known as; the interpretations, the results, the recommendations and the data.

I ensured that I was as neutral as possible during the course of this research to avoid any misunderstandings and bias. White (2005) argued that neutrality has to do with being biased or misunderstood in the research procedure and results. I had the task of upholding objectivity and making sure that the observation schedule was not prolonged and desisted from influencing the research. I ensured that I spent minimal time on the semi-structured questionnaires and observation. The participants were observed for a maximum of an hour and the semi-structured questionnaires were returned to the researcher by the participants.

To ensure confirmability, I took notes during observation as suggested by Gay, Mills and Airasian (2009) to avoid distortion of information or forgetting some information. If the data is recorded after observation, it may be distorted.

## **3.10 ETHICAL CONSIDERATIONS**

### **3.10.1 Institutional Approval**

To uphold legal and ethical considerations, I applied for and was granted an ethical clearance certificate (Appendix A) by UNISA Ethics Review Committee. I applied for permission to collect data (Appendix B) from the Ministry of Education and Training and was given authority (Appendix C) to carry out a study by the Ministry of Education and Training for this study. I sought permission from school administrators to conduct the study in their schools (Appendix D) and provided informed consent letters to educators (Appendix E), and parents of participating learners (Appendix F) and from the learners themselves (Appendix G).

### **3.10.2 Voluntary Participation and Informed Consent**

For this research, I was aware of the legal and ethical rights that I had on the participants and the study. These obligations included informed consent and assent, voluntary participation of participants (McMillan & Schumacher, 2010). I also had a commitment to ensure that participants' appropriate storage of data, privacy, anonymity, confidentiality were adhered to.

I ensured that all participants were aware that their participation was voluntary and their right to withdraw at any point, if they felt uncomfortable. All participants endorsed the consent forms by signing them to acknowledge that they accepted being participants. Assent forms were also signed by the LVI. The objectives and aims of the study and why they had been chosen as participants was explained to all participants. The benefits of the study was tabled to all participants.

### **3.10.3 Anonymity and Confidentiality**

I noted questions and attended to misunderstandings that were in relation to the study from the participants. Participants' confidentiality was guarded by ensuring that their identities were kept anonymous. Sensitive questions were avoided and the research questions were designed not to infringe on participants' rights. Personal names and information provided do not appear in the study; instead, identification numbers or codes were used.

### **3.10.4 Respect for Human Dignity**

I understood that my role was based on a fundamental respect for human dignity and personal integrity. I understood that human dignity cannot be set aside in order to achieve greater understanding. This study preserved individual freedom, respected privacy, protected personal integrity and safeguarded against harm.

### **3.10.5 Beneficence and Justice**

I was fair and treated all participants equally. I hoped to find out and make valuable recommendations to policy makers, curriculum designers at the NCC, education planners, educators and other stakeholders in referring to their plans for development that would address gaps in IE provisioning.

I hoped to benefit educators in that they could understand and have insight into the difficulties that faced them, in turn addressing the challenges faced by LVI. I also attempted to determine means and ways of meeting the learners' needs in an adaptive and sufficient manner. I aimed to get to the root cause of the poor academic performance of the LVI and how best they could be assisted.

### **3.10.6 Avoid Deception**

Deceiving someone is making them believe something that is false (Hornby, 2010). Deception is compromising the truth or telling lies (Manion & Morrison, 2011, cited in Chauke, 2017:18). Honesty was key in explaining the purpose and aim of this research, with regards to where the potential risk existed to the participants. Sometimes researchers compromise the truth to the population and participants sometimes discover that the researcher was not completely honest at a later stage. This did not happen in this study and prompt feedback was relayed during and at the end of the research to all participants. This positively impacted as ethical dilemmas were minimised.

### **3.10.7 Protection from Harm**

All participants were assured of physical and mental protection from harm in taking part in this research and further monitored that they were not distressed. I did not offend, frighten, embarrass or harm the participants. I ensured that the LVI received special care and that their participation was brief.

## **3.11 CHAPTER SUMMARY**

Chapter 3 highlighted the methodological approach used in this research. The sampling, population, location and the instruments for data collection and its features were described in detail in this chapter. Data analysis methods, procedures and ethical issues were discussed in depth. Chapter 4 will table the findings, interpretations and discussions from the empirical study.



## **CHAPTER 4:**

### **FINDINGS, INTERPRETATIONS AND DISCUSSIONS**

#### **4.1 INTRODUCTION**

The previous chapter of this research discussed the design and the methods that were particularly used. Details of the study's approach, collection of data, instruments, selection of participants, data analysis, ethical considerations and measures taken to ascertain validity and reliability of the research were provided. Chapter 4 of this study presents results of the research. Data was interpreted and analysed in light of the literature review in Chapter 2.

#### **4.2 DATA COLLECTION AND DATA ANALYSIS PROCEDURE**

The process of data collection aimed at answering these research questions:

How does a Learners with visual impairments experience Inclusive Education in the Kingdom of Eswatini?

##### **Sub-questions**

These sub-questions directed the research:

1. What are the education conditions of Learners with Visual Impairments in high schools in the Kingdom of Eswatini?
2. What educational constraints do educators encounter in high schools in the Kingdom of Eswatini?
3. What are the barriers to learning that Learners with Visual Impairments encounter in high schools in the Kingdom of Eswatini?
4. How do educators overcome these constraints in high schools in the kingdom of Eswatini?
5. How do Learners with Visual Impairments overcome these constraints in high school in the Kingdom of Eswatini?

Chapter 4 presents findings which are guided by the research questions and the aim of the research. It also looks at unitisation, data coding, categorising and presenting the emerging themes.

The research aims to explore LVIs' experiences in inclusive high schools in the Kingdom of Eswatini with the objective of highlighting the barriers they experience.

This study specifically looked at three inclusive schools in the Kingdom of Eswatini.

Data analysis interprets and describes raw data to obtain meanings and patterns from it (Bell, 2005). Data analysis began after the first interview to determine if there was

any missing data in the research. This assisted in restructuring the data collection tools where necessary, understanding the studied phenomenon and reviewing it to acquire data that answered the research questions. Interim analysis interchanges data analysis and data collection in qualitative research (Miles & Huberman, 1994). Interim analysis of data collection was unavoidable in this research. It succeeded every observation and questionnaire to recheck if there was information left out of the research. I analysed the collected data interpretatively and descriptively. The results of this research were organised to attend the research questions.

Data collection was done in the form of observation, semi-structured interviews and document analysis in three inclusive high schools. The documents that were reviewed were the mission and vision statements of three inclusive high schools. The researcher also reviewed two lesson plans of the classes that they observed. A total of three administrators, ten educators and six LVI were chosen as participants from the three participating schools. The participants were both females and males.

All the educator participants in this research were qualified educators who were employed permanently by the Ministry of Education and Training in the schools. Some educators held degrees while others held diplomas. Their teaching experience varied between 2 and 34 years. Educator participants are represented by letters T1–T10 under the educator category below. Principal participants are coded P1–P3, respectively. Learners on the other hand are represented by the codes L1–L6. Code T means educator, code P means Principal. The names of the learners, educators and principals are known to the researcher but codes and numbers were used to hide their correct identities thus ensuring anonymity and confidentiality.

Table 4.1: Educators' profiles

EDUCATOR	QUALIFICATION	TEACHING EXPERIENCE	AGE	GENDER	MARITAL STATUS	HOME LANGUAGE
T1	Secondary Educators' Diploma + Bachelor of Education	12	35	F	Single	SiSwati, English
T2	Bachelor of Arts + Post Graduate	20	41	F	Married	SiSwati

EDUCATOR	QUALIFICATION	TEACHING EXPERIENCE	AGE	GENDER	MARITAL STATUS	HOME LANGUAGE
	Certificate in Education					
T3	Secondary Teachers' Diploma	34	58	M	Widowed	SiSwati, English
T4	Bachelor of Science	12	36	M	Single	SiSwati
T5	Bachelor of Education	32	55	M	Divorced	SiSwati, English
T6	Bachelor of Education	4	26	F	Single	SiSwati
T7	Secondary Teachers' Diploma	2	25	M	Single	English
T8	Secondary Teachers' Diploma Bachelor of Education Honours in Special Educational Needs	25	49	F	Married	SiSwati, English
T9	Bachelor of Education	23	46	F	Married	SiSwati
T10	Secondary Teachers' Diploma	4	29	M	Divorced	SiSwati

Table 4.2: Principals' profiles

PRINCIPAL	QUALIFICATION	EXPERIENCE	AGE	GENDER	MARITAL STATUS	HOME LANGUAGE
P1	Bachelor of Science	27	52	M	Married	SiSwati

PRINCIPAL	QUALIFICATION	EXPERIENCE	AGE	GENDER	MARITAL STATUS	HOME LANGUAGE
	Post Graduate Certificate in Education					
P2	Diploma in Education Bachelor of Science Post Graduate Certificate in Education	33	56	M	Married	SiSwati
P3	Secondary Teachers' Diploma Bachelor of Education	20	43	F	Married	SiSwati, English

### 4.3 UNITISING, CATEGORISING AND FORMATION OF THEMES

During data processing and analysis in this qualitative study, several approaches including pattern and forming data themes, data unitising, categorising, and data coding were used. All the aforementioned processes are explained below:

#### 4.3.1 Coding and Unitising

Coding demanded that I reduced the mass of data collected so as to organise and identify it into vital themes or patterns; thus, coding the collected data was the first step in analysing the data of this research. The collected information of this research was grouped and coded beneath the study's questions. The data that is coded is attached as Appendix N. The unitised and coded data was further organised into vital categories below.

Lee (2007) discussed data analysis as the first step where the researcher is expected to read and note emerging themes in phrases, notes, labels or headings that discuss the participants' responses and what the researcher weighs as being vital. Mertler (2006) defined this process as data coding.

### **4.3.2 Categorisation of Units**

Data was categorised by monitoring data units under individual research question. Sometimes the responses of the participants was similar hence the formation of a single category and in instances where the responses yielded varying ideas, categories increased. A series of themes emerged from the categories. Chenail (2008) explained categorising as an important part of qualitative data analysis where a researcher attempts to join data into significant categories and units.

### **4.3.3 Themes**

Bryman (2012) described a theme as a classification that is grouped by the researcher through information that connects to the aim of the research. It is rooted on the identified codes in field notes or transcripts that guide the study towards a theoretical comprehension of the data that contribute towards the body of knowledge. Themes may be beliefs, experiences, knowledge or opinions that a specific participant expresses (Lee, 2007). Bryman (2012:580) further recommended that when trying to work out a theme, the following should be considered:

- “Transitions: The way chapters and topics move within transcripts and other materials.
- Indigenous typologies or categories: These could be expressions from the local community that may feel unfamiliar or are used in an unfamiliar manner.
- Repetitions: Chapters and topics that are repeated.
- Differences and similarities: This is experimenting and observing how differently interviewees may look and discuss a topic differently from each other and observing the differences”.

## **4.4 PRESENTATION AND ANALYSIS OF FINDINGS**

The presented plan had similarities between the three groups (principals, educators and LVI) with a few exceptions. The collected data was combined and coded. Eleven recurring codes emerged from the data and these were:

1. Theoretical comprehension of IE for the educators.
2. Educators’ and learners’ attitudes towards IE.
3. Available training options towards educators who work with LVI.

4. Support offered to educators and schools regarding the inclusion of LVI.
5. Experiences and challenges in terms of teaching LVI.
6. Educators' opinions about teaching the LVI.
7. Curriculum adaptations for the LVI.
8. The state of the schools for the LVI.
9. Assessment of the LVI.
10. Available assistive devices for the LVI.
11. Teaching reading and writing to the LVI.

To be able to attend to the research questions and the objectives of this research, the following codes were discussed as sub-headings. They were further translated so that readers could understand them (Patton, 2002). Finally, these codes were discussed under main themes. Participants' verbatim quotes were indented and assigned with quotation marks. To ensure anonymity, all participants were assigned codes.

