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DEPARTMENT OF SPECIAL NEEDS EDUCATION

**THE PRACTICES AND CHALLENGES OF TEACHING STUDENTS
WITH VISUAL IMPAIRMENT IN AN INCLUSIVE CLASSROOM AT
DAGMAWI MINILIK SECONDARY SCHOOL**

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July, 2024

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**The Practice and Challenges of Teaching Students with Visual Impairment
in an Inclusive Classroom at Dagmawi Minilik Secondary School**

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DECLARATION

I, the undersigned, hereby declare that the following thesis entitled “The Practice and Challenges of Teaching Students with Visual Impairment in an Inclusive Classroom at Dagmawi Minilik Secondary School” is my original work, has not already received the degree award from another university, and that all sources of information utilized in the preparation of this thesis have been properly recognized.

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ABSTRACT

Inclusive education (IE) based on the belief that every child has the inherent right to education, with their own unique characteristics, interests, abilities, and learning needs. Teaching students with visual impairment in an inclusive Classroom is the significant challenge faced in Ethiopia. The study aimed to investigate the practice and challenges of teaching students with visual impairment in an inclusive classroom at Dagmawi Minilik Secondary School in Addis Ababa. The study employed a qualitative approach using a case study design. The study was conducted at Dagmawi Minilik Secondary School. Interviews and observation were used to collect data. Eleven participants were purposively selected as the study participants. The data was analyzed by categorizing the data into four thematic areas. The study findings emphasized the critical practice and challenges faced by students with visual impairments in inclusive classrooms and the importance of implementing diverse strategies to support their academic and social development. Furthermore, the findings indicated the existing gaps in resources and support systems for students with visual impairments in inclusive classrooms however, some progress has been made through collaborative efforts and creative solutions, there is still a need for increased accessibility and tailored resources to fully support the academic and social growth of these students. The school should focus on providing personalized accommodations, promoting empathy and collaboration, adapting teaching methods, and creating inclusive environments that cater to the diverse needs of students with visual impairments, ensuring equal opportunities for academic and social growth.

Keywords: *Visual impairments, Perception, Challenge, and Teaching strategies*

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ACRONYMS AND ABBREVIATIONS

ICC	International Criminal Court
ICT	Information and Communication Technology
IE	Inclusive education
IEP	Individualized Education Plan
LVI	Learners with Visual Impairments
MA	Masters of Art
MoH	Ministry of Education
SVI	Students with Visual Impairments
UDL	Universal Design for Learning
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
VI	Visual impairment
WHO	World Health Organization

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

In Ethiopia, the prevalence of visual impairment among school-aged children is estimated to be between 4% and 9% (Negash & Gasa, 2022). Studies have also revealed that in Ethiopia, 2.8 million people have low vision, 1.2 million have lost their vision, and 9 million children aged 1 to 9 years old have active trachoma (Reda, Yemane, & Gebreyesus, 2020; Wale Abebe, Adamu, & Getinet, 2019). According to the World Health Organization (2011), over 1.8 million people, or 1.6% of the Ethiopian population, are blind, and 4.1 million people, or 3.7%, live with low vision. These statistics exceed the world average of 1.2% and 3.4%, respectively, as estimated by the WHO.

Visual impairment is a significant issue among children in sub-Saharan countries, particularly in Ethiopia. Vision plays a crucial role in learning as it is a major channel for processing information. Any impairment in vision can have a significant impact on the quality of the information processing system. Among the distance senses, vision has a unifying role in perceiving the world. It is essential for students to have good vision in order to learn and gain accurate information about their environment and the world (Palmer, 2005).

Teaching students with visual impairment in an inclusive classroom poses several challenges for teachers, such as unfamiliarity with inclusive strategies, a lack of resources, and the need for specialized training (Karuhowe, 2021). It can be a struggle for teachers to create educational programs that cater to the diverse needs of students with visual impairments and multiple disabilities (Baraily, 2023). To address these challenges, teachers must develop specific professional competencies and utilize assistive technology to establish an inclusive learning environment. Teachers need to be better prepared to teach children with special needs in an inclusive setting, and every effort should be made to ensure that resources, such as specialist teachers, special equipment, and access to current knowledge and research evidence, are widely available for successful implementation of the inclusive education programme. Overall, there is a need for increased support and training for teachers to enhance their professional competence in teaching visually impaired students in inclusive classrooms (Yalcin & Kamali Arslantas, 2020).

Teaching students with visual impairments in an inclusive classroom can present unique challenges and opportunities for both teachers and students. However, by using inclusive educational technology and implementing appropriate adaptations, these challenges can be overcome, and students with visual impairments can fully participate in the learning process alongside their peers (Miyachi, 2020). Teachers should be aware of the specific needs and accommodations required for students with visual impairments, such as providing accessible materials, using assistive technologies like screen readers or magnification software, and creating a visually accessible classroom environment (Palmer, 2005). By doing so, educators can create a supportive and inclusive learning environment where all students, regardless of their visual abilities, can thrive academically and socially (Miyachi, 2020).