#### **4.4.1 Educators' and Principals' Attitudes, Experiences, Challenges, Opinions, Beliefs on Available Assistive Devices to the IE of LVI in Learning Institutions**

This section presents educators' and principals' attitudes, experiences, challenges, opinions, beliefs on available assistive devices in relation to the IE of LVI in learning institutions. The main ideas pertaining the definition of IE was found in the participants' responses.

*"It is education that caters for all learners whether they live with disabilities and challenges or they do not. It places all learners in one environment." (T1)*

*"It is education that involves all kinds of learners, with or without special needs in one environment." (T7)*

These two participants (T1, T7) showed that they understood that inclusion is non-discriminatory and it allows all kinds of learners under one environment regardless of the challenges and disabilities that they live with.

EWP6 (DoE SA, 2001) states that inclusion is centred on the idea that respects and recognises uniqueness among all learners and builds on their shared connections. Mainstreaming, on the other hand, is the former method of allocating learners with special needs in classes with their normal peers for a section of the school day. On

the other hand, inclusion is not centred in allowing some learners extra assistance so that they will “fit in”. It is mainly about ensuring that all learners are awarded equal opportunities to meet their diverse learning needs (Chauke, 2017).

*“It is the education of learners in one class regardless of their physical disability, mental capacity or intellectual level that they may have.” (T4)*

This participant further stated that inclusion means putting learners of different intellectual, mental and physical disability in one class. This is testimony that these educators understood what IE is.

*“It involves learning of all learners with or without disabilities in a non-discriminatory manner.” (T5)*

The responses by the participants are testimony that they understood IE. This clearly shows that IE is a window of hope that can ensure that objectives of EFA are realised (UNESCO, 1994; 2001). Mainstream schools that embrace inclusion are the foundation of achieving EFA (UNESCO, 1994). The participants in this study seemed sure that to facilitate efficient inclusion, their schools had to embrace and accommodate all the different kinds of learners.

Embracing all learners meant that the schools had to make modifications with regard to their attitudes, curriculum, support, physical environment and assistive devices with an aim of embracing all the learners’ needs, particularly the LVI. Ralejoe (2016) stated that IE of learners means learners with disabilities learning side-by-side other learners in mainstream classrooms and mingling with them in shared learning experiences. This process demands an active interaction between learners and taking part in deliberations around how education is experienced.

#### **4.4.2 Educators’ and Learners’ Attitudes Towards Inclusive Education**

The participants shared a mixture of feelings on the attitudes of educators and learners towards IE. The questions from the interview schedules for each group are presented below:

- What is your attitude towards the concept of IE? [T]
- What is your thinking of other educators’ attitudes towards working with LVI? [T]



- Explain the attitudes of other learners during class activities. How do they treat you? [L]
- What is your view on the inclusion of LVI in mainstream classrooms? [P]

Educator participants (T10, T1, T7, T6, T5) and principal participant (P2) stated that the educators of the LVI had adapted and adjusted to teaching these learners and knew how best to assist them.

*“It is a good idea though it requires schools to have flat grounds as a lot of steps hinder the LVI’s free movement.” (P2)*

*“IE is the best method since it makes learners with disabilities to feel part of the community since they are also normal human beings.” (T10)*

*“It is a great concept because it allows all learners to feel accepted regardless of any challenges.” (T1)*

*“It is a good concept as it allows all learners with SEN to acquire education in nearby schools.” (T7)*

*“Most educators have adapted and the learners are treated the same way as their able-bodied peers.” (T6)*

*“Educators also try to cater for LVI by providing individual assistance to the learners.” (T5)*

These participants had a positive attitude towards IE. They believed it was a concept that allowed all learners to be accepted and ensured that they are all granted equal opportunities. Learners were of the idea that educators were dedicated to educating them. However, in terms of their peers, they were not so positive.

*“Attitudes of my peers is normal, but there are situations where I feel like I am an outsider.” (L6)*

*“My peers have a sympathetic attitude towards me and some do not associate themselves with me.” (L3)*

These two learner participants (L3, L6) were not satisfied with how they were treated by their peers. One sometimes felt like an outsider and the other felt her peers had a

sympathetic attitude towards her. This clearly shows that there is a huge role that still has to be played by learners and all other stakeholders to ensure that these learners feel human and loved too.

*“I feel as a country we are not yet at the stage to adopt inclusive education because the government has to initiate inclusion in the educator training colleges and universities or capacitate the educators who are already in the field through annual in-service workshops before rolling the programmes in the schools.” (T8)*

This participant (T8) said that the government had not covered much ground in this regard as educator training institutions that should be the pioneers of IE by teaching the educator trainees in colleges and universities about IE had not started this. She made a vital point when she said that the educators who were already in the field but were not trained in IE should be capacitated and receive annual in-service workshops to keep them abreast of the current trends. This is true because, if the Ministry of Education and Training thinks that educators should be positive towards IE without empowering and capacitating them on the concept, it will definitely not reap any positive results. The Ministry of Education and Training together with the SEN inspectorate have a major task of imparting knowledge on this concept to the educators who are in schools. If these educators were sensitised to IE, their fears would be addressed and some would become advocates of inclusion.

*“It is not working as the majority of learners in the class are usually normal therefore the few LVI in the classrooms are not properly attended to. To add to that, the classes usually have high numbers that hinder effective teaching and learning.” (T3)*

T3 felt that the number of learners with disabilities was lower as compared to the number of able-bodied learners. He also highlighted that the learners with disabilities were not attended to, mainly because of the high numbers in the class. The educators were said to be unable to properly attend to the needs of all the needs if the class sizes were high. There is a need for the schools to monitor the class sizes for effective teaching and learning. With large class sizes, learners with special needs will often be the most affected. The sentiments shared by T3 are similar to that shared by Sambo (2018). In her research, Sambo (2018) stated that overcrowding creates challenges

for educators as they may not notice and attend to learners who experience challenges in class. Often, pupils with learning challenges are ignored because of overcrowding and lack of space (Sambo, 2018). It is therefore vital for all learners, particularly those with visual impairments, to be accommodated in the teaching. Educators should have classes that allow them to accommodate all learners without leaving some behind.

The number of the learners with disabilities in the mainstream classes was also raised by T4. He alleged that the ratio of learners with disabilities versus the number of able-bodied learners was very low; thus, the learners living with disabilities are not granted enough attention. They are overshadowed by their able-bodied peers particularly because there are no teaching assistants in the classrooms. This participant also raised the issue of class size. He alleged that the success of IE will be stunted mainly because of the large class sizes. The educator will hardly have enough time to attend to each individual learner; thus, some learners who need attention will be left out.

*“The majority of my peers are friendly towards me, while others seem to ignore me and do not care.” (L2)*

*“I have very good relations with my peers. They often assist me in note-taking and to read longer pieces of writing.” (L5)*

*“LVI deserve to be in mainstream classrooms like all other able-bodied learners. They too deserve equal opportunities regardless of their disability.” (P2)*

Through semi-structured questionnaires with educators in the three inclusive schools in the Kingdom of Eswatini, it emerged that the attitudes of educators and learners were different towards the IE. Two participants (L2) and (L5) felt that they had good relations with their peers. L5 went on to explain that her peers even assisted her with note-taking and reading longer pieces of writing. This indeed was a positive sign.

Educator-participant (T3) stated that their colleagues were not happy to be teaching the LVI. They felt that they were overworked as the LVI teaching demanded that they go the extra mile to succeed academically.

*“Educators have a bad attitude. They feel that learners with such conditions need to have their own school mainly because they do not get extra pay for*

*teaching the LVI and are also not trained on how they can assist these learners.” (T4)*

Educator-participant (T4) argued that they were not given extra incentives for assisting the LVI and that this contributed immensely to the educators' bad attitude. He felt that they deserved to be remunerated for the extra work that they put in and be trained in teaching the LVI.

*“Teaching LVI is very cumbersome and demands hard work. Educators are not motivated to work harder because the pay we get is similar to mainstream schools.” (T4)*

Johnstone and Chapman (2009) concurred with T4. They argued that the government must offer incentives to motivate the educators. The educators declared that they struggled to teach learners with disabilities. The educators should be rewarded for their efforts in teaching diverse learners despite of the challenges that they encounter. Incentives could vary from capacity-building workshops to salary increases and allowances (Johnstone & Chapman, 2009).

Educator-participant (T2) said that other educators felt that it was difficult to work with LVI in the same class with those who can see because the LVI needed extra attention. She recommended that schools should have teaching assistants to assist in the day-to-day teaching. I concur with her as I realised the need for a teaching assistant when I observed the two lessons in one of the three inclusive schools. I noted the large class size, the pace of the lessons and realised that the service of a teaching assistant could be of value and assistance to the classes.

#### **4.4.3 Available Training Options for Educators who Work with LVI**

The profile information also shows that only one educator was trained in SEN (T2). She stated that she had received training at college level and was equipped with skills and knowledge for assisting the LVI. The numbers of trained educators in teaching the LVI is a disturbing sign mainly because for educators to successfully assist the LVI, they should be capacitated and trained on how best to reach out to the LVI. This, I believe, clearly shows that the country is a long way from confidently expecting success on the implementation of IE. Educators are the instrument that is needed to ensure success of IE, and if they are not trained on the subject, then its success rate

will be minimal. None of the principals were trained in IE in a formal institution but they had previously attended workshops on the concept. Principals are key figures in the schools and they are the 'engines' behind the schools. They should be conversant with SEN and IE to ensure its success. Questions asked in this regard were:

- Did you receive any assistance from the Educator Assistance Programme (EAP), or any capacity-building endeavour with regards to teaching the LVI? [T]
- Did you ever receive any support and training that educators receive with regards to the inclusion of LVI? Explain what makes you feel like that. [P]

Educator training should capacitate educators with knowledge and skills Sign Language and interpretation, Braille competency, curriculum differentiation, assessment strategies and giving assistance to diverse needs of learners with disabilities. Educators should be capacitated in developing and implementing IEP.

All three principals concurred that they had not been trained but had attended in-service workshops where they were capacitated on dealing with LVI. One principal participant (P3) stated that there is a need for government to engage them in annual refresher courses on inclusion to ensure that they are kept abreast of current trends. I felt that indeed this is a worthwhile suggestion mainly because the principals are not trained and qualified to handle special schools. They are not familiar with handling LVI; thus, a once-off workshop can never be enough. There is a need for frequent capacitation for the principals mainly because they are the brains behind the schools. There is a lot that schools and government could offer as support for LVI and there is still a lot to be done to ensure the success of IE.

It is important that the educators are trained and have adequate skills and knowledge of IE, to be able to affectively practice IE in learning institutions (Ralejoe, 2016). When educators lack training, inclusion practices within the school are compromised. Research studies have been advocating for all educator training institutions to teach IE to the learner-teachers as a means of preparing them for what lies ahead in a bid to improve IE globally (Engelbrecht et al., 2006).

#### 4.4.3.1 Forms of assistance available to the educators of the LVI.

This is a question that was given to the educators of the LVI:

What form of assistance would you like to receive? [T]

Their responses follow.

*“Training in using Braille. I would like to Braille learners’ work and also to transcribe Braille.” (T1)*

*“Training on working with the LVI so as to know how to reach out to them and instantly correct them.” (T7)*

*“Training on handling the visually impaired, reading and writing in Braille.” (P3)*

Most participants felt the need to be professionally trained in reading and writing in Braille and to understand the LVI in and out of school. The principal participants also wanted to be able to help the learners more thus they felt they needed training.

Congenitally legally blind adults that learnt Braille as their first route to communication usually have higher rates of employment, reach higher levels of education and are often financially stable, according to Bell (2010). There is a general consensus among scholars that an educator of the LVI is trained if they are eloquent in Braille, for correcting and prompting during teaching and creating instructional materials. Assuming that the Braille educator is sighted, they can learn to read Braille visually. This would allow the educator to read corrective feedback instantly to the child. This helps the LVI in that they get immediate response from the educator instead of waiting for the lengthy transcribing process.

#### **4.4.4 Experiences and Challenges when Teaching LVI**

There are many challenges that are faced by learners with special needs. The following is the question that was asked in the educator-participants’ semi-structured interviews:

- Are there any challenges that you face in class, on the sporting field or during play-time when teaching LVI? [T]
- How are your experiences in the inclusive schools? [L]

Responses included:

*“During extra-curricular activities, the LVI often do not have appropriate games that they can play.” (T7)*

*“Some LVI have difficulty in playing with other learners and tend to hide. They are often not willing to play with able-bodied learners and tend to withdraw if the games include other learners.” (T9)*

*“My experiences in a special school are beautiful. Knowing that I am a part of able-bodied learners shows that I am a normal being like them and has taught some of them to accept me and stop feeling I am a sorry sight.” (L5)*

The responses of the participants showed that there is still a hurdle that has to be overcome with regards to the LVI. The fact that some LVI do not have games that they can play during breaks is a very sad experience. There are many interesting games that these learners could play in a bid to have normal play-time too. The schools, the parents and the Ministry of Education and Training should find relevant games that they can play.

Some learners with special needs said that they would appreciate to be actively involved in sports and games but merely observed their peers in the playground playing while they could not participate. McLean, Headney and Gardner (2003) argued that the learners’ passive involvement in sports could be a result of a shortage of play tools that suit their disabilities and playgrounds. To improve engaging learners with disabilities in sporting activities calls for the institutions to tailor-make playgrounds that will suit the conditions of the learners with special needs and further purchase sporting tools to allow them a chance to participate too.

Kabeto (2015) stated that most of stakeholders believed that there were no adequate facilities and suitable infrastructure for learners with disabilities such as classrooms, dining halls, bathrooms, ICT facilities, playgrounds, science and language laboratories. If these facilities are inadequate for the learners with disabilities, the researcher believes that they feel left out and this impedes the learning process particularly where the LVI are involved.

Self-acceptance is defined as one's acceptance of all his or her attributes, whether negative or positive (Pillay, 2016). It encompasses self-protection, body acceptance and believing in one's capacities. There are three ways in which one can increase their self-acceptance:

- Self-awareness;
- Self-regulation; and
- Self-transcendence.

Self-acceptance may lead to the acceptance of other people. Encouraging one to be more accepting of their peers can boost their morale and create a positive teaching and learning environment. Acceptance holistically helps people to open their minds and comprehend different perspectives. It is possible to develop acceptance by acknowledging that people make mistakes (Griffin, 2020).

The guidance and counselling departments in schools have the task of counselling these learners towards self-acceptance and to step-in when they need help. Shutting themselves out can never be a solution for them. Learners are disturbed by the challenges and others opt to speak for their rights to entry while others begin to welcome and be content with these discriminatory practices. The schools' guidance and counselling departments should play a leading role in sensitising all stakeholders against discriminatory practices and further provide counselling sessions to learners who need it (Mosia, 2017).

#### **4.4.5 Curriculum Adaptations for the LVI**

Curriculum adaptation is the adaptation or modification of the curriculum to suit the diverse learners' needs in a class. Adapting a curriculum can mean changing the content, modifying the teaching methods and the learning content and adapting the assessment methods. It could mean breaking the class into groups of learners with mixed capabilities as learners often learn more from their peers. (Chauke, 2017). The questions asked in this regard were:

- Is the content accommodative and has it been adapted? [T]
- Has the content of the curriculum been adapted to accommodate LVI? If so, how? Please expand? [T]



- How has the curriculum been adapted to enhance true inclusion of LVI? [P]

The educator participants and school principals unanimously agreed that the content of the curriculum is not accommodative and has not been translated to assist the LVI in meeting their needs. The onus with regard to curriculum adaptation is on the Ministry of Education and Training and the NCC, who have the responsibility of ascertaining that the country's curriculum is tailor-made to meet the learners' needs. A rigid curriculum will disadvantage the learners with impairments and further ensure that they do not succeed effectively. If not adapted, failure of the LVI will be aggravated.

Madigan (2011) acknowledged that curriculum adaptation demands that the curriculum must be in place to meet the needs of the LVI in inclusion. This could be ensuring that the circumstances, nature of the learner's disability and strengths are considered and balanced.

#### **4.4.6 The State of the Teaching and Learning Physical Environment for LVI**

Educators have a responsibility of ensuring that the curriculum is differentiated and is at par with the school environment. A learning environment is the institution where learners are educated (Department of Basic Education South Africa (DBE SA) 2014(a)). This encompasses the psychological and the physical learning environment. The physical surroundings in a school encompasses the school as a unit, the classrooms, furniture and infrastructure. The psychological learning domain is the psychological and social effects that the learners relate to as they strive perform effectively and be socially sound (DBE SA, 2011).

The following were the responses of participants on the state of the teaching and learning physical environment with regards to the LVI.

*"It is not conducive. LVI often find themselves bumping into parked vehicles because the route they use to go to the resource centre is a car park." (T3)*

*"The ground that the LVI walk on is not level. It has numerous potholes. Just in front of all the classrooms, there is barbed wire which could injure the LVI." (T2)*

*"The route from the school to the hostel is an entry route to the mission. There are a number of speeding vehicles that drive past these learners and there*

*aren't even any road signs to warn drivers about these learners and caution them to drive slower.” (T7)*

*“There are no disability toilets, no teaching assistants and no side rails around passages and those for climbing steps.” (T10)*

*“There are steps and stairs that do not have rails and very short dangerous paths that could endanger the learner with visual impairments. The school is on very sloppy ground which is not ideal for LVI.” (P1)*

All the participants concurred that the schools' teaching and learning physical environments were not conducive to LVI. The lives of the LVI were often endangered and there was still a lot to be done to ensure that schools became safe havens for the LVI. These learning and teaching physical environments discriminated the LVI as they had challenges with moving around. The school terrain that has potholes created uncertainty to the LVI as they move around. They are a health hazard on the LVI as they tend to lead to injuries and on rainy days they often walk in puddles of water. This renders the schools an unsafe haven for the LVI. The sloppy terrain of a school discriminates the LVI and the absence of basic needs like disability toilets really discriminates the LVI.

Educators have a role of incorporating the physical, social and psychological needs of the learners as they plan their daily lessons to make these lessons to be at their level. For instance, educators have a role of assisting learners to be correctly positioned in the class with regards to their disabilities (Phala, 2019).

Sambo (2018) revealed that infrastructure affects the practices of IE. The DBE SA (2010) points out that classes must be reachable to all learners with special needs. The school should at least have one disability latrine that could be accessed by a person using a wheelchair and other toilets for both learners and educators. (Sambo, 2018).

#### 4.4.6.1 Universal design for learning

Universal Design for Learning (UDL) is an opportunity that grants all learners fair and equal chances of succeeding in the learning and teaching procedure (Morin 2014). It is flexible in allowing learners to access materials and engaging with them to show

what they have learnt. UDL's main goal is to use diverse techniques of teaching to eliminate barriers of learning thus allowing learners fair and equal opportunities. This flexibility within the use of teaching methods benefits all learners and allows them to show their strengths and needs. UDL has three main principles that define it (Morin, 2014). These are:

- Action and expression: UDL suggests giving learners different ways of interacting with materials and showing what they have learnt.
- Representing: UDL recommends giving learners more than one way of accessing information. When using textbooks, for example, learners would be allowed to get the hard copy of the textbook and also be provided with a video and an audio of the textbook so as to suit all the types of learners from visual, kinesthetic and to auditory learners.
- Engagement: UDL encourages all educators to look for different ways of motivating the learners and granting learners an opportunity to make skill-building feel like a game.

A universal design or inclusive design is a structure and design of the environment and how it can be used to its outmost by people of all ages and abilities, understood and accessed (Woodward, 2017).

The seven basic principles of universal designs are:

1. Equitable use: Designs should be marketable and useful to persons of different abilities.
2. Flexibility in use: Design should be accommodative to different abilities and preferences.
3. Intuitive and simple use: Design should be understandable to users of different languages, experiences and concentration level.
4. Perceptible information: Designs should communicate effective information to users of diverse sensory abilities.
5. Tolerance of errors: Designs should be able to minimise accidents, unintended actions and hazards.
6. Low physical effort: Designs must be utilised comfortably and efficiently with minimal exhaustion to the user.

7. Space and size for use and approach: Adequate space and size must be readily available to manipulate, reach and approach and the users should be able to use regardless of posture, body size and mobility.

Schools should ideally be universally designed to allow all users accessibility, convenience regardless of ability or age (Woodward, 2017). An accessible school allows all users to fully participate in their community. As people age, they require assistance; thus, it is important to have universally built spaces to allow them to continue being a part of the community.

#### **4.4.7 Assessing LVI**

Developing a socially just and enabling environment in schools relates to teaching, learning and assessments of and for learning. Provision of assessment opportunities for learners with sensory, physical, neurological and specific learning challenges is pivotal (Elmore, 2019). Guidelines for assessment in adaptations is mainly focused on assessment adaptations and methods of assessment (special concessions) for learners with challenges that hinder them from tabling their true reflection of skills and knowledge that they have acquired.

Guidelines for assessment adaptations are a useful roadmap that discuss ways of supporting learners with difficulties and gives techniques for adapting assessments. Dunbar-Krige (2014) discussed the contents of assessment adaptation as follows:

- Description of assessment adaptations;
- Curriculum adaptation;
- Identification of barriers to assessment;
- Principles of assessment;
- Specific learning challenges; and
- Procedures for administrative assessment adaptation.

LVI, particularly those with progressive sight, are usually referred to a government facility for further assessment to get specialised recommendations for individual educational provision. From this assessment, the relevant facility then recommends educational programmes. One usual provision is how much extra time an individual learner will need in assessments (Habulezi, 2012). LVI take their tests in a separate

room from other learners in order to accommodate the awarded extra time and because of the noise of Brailers (Habulezi, 2012). The question asked in this regard was:

LVI need more time during assessment. How do you accommodate this? [T]

Answers included the following:

*“During assessments, LVI write separately from other learners because they are granted extra time over the normal awarded time. LVI are often awarded 100% extra time during external examinations and writing in a separate room [which] ensures that they are not disturbed when the other learners finish writing.” (T8)*

*“For exams, the LVI use the resource centre and they are granted extra time.” (T1)*

The responses from the other participants were similar. In all three participating schools, LVI were given extra time to complete their assessments. The learners also wrote in separate rooms so that they were not disturbed when other learners finished the examination earlier. This was done for both internal and external assessments.

During assessments, educators must give learners with special needs adequate extra time to finish. Educators should award adequate and practical assistance to learners considering the nature of their disability (Chauke, 2017). Rampana (2015) highlighted that learners with SEN are awarded extra time and are assisted during assessments.

LVI should be given special concessions such as extra time and readers/scribes (Australian Disability Clearinghouse on Education and Training (ADCET), n.d.). ADCET maintains that the learning process of LVI may be affected in the following ways:

- LVI who access information with Braille cannot skim read; hence, they may take up to three times longer to access information.
- Learners with low vision often use enlarged print. All these learners need extra time to complete tasks.
- The LVI access information in a variety of ways. These may include Braille, audio-tapes and enlarged print.

- LVI often fall behind the class mainly because transcribing their work into Braille, audio-recording or enlarged print is often a lengthy process. While the class progresses, they often lag behind.
- Interaction and participation of the LVI is often limited. It is usually difficult for learners to feel comfortable to converse with people when you cannot see their body language. Knowing when to speak or join a discussion is difficult for the LVI.

#### **4.4.8 Available Equipment and Assistive Devices for the LVI**

Assistive technologies and devices are devices whose core mandate is to improve and maintain a learner's level of independence and functioning to ensure their overall well-being and participation is enhanced. These devices also help in curbing impairments and secondary health conditions. There are numerous assistive technologies and devices available in the market today that range from wheelchairs, reading pens, I-pads and tablets, walkers, crutches, hearing aids (WHO, n.d.).