Additionally, providing training and support for teachers in inclusive classrooms is crucial to ensure that they have the necessary knowledge and skills to effectively accommodate the individual needs of students with visual impairments. Collaboration with special education professionals and accessibility experts can also be beneficial for teachers seeking to create an inclusive environment for all students (Spoede, Fontenot, & Simpson, 2016). In addition to providing the necessary accommodations, fostering a culture of empathy and understanding among all students is essential (Brown, Packer, & Passmore, 2011). By creating a supportive and accepting classroom community, students with visual impairments can feel more included and valued, which can positively impact their academic and social experiences (Sharma, Moore, Furlonger, King, Kaye, & Constantinou, 2010; Fast, 2019).

Furthermore, it is important for educators to regularly assess the effectiveness of their teaching methods and accommodations for students with visual impairments that involve gathering feedback, collaborating with their families, and staying informed about the latest developments in inclusive education and assistive technologies (Ajuwon, Sarraj, Griffin-Shirley, Lechtenberger, & Zhou, 2015).

The empirical findings from Miyachi (2020), Sundqvist & Hannås (2021), Mwakyeja (2013), and Manitsa & Doikou (2022) offer valuable insights into effective strategies, interventions, and best practices for teaching students with visual impairments. These studies highlight the significance of individualized instruction, assistive technology, collaboration, braille literacy, social inclusion, and professional development for these students. Tailoring instruction to their specific needs, utilizing assistive technology, fostering collaboration among educators and stakeholders, early exposure to braille literacy, promoting social

inclusion and peer support, and ongoing professional development for educators are all crucial for the academic success and well-being of students with visual impairments (Haakma, Janssen, & Minnaert, 2018).

Studies conducted in Ethiopia by various researchers such as Zelelew (2018), Mitiku, Alemu, & Mengsitu (2014), Negash & Gasa (2022), Bekele (2017), Tizazu Negassa (2023), Yorke, Hailu, Rose, & Teferra (2022), Haye (2018), and Seid (2021) have extensively addressed the topic of inclusive education in Ethiopia from 2014 to 2023. For example, Mitiku, Alemu, & Mengsitu (2014) delved into issues such as the challenges of implementing inclusive education at different school levels, student outcomes, the effectiveness of teacher training programs, and government policies to ensure inclusive practices are followed in schools.

On the other hand, studies by Tizazu Negassa (2023), Zelelew (2018), and Negash & Gasa (2022) focused on academic barriers preventing the inclusion of learners with visual impairments. However, these studies did not directly address issues specific to students with visual impairments in the classroom, nor did they delve into highly specific visual impairment education strategies and the practice of inclusion of students with visual impairments in Dagmawi Minilik Secondary School. Therefore, this study aims to investigate the perception of students with visual impairments in learning, the challenges they face, teaching strategies that cater to their needs, and the resources and support systems available for them in the inclusive classroom at Dagmawi Minilik Secondary School.

1.2. Statement of the Problem

The Ministry of Education in Ethiopia initiated an inclusive education programme in 2008, which focuses on special needs education. The introduction of the programme could be seen as a positive step in recognizing that everyone can make a worthwhile contribution to society, provided that the environment is accommodating and supportive. The existing literature highlights a significant gap in understanding the specific challenges faced by students with visual impairments within inclusive classrooms in Ethiopia. While significant efforts have been made to promote inclusive education for students with visual impairments in Ethiopia, there is a notable gap in research focus (Mundorf, 2014; UN: General Assembly, 2008; UNESCO, 2020; Limaye, 2016; MoE, 2016). Despite existing literature by Fast (2019) and UNESCO (2006) emphasizing the importance of effective teaching practices for these students, there remains a lack of specific research addressing the challenges and strategies for accommodating visually impaired students within an inclusive classroom setting.

Existing studies conducted by Tizazu Negassa (2023), Zelelew (2018), and Negash & Gasa (2022) have primarily highlighted general barriers to inclusion in Ethiopian education. However, these studies do not delve deeply into highly specific education strategies tailored to students with visual impairments, nor do they explore the practical realities of inclusion at the classroom level at Dagmawi Minilik Secondary School.

The current literature gap is particularly evident in the limited research on secondary school students with visual impairments in Ethiopia. Despite ongoing efforts to advance inclusive education practices, there remains a significant lack of information on inclusive practices specifically tailored to secondary school students with visual impairments, with a specific focus on Dagmawi Minilik Secondary School. While previous research has acknowledged the challenges faced by students with visual impairments in accessing education, there is a need for more detailed investigation into the specific obstacles these students encounter within classrooms. This gap in knowledge includes understanding the perceptions of visually impaired students towards learning in an inclusive classroom environment and identifying the current challenges faced by educators in effectively teaching these students.

The gap in the existing literature also extends to the lack of comprehensive information on the teaching strategies used by educators and the resources and support systems available at Dagmawi Minilik Secondary School to facilitate the education of students with visual impairments in an inclusive setting. Bridging this gap is critical for developing targeted interventions and policies that address the unique needs of these students in the Ethiopian education system. By assessing the adequacy of these resources, the research aims to propose actionable recommendations for enhancing the educational environment, ensuring that all students, regardless of their visual abilities, can thrive in an inclusive classroom setting.