The following questions were asked:

Does your classroom have any specialised equipment for LVI? (T)

What specialised equipment do they have and how do they use it? (T)

Eight of the educator participants for the LVI stated that their classrooms had no specialised equipment. Only two educator participants (T4, T7) both from School A, stated that their learners had Braille note touch books that allowed them to read texts in Braille and to also listen to audio recordings. The Braille note touch books contained all the textbooks that had been transcribed into Braille and they could also record audios using them. Answers included the following:

*The LVI have Braille note touch which is a gadget that is able to convert print or words into audio recordings.” (T4)*

*“LVI have Braille note touch books that has all the individual learner's books in Braille.” (T7)*

In the school for these two participants (T4, T7) learners would be given print books that were in soft copy from the NCC. These soft copies would be copied into the Braille note touch gadgets and they would then convert the words to audio-tapes. This helped

learners because they could hardly read in the past, particularly the bigger texts. Now the Braille note touch ensured that they could at least listen to the audio-recording of the text.

A majority of the participants agreed that none of the classrooms have any specialised equipment for LVI. The participants stated that LVI used materials that were used by other normal-bodied learners.

Adaptive Technology (AT) increases the independence, achievement and participation of a learner with disability (Willings, 2020). They help the LVI to increase their access to the curriculum and in turn improve their academic performance. AT devices are not meant to give the LVI an unfair advantage but a chance to compete effectively with their peers.

Assistive devices that are used by the visually impaired include the following (Illinois University Library, 2020):

- JAWS screen reader;
- Kurzweil education;
- Refreshable Braille displays;
- Canes;
- Electronic mobility aids;
- Service dogs;
- Ray electronic mobility aids; and
- Ultracanes.

D'Andrea (2012) maintained that the use of assistive technologies and materials can curb assessment related and instructional challenges particularly for the LVI and their educators.

#### **4.4.9 Available Methods or Approaches that Assist in Assessing the LVI**

To be able to reach out to the LVI, it is imperative to ensure that educators use suitable methods and approaches that assist in assessing the LVI. The question asked was as follows: Is there and specific method or approach that assists the assessment of LVI?

[T]

Responses included:

*“There is a specific approach in their assessment because with the LVI some questions are modified to accommodate them.” (T4)*

*“The LVI are sometimes awarded the services of a reader, who assists in reading their questions to speed up time for reading questions. Sometimes, LVI may be granted the services of a scribe who writes on behalf of the LVI. The LVI tells the scribe what to write and this is an exercise that cuts down on assessment time.” (T9)*

The services of a reader during assessments should be used to relieve the load of reading for the LVI. The role of a reader or scribe is to assist the learner during assessments (Clark, 2006). The services of a reader helps the LVI to access and read more reading materials. This would in turn improve their command, reading, writing, spelling and pronunciation of the language. These services of a reader or scribe are not intended to give advantage to the LVI or to compensate for a lack of attainment.

*“Some questions, like drawings, in the assessment of the LVI are modified to accommodate. Instead of a LVI being assessed on labelling the parts of a flower, he or she may be asked to list the parts of the flower.” (T7)*

#### **4.4.10 Teaching Reading and Writing to the LVI**

It is a common knowledge that the development of language of LVI is delayed, particularly those that are affected by early and severe impairments. There are a number of reading strategies for the LVI (Cushman, 2018.) The following are E-text strategies that can be used to assist LVI in reading:

- Provide E-text with refreshable Braille;
- Supply a none enhanced E-text;
- Magnify Text and / or computer screen;
- Supply auditory support for the E-text;
- Change appearance of background and/or text; and
- Supply tracking support for the E-text.



These are paper strategies that could be used by educators:

- Enlarge text and diagrams;
- Use hand-held magnification with regular text;
- Provide regular print;
- Provide large print versions of the texts;
- Provide paper copies in Braille; and
- Use stand-alone video magnification.

Auditory strategies include:

- Provide auditory books on CD;
- Use a live Reader; and
- Provide textbooks in digital audio format.

A question asked in this regard was: Do LVI often struggle with reading and writing? [T]. Some of the answers provided were:

*“They struggle to read and write as it is a cumbersome exercise, particularly with longer texts. With reading and writing, the LVI have challenges with pronunciation, spelling and word construction.” (T3)*

*“Yes, they struggle because some content may be abstract for LVI. Some learners have never experienced some of the ideas that they are supposed to write about, hence they find themselves not sure of some of their ideas and opinions. They also struggle to write compositions.” (T6)*

Early and severe impairments often affect the development of the language in some learners (Greenaway & Dale, 2017). The limited access to the environment and the different verbal feedback from different people received by the learners tends to cause differences. These learners lack references and are hardly connected to their parents (Bathelt, de Haan, Salt & Dale, 2018). Vision allows people to understand objects in context and holistically. Language usage in non-verbal patterns of communication differs with regards to posture, facial expressions, smiling, loudness and posture.

## 4.5 OBSERVATION

The observations schedule began with my being introduced to the participants and to the two classes where observation took place. While observing, I took the position of a non-participating observer who monitored the class from the back, to avoid disturbing the classes and to accurately record the class's progress.

Table 4.3: Checklist

Teaching Methods	Level of Availability		
	Available	Not available	Total
Using group discussions / collaborative learning	0 (0%)	4(100%)	4(100%)
Calling learners names	4(100%)	0(100%)	4(100%)
Extra time allowance	1(25%)	3(75%)	4(100%)
Using questions and answers	3(75%)	1(25%)	4(100%)
Sound projection	3(75%)	1(25%)	4(100%)
Using audio devices, tactile, and visual materials	0(0%)	4(100%)	4(100%)
Encouraging the use of learning devices	3(75%)	1(25%)	4(100%)
Adapting written texts	0(0%)	4(100%)	4(100%)

Teaching methods must be properly used and educators should have adequate abilities and skills to deal with the LVI in order to successfully impart knowledge to the learners (Kapur, 2013).

Table 4.4 presents the observed results, which shows that the observed lessons did not incorporate group discussions or collaborative learning. William Ngozi and Anthony (2020) revealed that learners that were taught Biology using collaborative instructional strategy (co-teaching) had better interests and achievements in assessments than those that were taught with the conventional methods. William et al. (2020) further concluded that collaborative instructional strategy must be adopted to improve interests and achievements in assessments. Kapur (2013) stated that co-teaching is when a class is taught by two educators at the same time. This is often when two educators share their diverse skills and complement each other while meeting the LVI's needs in an inclusive classroom.

The educators called out the learners' names during the lessons which was a positive sign that alerted the LVI about the activities of the class and who was expected to respond. The LVI were also called out on several occasions by the educators which showed that they were a part of the class. Their sound projection was on point, with the exception of a few instances where there was noise from the learners and the educator continued teaching and did not realise that they could not be heard. The educators also never took time to ask the class to be quiet; hence, the LVI were left out for that short period of time. Calling names and sound projection is very important for the LVI. The educator's voice must be loud, pleasant, coherent and interesting to listen to (Kapur, 2013). Educators should make use of simple communication and presentation.

Extra-time allowance granted to the LVI was minimal and barely enough to complete the given tasks. LVI are normally slower to complete their written tasks (Kapur, 2013). They take longer to read texts and reading Braille is time-consuming. Sadly, they need more time to integrate information that they receive through hearing (Kapur, 2013). This definitely increased their chances of failure on the given exercise. However, the educators solicited responses and views from the learners using questions and answers. Learners were also encouraged to probe further and to pose questions to their peers and the educator, thus promoting self-confidence and a chance to be heard.

The educators in the observed lessons had no teaching aids in the form of audio, visual or tactile materials that could enhance the teaching and learning process. Since there are different kinds of learners who may be visual, auditory or kinaesthetic learners; they all should be catered for during lessons. Verbal learning proves to be beneficial to the LVI (Kapur, 2013). Incorporating audio, non-optical devices and optical devices is of great help to the LVI. The non-optical and optical devices have a role of improving the learners' other senses and to improve vision. Some of the LVI have Braille note touch books that they use. The educators encouraged and motivated these blind learners to use these gadgets. The written texts should be tailor-made to adhere to the needs of the LVI. This hindered their learning and denied them a chance to have equal and fair opportunities like other learners.

Visual aids are essential in the teaching and learning process. There are several available devices that can be used in the class to motivate and encourage learners and to make learning interesting (Ghulam, 2015). Learners find the use of learning aids useful and relevant. It aids in developing one's understanding of the learning areas as they experience success in the class.

#### **4.6 DOCUMENT REVIEW**

This part of the study analysed the mission and vision statements of the three inclusive schools that were used earlier (Appendix M). The vision and mission statements were analysed to see if they embraced the inclusion of LVI.

There is often a lack of formulation of clear procedures and policies on IE (Kapur, 2013). Educators and staff members have a responsibility of formulating policies that are roadmaps and are pivotal for the provision of education among the LVI.

I noted this in two of the participating inclusive schools. The mission and vision statements did not embrace IE. These two mission and vision statements highlighted quality teaching and learning, academic excellence, life skills development and nurturing responsible and economically able citizens with good morals. They were both silent on inclusion and learners with special needs. The researcher noted that for both institutions, the mission and vision statements were displayed clearly in the schools' entrance halls.

Only one of the schools had a mission and vision statement that embraced the inclusion of the LVI. Sadly, this school's mission and statement was not displayed for all to see. The researcher noted that by virtue of it not being displayed clearly meant that it did not serve its purpose.

The other documents that were analysed were the two lesson plans of the lessons that the researcher observed during observation (Appendix L). When analysing the lesson plans, I expected them to be embracing of IE and particularly LVI. They were screened to promote IE in the classroom. The two lesson plans partially embraced inclusion of the LVI.

I found that all three sampled schools did not have an admission policy which could act as a roadmap and be a guide for the schools with regards to new admissions. This

vital policy document should be formulated by the schools. Such policies also shed light on the milestones covered by the schools in implementing an IE system.

#### **4.7 CHAPTER SUMMARY**

Chapter 4 tabled the participants' responses in line with the aims, research questions and research objectives. The following chapter tabled summarised research results and drew conclusions. It made suggestions that could improve the education of the LVI in inclusive schools, outlined the limitations and strengths of the study and provided recommendations for future study.

## **CHAPTER 5:**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 INTRODUCTION**

The previous chapter presented the research results guided by the aim of the research and the research questions. Participants' responses to the data instruments aimed to explore conditions of education provision and constraints encountered when implementing IE in three inclusive high schools in the Kingdom of Eswatini with the aim of highlighting and alleviating the specific barriers experienced by the LVI daily. Chapter 5 summarised the research findings and drew conclusions. It made suggestions that could improve the education of the LVI in inclusive schools in the Kingdom, outlined the limitations and strengths of the research and made suggestions for future research.

Research objectives that were specific were:

- To establish the education conditions in which LVI find themselves in, in schools in the Kingdom of Eswatini.
- To establish educational constraints encountered by both educators and LVI and how they could be addressed in schools in the Kingdom of Eswatini.
- To establish best classroom practices for LVI in the Kingdom of Eswatini.

#### **5.2 SUMMARY OF CHAPTERS**

This research aimed to explore LVIs' experiences in inclusive high schools in the Kingdom of Eswatini with the objective of highlighting the barriers they experience.

Chapter 1 introduced the basis and main reason of the study. It provided an in-depth background to the research problem. Chapter 2 reviewed literature on learners living with special needs, particularly the LVI. It analysed the literature while following different views of other researchers for a deeper understanding of the daily experiences of LVI, challenges that hinder learning achievement and the opportunities that are available to these learners in education. Chapter 3 presented the methodology, research instruments, the research design, sampling, collection of data, analytical strategies, procedures, data analysis, and ethical issues. It also discussed the research paradigm involving epistemology, ontology and axiology. Chapter 4

presented the results of the research that were linked to the research questions and the aim of the research. This chapter also looked at unitisation, data coding, categorising and presenting the emerging themes. Data was interpreted and analysed in line with the literature review in Chapter 2.

### **5.3 FINDINGS OF THE RESEARCH**

This study earmarked three inclusive schools in the Kingdom of Eswatini that specifically accommodate LVI. The focus was on how the LVI experienced education in the three inclusive high schools. This research hoped to aid the educators so that they may have an understanding and insight into the difficulties that they face daily when carrying out their duties. They could use this study as a platform for their voices to be heard. It further hoped to find means and ways of meeting learners' needs and their own in an adaptive and sufficient way. It aimed to get to the main reason that leads to the poor academic results of the LVI and how best they could be assisted while addressing the daily difficulties faced by these learners by observing them during learning; listening to how they experience education; and sensitising all stakeholders on how best they can assist these learners for a better academic performance.

Under document review, it emerged that there are minimal educators who are trained in IE in schools. It also transpired that there is still a lot that can be done by educators in their classes to involve the LVI and make sure that they are not left behind; however, the starting point is ensuring that educators are either trained in colleges and universities on IE needs or in-service to be up-to-date with the current trends.

Document review also showed that some of the schools' mission and vision statements did not embrace IE. The researcher also noted with concern that out of the three inclusive schools, only one school had a mission and vision statement that embraced IE, but sadly it was not displayed for all to see.

The analysis of data and the results of this study show that there is a lot that has to be done with regard to in-service and pre-service educator training, a shortage of resources, poor infrastructure and large class sizes, are some challenges of IE. Ideally, educators should be trained in Braille and Braille transcription for easier teaching and learning. The LVI must have age-appropriate games that they can play during sports periods.

The NCC has a mammoth task together with the Ministry of Education and Training to guarantee that the curriculum for the LVI is adapted and tailor-made to assist in meeting the learners' needs. Schools should improve the physical environment to meet the learners' needs. Lastly, the mission and vision statements of the schools are the roadmaps that the schools follow. It is imperative therefore that these statements should embrace inclusion as purported in the EDSEC policy (The Government of the Kingdom of Eswatini, 2018).

In summary, objective 1 of the study was met because this study created a platform for looking into the conditions in which the LVI find themselves in the inclusive high schools in Eswatini. I experienced the way in which the LVI experienced education as I interacted with learners, educators and principals while collecting data.

Objective 2 of the study which spoke to determining the constraints encountered by educators and the LVI in the Kingdom of Eswatini was met as I identified the challenges faced by these two groups. It also looked at how best the challenges faced by educators and learners may be addressed.

Objective 3 of the study was concerned about establishing classroom practices for the LVI in the Kingdom. I reached out to the participants with the aim of understanding their practices and made recommendations on how these could be improved.

#### **5.4 LIMITATIONS OF THE STUDY**

While conducting this research, these factors were limitations:

- The Kingdom of Eswatini has four regions. The three participating schools were found in urban and semi-urban areas in the Lubombo, Hhohho and Manzini regions. The Kingdom has a total of 252 high schools. This is a limitation to the research as the findings of this research cannot be generalised to stand in place of the whole population.
- There is not much research that has been done on the education of LVI in inclusive schools. Available literature on this subject is minimal.
- The current Covid-19 pandemic caused considerable delays during this study. Schools were closed from March to July 2020 and I could not collect data. Even when schools eventually opened, individuals coming to school were very limited. Collecting data took a long time as schools feared contact with the individuals from



outsiders. Getting a chance to observe lessons was tiresome as I dealt with a number of cancellations from schools and participants. This meant extending the data collection period.

## 5.5 CONCLUSIONS

Considering the aforementioned research questions, the following are the conclusions that emerged.

- This study revealed that educators understand IE differently from each other although they generally have a positive attitude towards IE.
- Educator training on IE is inadequate. Training educators in teaching LVI is vital. Educators would appreciate being trained on Braille and transcribing work for LVI. This notion is supported by Ralejoe (2016) who argued that it is imperative that educators are trained and have sufficient knowledge of IE, to successfully practice it.
- Schools' poor infrastructure, shortage of resources and large class sizes are barriers to success in IE. There is a need to have disability toilets, and the immediate removal of perilous items like barbed wire or thorny bushes to improve the safety of the LVI. (Sambo, 2018) concurs that infrastructure affects the practices of IE. (DBE, 2010:) advocates for all classrooms to be reachable to all learners with disabilities and that schools should have adequate access to toilets for the staff and learners, plus at least one disability toilet that can be used by people in wheelchairs (Sambo, 2018). There is also a need to upgrade the physical environment to be accessible to the LVI. Participants also highlighted the need for disability toilets, teaching assistants and removal of thorny bushes and barbed wire that has to be attended promptly in some of these schools.
- LVI do not have age-appropriate games to play during sporting periods. Kapur (2018) maintained that it is important for the LVI to socialise with their peers and not be confined to their homes. These games assist in the holistic growth of learners' skills and allows them to learn different concepts that could enrich their lives.
- The curriculum must be adapted so that it meets the needs of the LVI. Maguvhe (2006) and Madigan (2011) concurred that curriculum adaptation is important to the LVI in the inclusive classroom.

- The services of a reader during assessments should be used to relieve the load of reading for the LVI. The role of a reader or scribe is to assist the learner during assessments (Clark, 2006). They read or write for the learner but must understand that they are write what has been strictly said by the learner The services of a reader helps the LVI to access and read more reading materials. This would in turn improve their command, reading, writing, spelling and pronunciation of the language.
- There is a need for classrooms to have specialised equipment or AT to enhance the learning process of the LVI. AT increases the independence, achievement and participation of a learner with disabilities (Willings, 2020). They help the LVI to increase their access to the curriculum and, in turn, improve their academic performance.

## **5.7 RECOMMENDATIONS**

This research aims to explore LVIs' experiences in inclusive high schools in the Kingdom of Eswatini with the objective of highlighting the barriers they experience.

The following are recommendations:

### **5.7.1 Educator Training**

It is recommended that the Ministry of Education and Training should invest more in pre-service and in-service training for educators who are new in the field and for those that are already in the field on IE. The act of mainstreaming IE without adequate educator training and capacitation means that IE will not succeed. In-service training programmes should ideally be annual as educators should be kept abreast of current trends on IE.

The EFA (UNESCO, 1990) stated that educator training is one sign of educator effectiveness that is an important element in improving the quality of basic education for all. Educator training is the second target of the MDGs. It suggests a need for capacitating extra educators, and continuously effective retraining for them to adhere to the universal primary education goal (United Nations, 2008). The MDGs Report (United Nations, 2015) provides the example of India as one country which has successfully adopted these goals in improving the country's education system.

Educator training is one of the important factors for imparting quality education and achieving quality education that can be accessed by all.

It is suggested that educators of LVI be sensitised, capacitated and conversant with Braille and Braille transcription to be able to read learners' work and give immediate feedback instead of waiting for the lengthy transcribing process by the resource centres. In-service educator training develops educators' abilities and skills to meet the needs of learners (Vorapanya & Dunlap, 2014).

### **5.7.2 Resources and Services to Support Learning**

It is suggested that the Ministry of Education and Training should attend to the lack of resources, poor infrastructure and large class sizes which are all barriers to successful IE. If these are not addressed, the success rate of IE will be minimal as these are some of the barriers to IE.

Information technology, for example, uses computers which could be used for administrative, teaching and learning. Shortage of electricity, on the other hand, renders information technology useless in such a context. The shortage of resources is a serious challenge that negatively affects learning in the classes. Sambo (2018) stated that overcrowding creates challenges for educators as they may fail to identify and attend to learners who experience challenges in class. Often, learners with special needs are ignored owing to overcrowding and lack of space thus the teaching and learning process is disturbed.

### **5.7.3 Accessible Games and Entertainment Activities**

It is recommended that the LVI have age-appropriate games that they can play during play-time and a chance to be involved in physical education. Conroy (2012) monitored the physical education educators' experiences in embracing the curriculum needs of LVI in inclusive classes. The findings of the research recommended that the IE of the LVI was a positive experience for the LVI and their classes. Having the LVI in inclusive classrooms promoted interaction amongst peers and developed their social skills (Conroy, 2012).

#### **5.7.4 Curriculum Adaptation**

It is recommended that the adapted curriculum should meet the needs of the LVI. Adapting the curriculum will ascertain that the learners learn all subjects and further understand the entire curriculum. Tomlinson (1999) stated that, through curriculum adaptation, educators are able to identify learners' starting points and adjust the content, thus improving the learners' achievements and engagement with the curriculum.

#### **5.7.5 Psychosocial Environments**

It is recommended that the inclusive schools' improve their teaching and learning physical environment to adhere to the needs of the LVI. Their physical environment should avoid steps because they hinder the normal activity of the LVI. Sambo (2018) revealed that infrastructure affects the practices of IE. Schools should have teaching assistants to aid the classroom educator and disability toilets. They should remove dangerous items like barbed wire and thorny bushes as they are perilous to the LVI.

It is recommended that educators should infuse the physical, social and psychological needs of the learners into their lesson preparations to allow all learners to feel accepted. It is the responsibility of the educator that these learners are placed in a convenient place in the classroom (Phala, 2019).

#### **5.7.6 Special Concessions**

It is recommended to have a reader during assessments as the service of a reader tends to lessen the reading load on the LVI. The role of a reader or scribe is to assist the learner during assessments (Clark, 2006). They read or write for the learner but must understand that they must write what has been strictly said by the learner

#### **5.7.7 Assistive Devices and Technologies**

It is recommended that all classrooms in the inclusive schools should have specialised equipment to enhance the teaching process of the LVI. The LVI need the specialised equipment so as to function effectively in the school environment (Francis & Clark, 2003). Schools that do not have the Braille note touch books are encouraged to procure them or purchase alternative AT that would assist in improving the LVIs' learning.

### **5.7.8 Provision of Learning Support Teaching Materials**

It is recommended that LVI must be provided with more reading materials to improve their command of reading, writing, spelling and pronunciation of the language. Practice in this regard is the only solution for the language acquisition of LVI. Willings (2017) stated that literacy and reading skills are the foundational skills that allow learners to access all areas of the curriculum. The educator is therefore responsible for determining the primary reading mode (Willings, 2017).

### **5.7.9 Inclusive Education Schools' Visions and Missions**

It is suggested that schools that embrace inclusion should have mission and vision statements that embrace it. These mission and vision statements should further be displayed so as to be a constant reminder to all stakeholders. All other policy documents should be accessible to all stakeholders.

### **5.7.10 Infrastructure**

The infrastructure is an important part of the learning institution (Khumalo & Mji, 2014). The school's basic infrastructure allows educators and learners to enter a wide range of resources, services and tools to aid learning and teaching.

It is suggested that inclusive schools be built in adherence to the universal built designs so as to be accessible, understandable and utilised to the outmost possible extent by all people (Woodward, 2017).

## **5.8 RECOMMENDATIONS FOR FUTURE RESEARCH**

While writing this research, I noted several issues that deserved to be addressed. I recommend the following items for further study:

- It is recommended that the Kingdom of Eswatini conducts a large scale research on the inclusion of LVI countrywide.
- It is recommended that Eswatini conducts studies on the IE of the LVI as well as other learners with other impairments such as hearing impairments, autism, physical impairments, albinism, cerebral palsy et cetera.
- It is suggested that Eswatini conducts study on the general perceptions of educators on IE.

- It is recommended that the Kingdom of Eswatini conducts a comparative study on IE with neighbouring countries.
- It is recommended that research is conducted on parents' perceptions on IE in the Kingdom of Eswatini.

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## APPENDIX A: ETHICAL CLEARANCE



### UNISA COLLEGE OF EDUCATION ETHICS REVIEW COMMITTEE

Date: 2020/03/11

Ref: **2020/03/11/43427030/01/AM**

Name: Ms NT Maseko

Student No.: 43427030

Dear Ms NT Maseko

**Decision:** Ethics Approval from  
2020/03/11 to 2023/03/11

**Researcher(s):** Name: Ms NT Maseko  
E-mail address: homsachunku@gmail.com  
Telephone: (+268) 7612 3010

**Supervisor(s):** Name: Professor M. Maguvhe  
E-mail address: maguvmo@unisa.ac.za  
Telephone: +27 12 481 2716

**Title of research:**

**A discourse of the education of learners with visual impairments in the kingdom of ESwatini.**

**Qualification:** MEd Inclusive Education

Thank you for the application for research ethics clearance by the UNISA College of Education Ethics Review Committee for the above mentioned research. Ethics approval is granted for the period 2020/03/11 to 2023/03/11.