1.3. The Objectives of the Study

1.3.1. General Objective

The study will aim to investigate the practice and challenges of teaching students with visual impairment in an inclusive classroom at Dagmawi Minilik Secondary School in Addis Ababa.

1.3.2. Specific Objectives

1. To explore how students with visual impairments perceive their learning experiences in an inclusive classroom setting at Dagmawi Minilik Secondary School.
2. To identify the challenges faced by students with visual impairments in inclusive classrooms at Dagmawi Minilik Secondary School.
3. To examine how teachers adapt their teaching strategies to meet the needs of students with visual impairments in inclusive classrooms.
4. To assess the resources and support systems available to facilitate the education of students with visual impairments in inclusive classrooms.

1.4. Research Question

Based on the gaps stated in the statement of the problem, the study aimed to answer the following basic research questions.

1. How do students with visual impairments perceive their learning experiences in an inclusive classroom setting at Dagmawi Minilik Secondary School?
2. What challenges do students with visual impairments face in inclusive classrooms at Dagmawi Minilik Secondary School?
3. How do teachers adapt teaching strategies to suit the needs of students with visual impairments in inclusive classrooms?
4. What resources and support systems are available to facilitate the education of students with visual impairments in inclusive classrooms?

1.5. Significance of the Study

These study findings held significant potential to provide valuable insights into the challenges and opportunities for inclusive education of students with visual impairments at Dagmawi Minilik Secondary school, thereby raising awareness within the community about specific areas requiring attention. Exploring effective teaching strategies for SVI, the study provides the school with practical methods to address their specific needs. The research emphasized the resources and support systems necessary to establish an inclusive environment, which may include specialized equipment, technology, or professional development for teachers. The findings of this study were based on real data collected at Dagmawi Minilik, ensuring their direct relevance to the school's situation and facilitating informed decision-making for

improvement. Ultimately, the study has the potential to guide the school in proposing a specific action plan with clear steps, timelines, and responsible parties, thereby empowering the school to implement tangible changes that enhance the inclusion of SVI.

Furthermore, the study contributes to the growing body of knowledge on the transformation of secondary schools into fully inclusive establishments, potentially leading to a shift in attitudes and perspectives. It is believed that this study can be a potential resource for the workshop and resource for guidance programmes for inclusive schooling. Taking into account the geographical context and cost of living, the findings of this study also offer valuable insights for other schools management in the country as they implement inclusive practices. Lastly, it could serve as a valuable resource for other researchers exploring inclusive schooling for different impairment categories and levels.

1.6. The Scope of the Study

This study aimed to investigate the practice of teaching SVI within an inclusive classroom setting at Dagmawi Minilik Secondary School in Addis Ababa, Ethiopia. It focused on understanding the experiences and effectiveness of teaching SVI students alongside their sighted peers. The study explored various aspects of this inclusive environment, including examining the instructional strategies teachers use, such as Braille, audiobooks, or modified materials, to cater to VI students' needs.

Additionally, the physical accessibility of the classroom was assessed, looking at factors like lighting, furniture arrangement, and the availability of adapted learning materials. Social inclusion is a crucial aspect, so the research will investigate how well SVI students integrate with classmates, participate in group activities, and feel like valued members of the learning community. Furthermore, the level of training and support teachers receive in effectively including SVI students will be analysed. The study acknowledged the challenges faced by both teachers and students in this setting, but also explored the potential benefits and opportunities that inclusive education offers for all involved.

To gain a comprehensive understanding, the research employed interviews with teachers, SVI students, and school administrators, alongside observations of classroom interactions. Additionally, the specific visual impairments of the student(s) involved were considered to ensure a nuanced picture of the learning experience. Ultimately, this research aimed to shed light on the realities of inclusive education for SVI students at Dagmawi Minilik Secondary

School, informing future efforts to create a truly inclusive learning environment where all students can thrive.

1.7. Definition of Terms

Academic barriers: refer to intrinsic and extrinsic obstacles that hinder students from effectively engaging in the learning process and achieving their educational goals. These barriers can encompass a variety of challenges, including socio-economic factors, learning disabilities, emotional struggles, lack of motivation, and past negative experiences.

Inclusion: is the state or process of addressing and positively responding to the diverse needs of students by modifying and adapting the education system to accommodate all children including adjustments to content, teaching methods, learning materials, classroom organization, and infrastructure (UNESCO, 2006).

Inclusive classroom: is a learning environment where students with and without disabilities learn alongside each other. It's about creating a space that caters to the diverse needs of all students, fostering a sense of belonging and equal opportunity for academic and social success.

Special needs teacher: is the one dealing with disability specific educational problems in inclusive classrooms who aiming to implement the Individualized Education Plan (IEP) of students in inclusive classrooms (Duchnowski, 2006).

Adaptation: is the act of modifying teaching practices and learning environments to suit the individual needs of all students in inclusive classrooms that involves regular teachers in inclusive classrooms modifying their teaching to accommodate the individual requirements of specific students (Johnsen, 2001).