*The **medium risk** application was reviewed by the Ethics Review Committee on 2020/03/11 in compliance with the UNISA Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.*

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the UNISA College of Education Ethics Review Committee.



University of South Africa  
Pretorius Street, Midrand, Johannesburg, City of Johannesburg  
PO Box 392, UNISA 0003, South Africa  
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4130  
www.unisa.ac.za

3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing.
5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data requires additional ethics clearance.
7. No field work activities may continue after the expiry date **2023/03/11**. Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

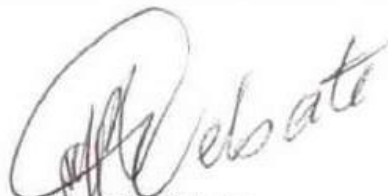
*Note:*

*The reference number **2020/03/11/43427030/01/AM** should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.*

Kind regards,



**Prof AT Motlhabane**  
**CHAIRPERSON: CEDU RERC**  
motlhat@unisa.ac.za



**Prof PM Sebate**  
**ACTING EXECUTIVE DEAN**  
Sebatpm@unisa.ac.za



## **APPENDIX B: REQUEST PERMISSION TO CONDUCT RESEARCH AT SCHOOLS**

Title of the research: "Exploring Learners with Visual Impairments' experiences in inclusive high schools in the Kingdom of Eswatini."

Dr N. L. Dlamini  
The Director of Education  
Ministry of Education and Training  
P. O. Box 39  
Mbabane  
H100

Dear Madam

I, Nomsa Treasure Maseko, am doing research under supervision of M. Maguvhe, a professor in the Department of Inclusive Education towards a Master's in Education at the University of South Africa. I am asking for permission to carry out a study at St Joseph's High School, St Francis High School and Evelyn Baring High Schools. These three schools are all-inclusive schools. We have funding from Canon Collins for registration and tuition. This study is entitled "Exploring Learners with Visual Impairments' experiences in inclusive high schools in the Kingdom of Eswatini."

The aim of the study is to explore conditions of education provision and constraints encountered when implementing inclusive education in high school with the aim of highlighting and alleviating the specific **barriers** experienced by the LVI in their day-to-day school activities. These schools have been selected because they are inclusive schools that have LVI that are information-rich cases.

The study will entail the data collection in the form of semi-structured questionnaires, observation and document analysis. This study hopes to benefit educators in that they may understand and have insight on the difficulties that face them, in turn addressing the challenges that are faced by the LVI. Potential risks include social and emotional risks on the participants which may come as a result of sharing or relaying information that would have otherwise been kept confidential and may embarrass the participants. The researcher will promptly avail counselling sessions to participants who will need it. There will be no reimbursement or any incentives for participating in the research. Feedback will be relayed by the researcher at the end of the research through a meeting.

Yours sincerely

Nomsa Treasure Maseko  
Researcher

## APPENDIX C: RESPONSE LETTER FROM MINISTRY

The Government of the Kingdom of Eswatini



Ministry of Education & Training

Tel: (+268) 2 4042491/5  
Fax: (+268) 2 404 3880

P. O. Box 39  
Mbabane, ESWATINI

10<sup>th</sup> July, 2020

Attention:

Head Teacher:

St Joseph's High School	Evelyn Baring High School
St Francis High School	

THROUGH

Hhohho, Manzini and Shiselweni Regional Education Officers.

Dear Colleague,

**RE: REQUEST FOR PERMISSION TO COLLECT DATA FOR UNIVERSITY OF SOUTH AFRICA – MS. NOMSA TREASURE MASEKO**

1. The Ministry of Education and Training has received a request from Mrs. Nomsa Treasure Maseko, a student at the University of Pretoria that in order for her to fulfill her academic requirements at the University she has to collect data (conduct research) and her study or research topic is: "*La Discourse of the Education of Learners with Visual Impairments in the Kingdom of Eswatini: Research Proposal Version*". The population for her study comprises of sixteen teachers and eight learners from each school of the above mentioned schools. All details concerning the study are stated in the participants' consent form which will have to be signed by all participants before Ms. Maseko begins her data collection. Please note that parents will have to consent for all the participants below the age of 18 years participating in this study.
2. The Ministry of Education and Training requests your office to assist Ms. Maseko by allowing her to use above mentioned schools in the Hhohho, Manzini and Shiselweni regions as her research site as well as facilitate her by giving her all the support she needs in her data collection process. Data collection is one month.

Handwritten signature of Dr. N.L. Dlamini.

**DR. N.L. DLAMINI**  
DIRECTOR OF EDUCATION AND TRAINING

cc: Regional Education Officer – Hhohho, Manzini and Shiselweni  
Chief Inspector – Secondary  
3 Head Teacher of the above mentioned school  
Professor Mbulaheni Maguvhe – Research Supervisor

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## **APPENDIX D: LETTER TO THE PRINCIPAL REQUESTING PERMISSION**

P. O. Box C2035

Hub

Manzini

15<sup>th</sup> March 2020

### Request for permission to conduct a research in your school

Title of the research: "Exploring Learners with Visual Impairments' experiences in inclusive high schools in the Kingdom of Eswatini."

The Principal

Dear Sir /Madam

I, Nomsa Treasure Maseko, am doing research under supervision of M. Maguvhe, a professor in the Department of Inclusive Education towards a Master's in Education at the University of South Africa. We have funding from Canon Collins for registration and tuition. We are inviting you to participate in a study entitled "Exploring Learners with Visual Impairments' experiences in inclusive high schools in the Kingdom of Eswatini."

The aim of the study is to explore conditions of education provision and constraints encountered when implementing inclusive education in high school with the aim of highlighting and alleviating the specific barriers experienced by the LVI in their day-to-day school activities. Your school has been selected because it is an inclusive school that has LVI that are information-rich cases. It has also been earmarked since it is within the radius of the researcher's work place.

The study will entail the data collection in the form of semi-structured questionnaires, observation and document analysis. This study hopes to benefit educators in that they may understand and have insight on the difficulties that face them, in turn addressing the barriers that are faced by the LVI. Potential risks include social and emotional risks on the participants which may come as a result of sharing or relaying information that would have otherwise been kept confidential and may embarrass the participants. The

researcher will promptly avail counselling sessions to participants who will need it. There will be no reimbursement or any incentives for participation in the research. Feedback will be relayed by the researcher at the end of the research through a meeting.

Yours sincerely

.....

Nomsa Treasure Maseko

Researcher

**(Return slip)**

I, \_\_\_\_\_(participant name): confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the questionnaire and observation.

I have received a signed copy of the informed consent agreement.

Participant Name & Surname (please print) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Participant Signature

Date

Researcher's Name & Surname (please print) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Researcher's signature

Date

## **APPENDIX E: LETTER TO THE PARTICIPANTS REQUESTING THEM TO PARTICIPATE**

P. O. Box C2035

Hub

Manzini

15<sup>th</sup> March 2020

### Request for permission to participate in a research

Title of the research: "Exploring Learners with Visual Impairments' experiences in inclusive high schools in the Kingdom of Eswatini."

The participant

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Dear Sir /Madam

I, Nomsa Treasure Maseko am doing research under supervision of M. Maguvhe, a professor in the Department of Inclusive Education towards a Master's in Education at the University of South Africa. We have funding from Canon Collins for registration and tuition. We are inviting you to participate in a study entitled "Exploring Learners with Visual Impairments' experiences in inclusive high schools in the Kingdom of Eswatini."

The aim of the study is to explore conditions of education provision and constraints encountered when implementing inclusive education in high school with the aim of highlighting and alleviating the specific barriers experienced by the LVI in their day-to-day school activities. Your school has been selected because it is an inclusive school that has LVI that are information-rich cases. It has also been earmarked since it is within the radius of the researcher's work place.

The study will entail the data collection in the form of semi-structured questionnaires, observation and document analysis. This study hopes to benefit educators in that they may understand and have insight on the difficulties that face them, in turn addressing the barriers that are faced by the LVI. Potential risks include social and emotional risks on the participants which may come as a result of sharing or relaying information that would have otherwise been kept confidential and may embarrass the participants. The



researcher will promptly avail counselling sessions to participants who will need it. There will be no reimbursement or any incentives for participation in the research. Feedback will be relayed by the researcher at the end of the research through a meeting.

Yours sincerely

.....

Nomsa Treasure Maseko

Researcher

**CONSENT TO PARTICIPATE IN THIS STUDY (Return slip)**

I, \_\_\_\_\_(participant name): confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the questionnaire and observation.

I have received a signed copy of the informed consent agreement.

Participant Name & Surname (please print) \_\_\_\_\_

\_\_\_\_\_

Participant Signature

\_\_\_\_\_

Date

Researcher's Name & Surname (please print) \_\_\_\_\_

\_\_\_\_\_

Researcher's signature

\_\_\_\_\_

Date

## **APPENDIX F: LETTER REQUESTING PARENTAL CONSENT FOR MINORS TO PARTICIPATE IN A RESEARCH PROJECT**

**Dear Parent**

Your \_\_\_\_\_ (child/daughter/son) is invited to partake in a research entitled “Exploring Learners with Visual Impairments’ experiences in inclusive high schools in the Kingdom of Eswatini”.

I am undertaking this research as part of my Master’s research at the University of South Africa. The purpose of the research is to explore conditions of education provision and constraints encountered when implementing inclusive education and the practical benefits of the research include assisting educators to gain insight on the difficulties that they face in executing their duties, in turn addressing the challenges faced by the learners with visual impairments. All stakeholders will benefit by being empowered and capacitated with knowledge that will come as a result of this study to become better advocates for all persons with visual impairment. I am seeking consent to incorporate your son or daughter in this research because she or he is an information-rich case to this research. I hope to have five other learners partaking in the research.

If you allow your child to participate, I shall request him/her to:

- Answer a questionnaire on different aspects of his or her school life in school. The duration for completing each questionnaire will not exceed an hour. Your child will be given a questionnaire that he / she will answer during his or her spare time in school. Once he or she has filled in the questionnaire, the researcher will be given the questionnaire.
- Be part of a class that will be observed during lesson times in the school. The teacher will be teaching the class while the researcher will observe the lesson.

Information acquired while conducting this research and can be associated with your child will remain confidential and will be disclosed with your authority. Your child’s responses will not be associated with his/her name or your name or the school’s name based on the research.

There are no risks that the researcher could foresee to your child by being involved in this research. There are no directs that your child will benefit from being involved in the research; however, the possible benefits include understanding and having insight on the difficulties that educators face in executing their duties, while attending the barriers faced by LVI. By empowering and capacitating all stakeholders with knowledge will result in them becoming better advocates for all learners with visual impairment. There is no payment that will be received by you or your child for being involved in this research.

Your child's involvement in this research is voluntary. Your child may at any time withdraw from the study. Refusal or withdrawal to be involved will not disturb him/her in any way. You are also permitted to allow your child to participate in the research now and later change without any penalty.

This research will take place during regular classroom time with the written approval of the school and the educator that teaches your child. If you do not want your child to be involved, a separate task will be available in the form of visiting the school library.

In addition to you permitting your child, he or she should be willing to be a part of the research. Your child will be asked to sign an assent form that goes together with this letter. If your child is not willing to be a part of this research, he or she will not be involved and there will be no punishment. The gathered information from the research and the involvement of your child in the research will be securely preserved in my office in a password locked computer for five successive years after the research. The records will then be erased.

The research wishes to assist educators in that they may comprehend and have insight on the difficulties that face them, in turn addressing the difficulties that face LVI. Potential risks include social and emotional risks on the participants which may come as a result of sharing or relaying information that would have otherwise been kept confidential and may embarrass the participants. There will be no incentive or payment for being involved in the study. Feedback will be relayed by the study at the end of the research through a meeting.

If there are any questions about this research, please ask me or my study supervisor, Prof Mbulaheni Maguvhe, Department of Inclusive Education, College of Education, University of South Africa. My contact number is +268 7612 3010 and my e-mail is nomsachunku@gmail.com. The e-mail of my supervisor is maguvmo@unisa.ac.za. Authority to conduct this research has been granted by the Ministry of Education and Training, The Principal and the Ethics Committee of the College of Education, UNISA.

By deciding to allow your child to participate in this research, you are making a decision. Your endorsed signature beneath this document is proof that you read and allow your child to participate in this research. You may keep a copy of this letter.

Name of child: \_\_\_\_\_

Sincerely \_\_\_\_\_

_____	_____	_____
Parent/guardian's name (print)	Parent/guardian's signature:	Date:

_____	_____	_____
Researcher's name (print)	Researcher's signature	Date:

## **APPENDIX G: A LETTER REQUESTING ASSENT FROM LEARNERS IN A SECONDARY SCHOOL TO PARTICIPATE IN A RESEARCH PROJECT**

Title: "Exploring Learners with Visual Impairments' experiences in inclusive high schools in the Kingdom of Eswatini."

Dear \_\_\_\_\_

Date \_\_\_\_\_

I am doing research on Visual Impairments as part of my studies at the University of South Africa. Your principal has granted me authority to do this research in your school. I would like to send an invite to you to partake in this research. I have chosen to do this research to find ways that your educators, principal and the Ministry of Education and Training can use to alleviate challenges faced by LVI. This may assist you and many other learners of your age in different learning institutions.

This letter aims to explain to you what I would like you to do. There may be several words that you may not know in this letter. You are allowed to ask me or any other adult to explain any words that may not know or comprehend. A copy of this letter can be taken home to thoroughly think about my invitation and engage your parents prior to deciding if you want to partake in this research.

I would like to ask you to individually complete a questionnaire which will be filled in by an overall of 16 participants. Responding to a questionnaire will take about an hour.

A report will be written on the research but your name will not or anything you say that will let other people know who you are will not appear. Your participation in this research is voluntary and if you do not want to be a part of the research, you will not take part. If you choose to be in the study, you may stop taking part at any time without punishment. You are free to tell me if you do not want to answer any questions and you will not be blamed or criticised. When I have completed my study, I shall return to your school to talk about some of the interesting and helpful ideas I unearthed in this research. You will be invited to listen to my talk.

The research hopes to benefit educators in that they may understand and have insight on the difficulties that face them, in turn addressing the challenges that are faced by the LVI. Potential risks include social and emotional risks on the participants which

may come as a result of sharing or relaying information that would have otherwise been kept confidential and may embarrass the participants.

You will not receive any incentives nor will you receive refunds for participating in this study.

If you finally choose to partake in my research, you will be asked to endorse your signature in the form on the next page. If you have questions about this research, you can talk to me or you can have your parent or another adult call me at +268 7612 3010. Please do not sign the form until all your questions and concerns have been addressed.

Researcher: Nomsa Treasure Maseko Phone number: +268 7612 3010

Do not sign the written assent form if you have any questions. Ask your questions first and ensure that someone answers those questions.

**WRITTEN ASSENT**

I have read this letter which asks me to be part of a study at my school. I have understood the information about my study and I know what I will be asked to do. I am willing to be in the study.

\_\_\_\_\_

Learner's name (print): Learner's signature: Date:

\_\_\_\_\_

Witness's name (print)      Witness's signature Date:

(The witness is over 18 years old and present when signed.)

\_\_\_\_\_

Parent/guardian's name (print) Parent/guardian's signature: Date:

\_\_\_\_\_

Researcher's name (print) Researcher's signature:      Date:

## **APPENDIX H: OBSERVATION CHECKLIST**

Under this question, the following aspects were considered.

The following is a list of items that will be noted for classroom observation

- (i) Using group discussion/ Collaborative learning
- (ii) Calling learners' names
- (iii) Extra time allowance
- (iv) Using questions and answers
- (v) Sound projection
- (vi) The use of teaching materials, for an example; visual, audio devices and tactile materials
- (vii) Encouraging the use of learning devices
- (viii) Adapting written texts

## **APPENDIX I: SEMI-STRUCTURED QUESTIONNAIRE FOR LVI**

This questionnaire is based on sub-question 1.

### **Main question.**

How are the daily experiences of LVI in schools in the Kingdom of Eswatini?

### **Sub-questions:**

1. When you arrived at your school, did you receive any introductory session to familiarise you with the physical environment? Expand and tell me more about this.
2. Have you made any sighted friends in the school? How many are they? If you haven't made any sighted friends, explain why?
3. Do you have teaching assistants that assist you in the class?
4. Is there any support that is offered to you in class? Please explain what makes you feel like that.
5. Explain the attitudes of your peers during classroom activities. How do they treat you?
6. How are your experiences in the inclusive school?
7. Does the school provide any form of guidance, assistance, training or counselling? Please explain what makes you feel like that.



## **APPENDIX J: SEMI-STRUCTURED QUESTIONNAIRE FOR THE PRINCIPALS**

### **SUB-QUESTION 2**

What educational constraints do educators and LVI encounter in schools in the Kingdom of Eswatini?

### **SUB-QUESTIONS**

1. What is your opinion or understanding of the concept of inclusive education?
2. What is your view on the inclusion of LVI in mainstream classrooms?
3. What support do you receive from the Regional Education Office regarding inclusion of LVI?
4. Is there any form of support and training that educators receive regarding the inclusion of LVI? Explain what makes you feel like that.
5. How have the following aspects been adapted to enhance true inclusion of LVI?
  - (a) Curriculum:
  - (b) School infrastructure:
  - (c) Playing grounds:
6. Does your school have an ILST (Institution Level Support Team) for the LVI to access?
8. If not, what do you use for support?
9. Does your ILST complete a diagnostic profile for your LVI?
10. Does your ILST educate other stakeholders on how to deal with LVI in your school?
11. Does your school have a vision and mission statement that promotes inclusion?  
What does it say?

## **APPENDIX K: SEMI-STRUCTURED QUESTIONNAIRE FOR EDUCATORS**

Questionnaire based on sub-question number 3 and 4.

### Sub-question 3.

How could the educational constraints experienced by educators and LVI be addressed in schools in the Kingdom of Eswatini?

### Sub-question 4.

What classroom practices are available for LVI in the Kingdom of Eswatini?

Please answer the following questionnaire.

1. Explain your understanding of the term inclusive education?
2. What is your attitude towards the concept of inclusive education? Why?
3. Have you received any form of assistance from the Educator Assistant Programme (EAP): or any training with regards to working with learners with visual impairments (LVI)?
4. If yes, what exactly did you receive?
5. If not, what form of assistance would you like to receive?
6. Are there any challenges that you face in the classroom, on the sports field or during extra-curricular activities when teaching LVI?
12. What is your thinking of other educators; attitudes towards working LVI? Please expand.
13. Has the content of the curriculum been adapted to accommodate LVI? If so how? Please expand?
14. Is the teaching and learning physical environment conducive for placing LVI? Elaborate.
15. LVI need more time during assessment. How do you accommodate this?
16. Does your classroom have any specialised equipment's for LVI? What specialised equipment do they have and how do they use it?
17. Is there any specific method or approach that assists the assessment of LVI? Please explain.
18. Do learners with visual impairments often struggle with reading and writing? If so, how? Please expand.

# APPENDIX L: LESSON PLANS

## LESSON PLAN 1

Subject: Agriculture

Topic: Farm water supply

Subtopic: Irrigation

Class: Form 5B

Date: 10<sup>th</sup> October 2020

Time: 1350 - 1430

Duration: 40 minutes

Method(s): Discuss and Brainstorming

Reference: Macmillan Agriculture for Southern Africa

(DAY 6)

- Objectives: By the end of the lesson learners should be able to:
1. describe Sub-surface irrigation
  2. describe Overhead irrigation

Stage/Time	TEACHER'S ACTIVITY	LEARNERS' ACTIVITY
STAGE 1 Introduction	Review the previous lesson by asking learners questions. Introduce today's lesson which is Sub-surface and overhead irrigation.	Learners answer the questions asked based on the previous lesson.
STAGE 2	<u>Sub-surface irrigation</u> Discuss Sub-surface irrigation by describing how it is installed and the types of Sub-surface irrigation.	Learners discuss Sub-surface irrigation together with the teacher.
STAGE 3	<u>Overhead irrigation</u> Discuss overhead irrigation by describing how it is installed and	Learners discuss overhead irrigation together with the teacher.

	the types of overhead irrigation.	
Conclusion	conclude the lesson by summarising subsurface and overhead irrigation.	Learners observe as the teacher summarises the question.
Evaluation	<u>Classwork</u> 1. Describe subsurface irrigation 2. Describe overhead irrigation.	Learners write their classwork into their exercise books.

Reflection: Learners were able to describe subsurface irrigation and overhead irrigation.

## LESSON PLAN 2

Subject: Agriculture  
Topic: Crop protection  
Subtopic: Sprayer Calibration (Revision)  
Class: Form 9B  
Date: 21<sup>st</sup> October 2020  
Time: 1030 - 1150  
Duration: 1hr 20 minutes  
Method(s): Discussion

(DAY 3)

Objectives: By the end of the revision learners should be able to:

1. describe sprayer calibration
2. Calculate the quantity of spray mixture needed
3. Calculate how much concentrate should be added to make certain litres of spray in the knapsack sprayer

<u>STAGE/Time</u>	<u>TEACHER'S ACTIVITY</u>	<u>LEARNERS' ACTIVITY</u>
<u>STAGE 1</u> Introduction	Ask learners to state the different methods of pest control  Which method is mostly used when applying soluble chemicals? - How to calibrate a sprayer?	Learners state the different methods of pest control as chemical, biological and cultural. - a knapsack sprayer
<u>STAGE 2</u>	<u>Calibration</u> Ask learners to describe how to calibrate knapsack sprayer. - Write their points on the board.	Learners describe how to calibrate knapsack sprayer

<p>STAGE 3</p>	<p>Write an example on the board and allow learners to calculate</p> <ol style="list-style-type: none"> <li>1. quantity of spray mixture needed.</li> <li>2. the amount of concentrate added to a knapsack sprayer.</li> </ol>	<p>Learners calculate the quantity of spray needed and amount of concentrate.</p>
<p>Conclusion</p>	<p>Conclude the lesson by summarising sprayer calibration and how to calculate the quantity of spray mixture and concentrate added to the sprayer.</p>	<p>Learners agree as the teacher concludes the lesson.</p>
<p>Evaluation</p>	<p><u>Classwork</u></p> <p>The spray volume is 2 litres per square metre. The field has an area of 100 hectares. The instruction on the label of the container is to mix 50 millilitres of the chemical with 1 litre of water. The sprayer's tank capacity is 15 litres.</p> <ol style="list-style-type: none"> <li>1. Calculate the quantity of spray mixture needed.</li> <li>2. How much concentrate should be added to make 15 litres of spray in the tank.</li> </ol>	<p>Learners write the classwork in their classwork exercise books.</p>

Reflection: Learners were able to calculate spray mixture, added concentrate to make certain litres of spray.

## **APPENDIX M: MISSION AND VISION STATEMENTS**

### **School A**

#### **Mission statement**

To educate all learners and ensure that they acquire education, vocational skills, social and cultural values to the best of their abilities.

#### **Vision statement**

To be an inclusive Swazi school in which all learners have access to quality education and training opportunities.

### **School B:**

#### **Mission statement**

To create an environment that enhances the overall academic success of learners through high level of assistance and care to develop marketable skills and acquire sustainable knowledge.

#### **Vision statement**

Academic excellence through competent teaching and quality learning.