Visual impairments: encompass blindness for the purpose of this study. There are legal and educational definitions for visual impairment, and this study adopts the educational definition, which focuses on a person's ability to use their vision for educational purposes. In educational terms, a blind student has very limited vision and relies on the braille system or audio tapes for reading and writing (Mastropieri & Scruggs, 2010).

Perception: encompasses feelings, thoughts, and beliefs of SVI about their education in inclusive classroom. It is a crucial aspect of human cognition, playing a pivotal role in

shaping how individuals interact with their environment and form their understanding of the world (Runge, 2013).

Challenge: is an obstacle that hinders SVI from acting or participating, including adaptation skills difficulties, environmental barriers, requiring extra time or effort, lacking necessary support, and experiencing difficulties with social interactions or communication.

Teaching strategies: refer to the methods and techniques that educators use to facilitate learning and promote student engagement in the classroom. These strategies are like tools in a toolbox, chosen based on specific learning objectives, the content being taught, students' needs and learning styles, and the available resources. They are employed to deliver content, foster understanding, and enhance the overall learning experience for students.

Support system: is a network of people and resources that provides practical and emotional assistance to an individual. It consists of a network of people who offer mental, emotional, and practical support when needed, helping to build resilience, reduce stress, and foster personal growth. This network helps individuals navigate challenges, celebrate successes, and grow as a person.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

Education is universally recognized as a fundamental human right essential for personal development and the achievement of other rights and freedoms (United Nations, 1948). Despite this acknowledgement, individuals with disabilities, especially those with visual impairments, encounter significant barriers in accessing quality education, thus being deprived of their basic human rights (Alfredsson & Eide, 2023, Kretzmer & Klein, 2021). Students with visual impairments enrolled in specialized schools, underscoring the lack of inclusivity within the educational system. This lack of inclusivity adversely affects the self-concept of students with visual impairments, leading to lower self-esteem in social, academic, and physical domains compared to their sighted counterparts (Ishay, 2022 & Juvonen, Lessard, Rastogi, Schacter, & Smith, 2019).

Students with disabilities, including visual impairments, are not reaping the full benefits of education due to ineffective efforts to incorporate them into mainstream educational programs (Fitri, 2022). Students with disabilities, including those with visual impairments, lack access to challenging coursework, interaction with non-disabled peers, and opportunities to engage in school activities (Butler, Holloway, Marriott, & Goncu, 2017). Inclusive education plays a critical role in addressing the educational needs of students with visual impairments and promoting their overall well-being. By ensuring equal access to quality education, inclusive practices can support the development of these students and enhance their educational and occupational aspirations (Rieser, 2012).

2.2. Definition of Inclusion

Inclusion is a crucial aspect of creating a diverse and thriving organization or community. It involves ensuring that people from all backgrounds and identities are represented and have equal opportunities to participate, contribute, and be heard (Defining Diversity, Equity, and Inclusion, 2018). Inclusion fosters a sense of belonging, respect, and collaboration, which leads to higher levels of innovation, productivity, and overall well-being for individuals and the organization as a whole. Some benefits of inclusion include improved problem-solving, increased creativity, enhanced employee morale and satisfaction, and a stronger sense of community (Shore, Cleveland, & Sanchez, 2018). Inclusion is not just about meeting

diversity quotas or checking boxes it requires a genuine commitment to creating an environment where everyone feels valued, respected, and included (Vieira, 2017).

2.3. Inclusive Education

Inclusive education has long been a topic of debate, particularly concerning students with visual impairments, where differing viewpoints influence perceptions of effective learning strategies (Niure, 2021). One school of thought supports the integration of visually impaired students into general education classrooms to align with standard curricula and enhance social skills crucial for their future success, while an opposing perspective favours specialized resource or separate settings with customized curricula (Ajuwon, Sarraj, Griffin-Shirley, Lechtenberger, & Zhou, 2015). The study emphasized the importance of adequate resources and support for students and teachers as key factors in the success of inclusive education (Mncube, Hadebe-Ndlovu, & Uleanya, 2021).

Inclusive education prioritizes providing visually impaired students with access to the least restrictive learning environment tailored to their unique needs, enabling them to engage actively in academic and social activities alongside their non-disabled peers (Bardin & Lewis, 2008). The integration of students with diverse backgrounds in inclusive classrooms presents challenges for teachers, necessitating adjustments in instructional methods to effectively support visually impaired students within the inclusive educational setting (Belay & Yihun, 2020). Traditionally, students with visual impairments were educated in specialized environments designed for individuals with disabilities. However, the shift towards inclusive education has resulted in an increasing number of visually impaired students joining general education classrooms; where inclusive settings allow all students, including those with visual impairments to learn together (Rueda et al., 2010).