### **School C**

#### **Mission statement**

To provide a conducive environment necessary for quality teaching and learning aimed at teaching academic excellence, nurturing responsible and economically –able citizens with good morals through cooperation among relevant stakeholders.

#### **Vision statement**

To be a school committed to excellence through academic enrichment and lifeskills development.

## APPENDIX N: UNITS, CATEGORIES AND THEMES THAT EMERGED DURING DATA ANALYSIS

Units	Categories	Themes
<b>Educators' theoretical understanding of inclusive education</b>		
<p>Educating learners in one class regardless of their disability, intellectual level or physical disability that they may have.</p> <p>It is education that caters for all learners whether they live with disabilities and challenges or they do not.</p> <p>It places all learners in one environment.</p> <p>It is education that involves all kinds of learners with or without special needs in one environment.</p> <p>It is the practice of not separating schools according to learners' physical or intellectual disability.</p> <p>It is accommodating all learners in the education system. Education that demands inclusive education for learners with difficulties in learning in the same class with normal learners.</p> <p>It is when all learners irrespective of difficulties are allocated into general education classrooms with their peers.</p> <p>It involves the learning of learners with disabilities to feel part of the community since they are also normal human beings.</p> <p>It is education for all.</p> <p>Learning of all learners in one school and class.</p>	<p>The inclusion of all learners regardless of their disabilities and challenges.</p> <p>Education of all learners regardless of their learning challenges and disabilities.</p>	<p>Educators understand inclusive education differently from each other.</p>
<b>2. Attitudes towards inclusive education.</b>		
<p>IE is the best method because it makes learners with special needs to feel part of the community since they are also normal human beings.</p> <p>It is a great strategy as learners with disabilities are regarded as fundamentally</p>	<p>Inclusive education is a good practice that gives fair and equal chances to all learners regardless of their impairments and learning difficulties.</p>	<p>Educators have a positive attitude towards inclusive education.</p> <p>Educator training in inclusive education is</p>



Units	Categories	Themes
<p>competent as their fellow learners without disabilities.</p> <p>I feel that as a country we are not yet at the stage to adopt inclusive education. The reason is the fact that there is a shortage of educators and this must start with the training of every educator from the tertiary institutions.</p> <p>It is not working as the majority of the learners in the class are normal therefore the few learners with disabilities are not properly attended to. The large class sizes are also a hurdle.</p> <p>It's a good concept since all learners with special needs acquire education in neighbouring schools.</p> <p>It is a good concept because it allows all learners to feel accepted regardless of their challenges.</p> <p>On paper, inclusive education is well advocated for but on the ground the learners with SEN hardly benefit.</p> <p>It must be practiced in all schools.</p> <p>There is a need for more educators to be trained on the subject.</p> <p>Improvements on infrastructure, teaching and learning materials must first be attended to.</p>	<p>Educators have a challenge with the lack of educator training and capacitation, infrastructure, resources and large class sizes.</p>	<p>inadequate.</p> <p>Infrastructure, resources and large class sizes are barriers to success in inclusive education.</p>
<p><b>3. Assistance from the (EAP) Educator Assistant Programme, or training on working with LVI. State what you received.</b></p>		
<p>I did not receive any training.</p> <p>No training received.</p> <p>Not trained. I didn't receive training.</p> <p>Yes, at college level. I did a course on inclusive education.</p> <p>I am not trained.</p> <p>No.</p> <p>None at all.</p> <p>Not at all.</p>	<p>Educators are not trained in inclusive education.</p> <p>The training received was not intensive.</p>	<p>Educator training in inclusive education is inadequate.</p>

Units	Categories	Themes
<p>Not at all. Just learnt informally. No training received.</p>		
<b>4. What form of assistance would you like to receive?</b>		
<p>Professional training on how to teach learners with visually impaired learners in an inclusive classroom. I would like to Braille learners' work and to transcribe Braille work. Training on working with learners with special needs. Training in using Braille. Being taught to Braille and to work with visually impaired learners. Training on teaching learners living with disabilities. Assistance on how to help a learner who is visually impaired. In-service training on teaching LVI.</p>	<p>Educators would appreciate to receive training on teaching LVI.  They would like to be taught how to Braille and transcribe learners' work.</p>	<p>Educators would like to receive assistance in the form of teacher training on working with LVI in inclusive schools, Braille and transcribing work. In-service workshops for educators who learnt about inclusion of the LVI.</p>
<b>5. Challenges that you face in the classroom, sports field or during extra-curricular activities.</b>		
<p>During extra-curricular activities, the LVI often do not have appropriate games that they can play. LVI delay getting responses for their work because educators cannot read Braille. Learners are told not to choose particular subjects because those subjects are not accommodative of their visual impairments. Some LVI have difficulty in playing with others. They are often not willing to play with able-bodied learners and tend to withdraw if the games include other learners. I often wonder if I am able to drive my ideas across to the LVI. I do not know how to adapt teaching materials for the LVI. I cannot read their Braille work and it takes a while before the resource centre can transcribe.</p>	<p>Educators have challenges with the delays in responses from the resource centre.  There is a need for games that are appropriate for LVI.  There is a need to capacitate educators on reading and transcribing Braille and LVI should have all books in Braille.</p>	<p>Training for educators on Braille and transcribing Braille.  Age-appropriate games for the LVI.</p>

Units	Categories	Themes
<p>There are no games that are appropriate for the LVI.</p> <p>Learners do not have books in Braille print.</p> <p>Learners are told not to take some subjects because things like the pictures and diagrams cannot be handled by the learners.</p>		
<b>6. Has the content of the curriculum been adapted to accommodate LVI? If so, how?</b>		
<p>No, it has not been adapted.</p> <p>No.</p> <p>No, it hasn't.</p> <p>It hasn't.</p> <p>It has not been adapted.</p> <p>A few of their texts are in Braille, so yes, some minimal parts are adapted.</p> <p>No.</p> <p>It has not.</p> <p>No.</p> <p>None.</p>	<p>The curriculum has not been adapted to accommodate LVI.</p>	<p>The curriculum has to be adapted to fit the needs of the LVI.</p>
<b>7. Is the teaching and learning physical environment conducive for placing LVI? Elaborate.</b>		
<p>Not conducive. LVI try to fit themselves into the present teaching and learning environment.</p> <p>No. LVI struggle to learn in the present-day situation.</p> <p>It's not conducive. LVI find themselves bumping into parked vehicles because the route they use to go to the resource centre sometimes parks cars.</p> <p>No. The ground that the LVI walk on is not level. It has numerous potholes.</p> <p>No. In front of all the classrooms, there is barbed wire and thorny bushes which could injure the LVI.</p> <p>No. The route from the school to the hostel is an entry route to the mission. There are a number of speeding vehicles that drive past where these learners walk and there aren't even any road signs to warn drivers about</p>	<p>The teaching and learning physical environment is not conducive for placing LVI.</p> <p>Learners are not safe as they bump into cars.</p> <p>The ground they walk on is not level. It has potholes.</p> <p>No disability toilets.</p> <p>No teaching assistants and no side rails to protect the visually impaired.</p> <p>Barbed wire and thorny bushes could injure the LVI.</p>	<p>There is a need to improve the physical environment to meet the needs of the LVI.</p> <p>There are improvements with regards to disability toilets, teaching assistants and removal of thorny bushes and barbed wire that has to be attended promptly.</p>

Units	Categories	Themes
<p>these learners and to caution them to drive slower.</p> <p>No. There are no disability toilets, no teaching assistants and no side rails around passages and those for climbing steps.</p> <p>No. There are steps and stairs that do not have rails and very short dangerous paths that could endanger the learner with visual impairments. The school is on very sloppy ground which is not ideal for LVI.</p> <p>No. Curriculum is not tailor-made to meet the needs of the LVI.</p> <p>No. to Braille their work, the LVI have to move to the resource centre instead of the resource staff fetching it, which disturbs the learners from attending classes.</p>		
<p><b>8. Extra time allowance for the LVI during assessments.</b></p>		
<p>They are granted extra time of up to 100% during all assessments.</p> <p>They are given extended time, usually double the time normal learners get to write assessments.</p> <p>Given extra time allowance. They are sometimes given a reader to assist in reading for them in assessments.</p> <p>They write assessments separately from the rest of the learners to avoid disruptions.</p> <p>They are allowed extra time of up to 100% in during tests and examinations. They may also be given a reader to help them in reading during assessments.</p> <p>We apply to Examinations Council (ECESWA) for extra time for the LVI.</p> <p>They are given extra time allowance.</p> <p>Granted extra time.</p> <p>Writing in Braille is cumbersome thus they are granted extra time.</p>	<p>Learners are granted extra time of up to 100% during assessments.</p> <p>They are sometimes given a reader to assist them.</p> <p>They write assessments separately from the others to avoid disruptions.</p>	<p>The services of a reader during assessments should be improved to relieve the load of reading from the LVI.</p> <p>Learners are granted extra time during assessments.</p>
<p><b>9. Does your classroom have any specialised equipment's for LVI? What specialised equipment do they have and how do they use it.</b></p>		

Units	Categories	Themes
<p>There is no specific method or approach for LVI.</p> <p>No specific method.</p> <p>They have Braille note touch.</p> <p>No specific methods save for large print and Brailled texts.</p> <p>Braille note touch but I am unaware what purpose they serve.</p> <p>Giving the service of a reader often tends to cut down on time for assessments.</p> <p>LVI are encouraged to sit closest to the educator for better attention.</p> <p>Braille note touch but most LVI seem not to be sure of how to use this gadget.</p> <p>They have gadgets called Braille note touch.</p> <p>These gadgets help them to load soft copies of textbooks that they can access.</p> <p>No specific approach.</p>	<p>The LVI have Braille note touch notebooks that they use for accessing Brailled books on.</p> <p>It seems some educators are not sure of the purpose of these Braille note touch gadgets.</p>	<p>Classrooms have no specialised equipment for LVI.</p> <p>Learners use Braille note touch gadgets as a specialised gadget.</p>
<p><b>10. Do LVI often struggle with reading and writing? If so, how? Please expand.</b></p>		
<p>Yes since some texts may be small and some content may be abstract for LVI.</p> <p>Yes, it is cumbersome to read some texts with writing. They have challenges with spelling because of a lack of exposure to written texts and reading.</p> <p>Most of the reading material is not available in Braille. Where it is available you find that their work does not reach the educator immediately as it first needs to be translated to normal print, this discourages the learners to write.</p> <p>They do when reading. Some letters of words are not clear to them thus making them to spell words incorrectly.</p> <p>The library has no interesting materials for the visually impaired to read thus their command of the language is often poor because of a lack of exposure to written texts.</p>	<p>LVI struggle with reading and writing mainly because of the lack of available reading materials for them.</p> <p>The educators are not able to give timely feedback to the LVI because the educators cannot read Braille thus they have to rely on the team that transcribed their work.</p> <p>They have challenges with spelling and pronunciation.</p>	<p>There is a lack of reading materials for the LVI that could assist them in improving their English spelling and pronunciation.</p>

<b>Units</b>	<b>Categories</b>	<b>Themes</b>
<p>They struggle to read and write as language learning area lacks with them due to their disability. They cannot read normal print and this causes them to be weak in spelling and pronunciation of words in general.</p> <p>It is not necessarily struggling but the lack of reading materials.</p>		

## APPENDIX O: LANGUAGE EDITING CERTIFICATE



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11 February 2021

### Declaration of professional edit

**A DISCOURSE OF THE EDUCATION OF LEARNERS WITH VISUAL IMPAIRMENTS IN THE KINGDOM  
OF ESWATINI**

by

**NOMSA TREASURE MASEKO**

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I declare that I have edited and proofread this thesis. My involvement was restricted to language usage and spelling, completeness and consistency and referencing style. I did no structural re-writing of the content.

I am qualified to have done such editing, being in possession of a Bachelor's degree with a major in English, having taught English to matriculation, and having a Certificate in Copy Editing from the University of Cape Town. I have edited more than 200 Masters and Doctoral theses, as well as articles, books and reports.

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