2.4. Visual Impairments

2.4.1. Definition of Visual Impairments

Visual impairment is a condition characterized by a partial loss of the ability to interpret visual information, leading to challenges in seeing. While the term is commonly associated with blindness, the World Health Organization prefers the term "visually disabled." Visual impairment is often classified as low vision and blindness (Nayeni, Dang, Mao, & Malvankar-Mehta, 2021). Visual impairment is a complex disability that extends beyond complete blindness, affecting individuals whose eyesight cannot be fully corrected to a

typical level. The severity of visual impairment varies greatly, with approximately 90% of visually impaired individuals retaining some degree of sight (Bourne, Steinmetz, Flaxman, Briant, Taylor, Resnikoff, & Tareque, 2021). Despite challenges, many visually impaired individuals live independently and can accomplish tasks typical of sighted individuals with appropriate support and training (Manjari, Verma, & Singal, 2020).

2.4.2. Types of Visual Impairments

Visual impairments are categorized as low vision and blindness depending on the eye condition and the level of remaining eyesight. People with visual impairments will have a greatly reduced input in the visual acuity and field of vision concept categories (Martiniello et al., 2022). It is considered a visual impairment when a person's eyesight cannot be corrected to a "normal" level. These people use a variety of methods to help them move around, including canes, guide dogs, and human guide assistance (Demmin & Silverstein, 2020).

2.5. Visual Impairments and Learning

Giangreco, Edelman and Broer (2007) studied the hidden curriculum for students with visual impairment in this context. The hidden curriculum is a term used to describe that the hidden curriculum for students with disabilities often consists of learning experiences that lead to a student's self-perception as being a second-class citizen and limited learner. Their study revealed evidence that students with visual impairments were indeed learning different things to their sighted peers, often with an emphasis on developing their skills for daily living and support needs, as opposed to their academic learning and potential for the future. This suggests they are being limited, with the latter predominantly taking part in special education learning experiences within their regular school setting or in separate educational facilities (Giangreco et al., 2007).

Visual impairment is a term that describes a range of conditions that affect the extent to which a person functions effectively with vision in learning. This is a low incidence disability and often children with a visual impairment are not diagnosed until they are of school age. 90% of children who are classified as visually impaired are educated in mainstream settings (MacFarlane & Woolfson, 2007). Newey and Davies (2007) explain there is no evidence that suggests children with a visual impairment cannot prosper in mainstream education, however, there are significant range of obstacles to overcome if they are to succeed in regular education. Visually impaired children in inclusive education have improved social

interaction, have greater self-esteem and are likely to progress to further education and or employment (MacFarlane and Woolfson, 2007).

2.5.1. Inclusive Education Opportunities for Students with Visual Impairments

Inclusive education and the integration of students with visual impairments into regular classrooms can be conducive to their socialization and emotional development. Special education has not been effective in meeting the socio-emotional needs of students with disabilities. This has been supported by research showing that students with visual impairments in segregated educational settings have higher rates of social withdrawal and loneliness than their counterparts in inclusive settings (Ruijs & Peetsma, 2009).

The isolation experienced by some vision impaired students in special educational settings will not promote the development of lifelong skills needed to fully participate in society (Palmer, 2005). There has been a shift in ideology and subsequently practices toward educating students with disabilities in regular classrooms. This shift is founded on the concept of social justice, a rights-based notion to equal access and increasing the participation of marginalized groups in society. Schooling is a fundamental influence on the lives of all children (Kelly, 2016).

It provides a context for social and academic learning and is a preparation for the world of work and civic life. However, children with disabilities have frequently been denied access to this vital institution. For students with visual impairments, inclusive education has the potential to provide them with equal access to regular classrooms and prepare them to be contributing members of a diverse society (Miyachi, 2020). This contrasts with the traditional segregation of students with visual impairments in special schools and classrooms with other students with disabilities (Palmer, 2005).

Children with visual impairments also have access to rehabilitation services by organizations that barriers are being removed, and persons with disabilities are being recognized as equal members of society. UNESCO (2006) emphasized the importance of ICT in providing high-quality education for students with disabilities. ICTs have been integrated into the teaching and learning process to enhance educational quality, support curriculum changes, and provide new learning experiences (UNESCO, 2006).

2.5.2. Perceptions of Students with Visual Impairments Learning in Inclusive Classrooms

Inclusive education has gained significant attention in recent years, with an increasing emphasis on creating learning environments that accommodate the diverse needs of all students (Chang & Schaller, 2002). Teachers need to be open-minded, knowledgeable about visual impairments, and equipped with appropriate strategies to ensure these students can fully participate in the educational experience (Miyachi, 2020). They need to understand the unique challenges faced by students with visual impairments and be proactive in making necessary modifications to pedagogy, and the environment (Kelly, 2016). They must adapt their teaching strategies to suit the needs of these students, ensuring that instruction is accessible, inclusive, and engaging (Cox & Dykes, 2001).

It is also important to understand how students with visual impairments perceive their learning experiences in inclusive classrooms (Al-Busaidi & Tuzlukova, 2017). The challenges that students with visual impairments may face in inclusive classrooms are diverse and multifaceted (Belay & Yihun, 2020). These challenges can include accessing and understanding visual materials, navigating the physical environment, participating in group activities, and receiving appropriate support and accommodations (Verdier, 2016).

Students with visual impairments perspective that they liked inclusive school better because they study along with students without visual impairments; they have many close friends; their friends also help them in learning and in mobility; they have fun and are happy; they talk and play with friends; they enjoy school; they are not lonely; they learn better as their friends are helping them (Lee, Cheausuwantavee, & Roberts, 2023). Moreover, they also have the opportunity to help their friends, for example, by telling their friends to listen to the teachers, to obey them, not to be noisy and to concentrate on studying (Lee et al., 2023).

2.6. Importance of Inclusive Education for Students with Visual Impairments

The landscape of school and classroom settings has seen significant changes in the last twenty years, largely due to the impact of different legislations. The legislations have been instrumental in integrating children with disabilities into mainstream education, leading to substantial transformations in classrooms, curricula, and teaching methods (Webster, 2022). Children with disabilities were receiving the necessary educational services in public schools, and visually impaired children had limited access to public education.

However, as a result of subsequent legislations and legal actions, opportunities for visually impaired children have significantly expanded. Many now participate in regular classes, interact more with sighted peers, and engage in extracurricular and community activities (Bondar, 2021). As we approach the 21st century, educators and parents of visually impaired children have reasons for optimism. Attitudes and misconceptions about the abilities and limitations of blind and visually impaired individuals are gradually fading. There is increasing awareness and acceptance of the principle that all children, with appropriate services and support, can learn and compete equally with their peers in the regular classroom (Taneja-Johansson, Singal, & Samson, 2023).

2.6.1. Enhanced Access to Information

Visually impaired students face challenges in accessing information that their sighted peers can easily obtain. They rely on alternative formats provided by teachers, but these often don't allow for spontaneous access to information or exploration of personal interests. This lack of access can also hinder social opportunities (Lund & Cmar, 2020). However, modern technology, such as high-speed Internet and computers, has the potential to revolutionize access to information for visually impaired students. With training, they can navigate the Internet and access a vast world of information. This combined with electronic texts and materials provided by teachers, gives visually impaired students to access to the same information as their sighted peers (Otu-Danquah, 2022).

2.6.2. Improved Communication and Collaboration

Improved communication and collaboration linked both to the students increasing their educational status and needing to communicate in more 'academic' ways, and specific curricular outcomes based around communication skills. The major codes identified were around quality of communication and increased interactions (Farhan and Razmak, 2022). The majority of participants felt that the quality of communication in terms of grammatical accuracy and depth of content had increased since the introduction of the technology. The difference in writing quality was in some cases quite dramatic, particularly for students who had been resistant to scribing or who had poor braille literacy. These students were generally producing longer and more complex texts than previously (Kisanga and Kisanga, 2022).

Many students also demonstrated increased ability to communicate by producing texts in alternative formats including braille and tactile graphics, and using email and internet chat.

Email in particular was highly valued as a communication tool, allowing ongoing interaction with geographically distant contacts (Farhan and Razmak, 2022). The major perceived benefit of the students' increased communication ability was improved access to educational interactions, through being able to ask questions and to explain to others what they were trying to learn. This was seen as very important for their inclusion in mainstream education (Fernández-Batanero, Montenegro-Rueda, Fernández-Cerero, & García-Martínez, 2022).

2.6.3. Increased Independence and Self-Efficacy

The academic and social self-efficacy is crucial for fostering self-determination and equipping students with visual impairments for success in adult life. Inclusive education is a powerful tool that can greatly benefit students with visual impairments by increasing their independence and self-efficacy. Inclusive education allows students with visual impairments to interact with their peers and develop social skills in a supportive environment. This can help them build self-confidence and increase their independence by fostering positive relationships with others (Shore et al., 2022).

Inclusive classrooms are often designed to be more accessible for students with disabilities, including those with visual impairments. Access to learning materials in alternative formats, such as braille or audio, can empower students to engage with the curriculum independently (Shore et al., 2022). Inclusive education provides opportunities for students with visual impairments to interact with successful role models who may also have disabilities. Seeing others who have overcome challenges and achieved success can inspire students to believe in their own abilities and increase their confidence in navigating the world independently (McNicholl, Desmond, & Gallagher, 2023).

In inclusive settings, students with visual impairments are encouraged to actively participate in decision-making processes related to their education. This can help them develop a sense of autonomy and empowerment, leading to increased self-efficacy and independence (McNicholl et al., 2023). Inclusive education offers a variety of learning experiences that can help students with visual impairments develop skills that are essential for independence, such as orientation and mobility training, assistive technology proficiency, and self-advocacy skills (Shore et al., 2022).

2.6.4. Increase Learning in Inclusive setting

According to Chang & Schaller (2002), the majority of schools for visually impaired students in India prioritize "educating" over "learning." Educating is often viewed as a process focused on acquiring bookish knowledge for exam purposes, while learning is seen as a broader concept that involves understanding and applying knowledge in daily life. This discrepancy highlights a gap in the educational approach for visually impaired students, with an emphasis on rote learning rather than experiential learning (Lud & Finkov, 2012). There is a prevailing belief that visually impaired students may not be as capable of learning and achieving due to their disability, leading to lower expectations and limited opportunities for these students. This societal perception often results in discrimination and a lack of belief in the abilities of visually impaired students to excel (Gray, 2005).

The comparability of visually impaired students to their peers in mainstream schools, highlighting the need to create inclusive educational environments fosters holistic learning and development (Lud & Finkov, 2012). By addressing these perceptions, educators and policymakers can create inclusive settings that promote a culture of learning and empowerment for visually impaired students, enabling them to reach their full potential and contribute meaningfully to society (Grum & Bobinski, 2005).

2.7. Challenges Faced by Visually Impaired Students in Inclusive Settings

Inclusive education aims to provide equal opportunities and access to education for all students, including those with visual impairments (Belay & Yihun, 2020). However, there are several challenges that visually impaired students may face in inclusive settings.

2.7.1. Limited Access to Educational Materials

Visually impaired students may face challenges in accessing printed materials such as textbooks, hand-outs, and worksheets, which could hinder their full participation in classroom activities and completion of assignments (Al-Busaidi & Tuzlukova, 2017). There is a misconception that the school environment is not suitable for visually impaired students, suggesting that entry requirements for schools and educators create a significant barrier to inclusive education (Miyachi, 2020). Students with visual impairments encounter difficulty accessing educational material presented in visual formats, such as graphs, videos, maps, and diagrams (Binder-Olibrowska, Godycki-Ćwirko, & Wrzesińska, 2022).

Teachers often struggle to provide verbal descriptions of the material, leading to exclusion of students with visual impairments from participating in lessons. Additionally, materials are not always provided in advance for transcription into the student's preferred format, such as braille, electronic format, large print, or audio (Miyauchi, 2020). This lack of access to quality educational material significantly hinders the ability of students with visual impairments to participate and succeed in education (Kuriakose, Shrestha, & Sandnes, 2022). Without resources, specialist assistance, and changes to the physical environment, visually impaired students struggle to access the same curriculum as sighted students (Manitsa & Doikou, 2022).

Visually impaired students may struggle to access visual information presented in the classroom, such as graphs, charts, and other visual aids. This can impact their understanding of certain subjects and hinder their overall learning experience (Mihegwa, Mutsotso, & Masibo, 2020). Inclusive settings may not always provide the necessary accommodations and support for visually impaired students that include the lack of assistive technology, braille materials, or support from specialized professionals such as vision teachers or orientation and mobility specialists (Tom, Mpekoa, & Swart, 2018).

2.7.2. Attitudinal Barriers

Teachers' attitudes towards inclusion encompasses the desire to maintain a homogeneous peer culture, preparation for a role in special education, and concerns about the increased demands placed on teachers in terms of classroom management and the additional teaching strategies required for students with special needs. These attitudes often influence the educational provision available to students with visual impairment (Heyder, Suedkamp, & Steinmayr, 2020). Additionally, students with disabilities frequently encounter attitudes among school staff that make them feel unwelcome in regular school settings, presenting a significant barrier to their full inclusion (Emmers, Baeyens, & Petry, 2020).

Beliefs, attitudes, and values held by individuals in educational systems can act as a barrier to inclusive practices and significantly impact their success (Radojlovic, Kilibarda, Radevic, Maricic, Parezanovic Ilic, Djordjic... & Radovanovic, 2022). If parents and teachers believe that inclusion will negatively affect the education of non-disabled students, efforts to provide inclusive education may be hindered (Singh et al., 2020). Similarly, if teachers and parents of students with special needs perceive that the quality of education will be inferior in inclusive

settings compared to segregated ones, they may resist attempts to include these students in general education classrooms (Paseka and Schwab, 2020).

Many visually impaired students receiving a public education are placed in special education classes. This happens because it is assumed they will receive more individualized attention. However, a direct result of this is segregation from their sighted peers and, in effect, an education that is wholly separate and not equal (Belay & Yihun, 2020).

2.7.3. Lack of Awareness and Understanding

In a study conducted in Saudi, two-thirds of parents with children receiving additional support in regular schools expressed their belief that the general public lacks a good understanding of educational services for their children. This lack of knowledge was viewed negatively by most parents (Habeeb & Alarfaj, 2020). It is crucial to recognize that adequate knowledge plays a significant role in promoting greater acceptance and social integration of individuals with special needs.

Furthermore, it is important to highlight the factual understanding of inclusive education and the provision of services for children with special needs as a pertinent sub-theme. Often, in the education sector, policy advancements have outpaced public awareness and the educational capacity to implement them (Kurt & Erden, 2024). The significance of public awareness for children with special needs was underscored in the contextual studies. The research identified that a lack of awareness and understanding serves as a major barrier to the integration of children with special needs, hindering the provision of effective support services and the development of positive attitudes (Bunbury, 2020).

2.7.4. Limited teacher training and support

Historically, teachers in regular classroom settings have not received sufficient training to effectively teach students with diverse needs (Aldabas, 2020). Teacher preparation programs have sometimes neglected to include coursework related to teaching diverse learners, perpetuating traditional paradigms of education. As a result, teachers may not feel empowered or capable to teach students with diverse needs, leading to low expectations and passive learning among students with special needs (Neca, Borges, & Pinto, 2022).

Teachers in traditional classroom settings may have the desire and belief to make a positive impact on the lives of students with special needs. However, they often lack the knowledge

and effective strategies to teach these students. General education teachers may have limited understanding of how to implement instructional and behavioural strategies for students with special needs. This can lead to ad hoc decision-making and the segregation of students with special needs (Byrd & Alexander, 2020). The overemphasis on sorting and labelling students through rigid assessment perpetuates a culture of failure for those with learning differences. This ultimately leads to a lack of accommodations and differentiated instruction for students with special needs, reinforcing a prophecy of failure for these students (Mason-Williams, Bettini, Peyton, Harvey, Rosenberg, & Sindelar, 2020).

2.7.4.1. Inadequate Preparation for Teaching Diverse Students

Inadequate preparation for teaching diverse students results in the inability to adjust curricula and instructional strategies to meet all learners' needs. Special education teachers are the most likely to receive information on special needs education, but it is essential for all teachers to have this knowledge. Without effective inclusive educational practices, special needs students may be included yet marginalized in regular classes (Miyachi, 2020). Inadequate teacher preparation to teach students with special needs leads to failure in making accommodations, negatively impacting students learning. Inadequate teacher preparation also leads to low expectations and miscalculated judgments of special needs student performance (Byrd & Alexander, 2020).

2.7.4.2. Insufficient Knowledge of Inclusive Teaching Strategies

Many teachers in different countries feel that they are not properly prepared to teach a diverse classroom of students, especially those with special educational needs. Teacher preparation programs often focus on subject knowledge and pedagogy, neglecting the training needed to work with students with exceptional learning needs (Carroll, 2019). Even when there is some initial training for inclusive settings, it is not always utilized in the actual working environment. This lack of preparation and training can lead to increased stress for teachers and lower expectations for student success (Brownell et al., 2010).

2.7.4.3. Lack of on-going professional development opportunities

Distance education or online courses are not always the most effective substitute for in-person, interactive, and discussion-based courses with colleagues and instructors. These types of courses have been shown to be most effective in increasing understanding and changing attitudes, which is crucial for professional development. The most effective professional

development often takes place within the school environment, where teachers can learn from each other through collaboration. However, this is dependent on adequate staffing and isn't always directly related to inclusive education (Ajani, 2018).

Unfortunately, professional development opportunities for teachers and special educators interested in enhancing their knowledge and skills in inclusive education are minimal or non-existent. This includes in-service training on working with students with special needs, as well as formal coursework in special education and online courses (Zulfija, Indira & Uaidullakzy, 2013).

2.7.5. Social Isolation and Stigma

Social isolation and stigma could lead to feelings of exclusion, low self-esteem, and difficulties in building relationships with classmates. Visually impaired students may experience social isolation or be stigmatized by their peers because of their disability (Cox and Dykes, 2001). This means that they may feel left out, have low self-esteem, and struggle to form connections with their classmates. These challenges can have a significant impact on their overall well-being and academic experience. It is important for educators and peers to be aware of these potential difficulties and work towards creating an inclusive and supportive environment for visually impaired students (Cox and Dykes, 2001).

2.7.6. Physical Barriers

Visually impaired students often face physical barriers that hinder their mobility and independence. These barriers include inaccessible classrooms, playgrounds, and facilities, making it challenging for visually impaired students to navigate their environment (Asamoah, Ofori-Dua, Cudjoe, Abdullah, & Nyarko, 2018). To address these challenges, it is important to create a physical environment that is conducive to the needs of visually impaired students (Belay & Yihun, 2020). This may involve implementing measures such as tactile paving, audible signals at pedestrian crossings, and accessible signage to help visually impaired students navigate their surroundings with greater ease. Additionally, ensuring that classrooms and facilities are equipped with assistive technologies and accommodations can also greatly enhance the learning experience and independence of visually impaired students. By addressing these physical barriers, educational institutions can create a more inclusive and supportive environment for visually impaired students (Belay & Yihun, 2020).

2.8.Strategies to Promote Students with Visual Impairments in Inclusive Education

Teachers play a crucial role in the education of students, while emphasize the importance of a positive attitude towards learner diversity for inclusion. It is essential for teachers to be aware of diversity in their classrooms and to receive continuous professional development support (Boyle & Topping, 2012). Literature suggests various strategies to promote the inclusion of visually impaired learners, including teacher development, classroom adaptations, cooperative learning, peer tutoring, collaborative teaching, and the use of assistive technologies and materials (Loreman, Deppeler, & Harvey, 2005).

2.8.1. Settings Universal Design for Learning

Universal design for learning (UDL) is a concept for curriculum development that aims to ensure all students, including those with disabilities, can access the general education curriculum. The UDL framework emphasizes the importance of providing diverse methods of representation, action and expression, and engagement to cater to the needs of every student (Coffman & Draper, 2022). By incorporating the recognition, strategic, and affective networks of the brain into the guidelines, UDL promotes the use of multiple and flexible methods of representation and multiple means of engagement (Unluol Unal, Karal & Tan, 2022). Ultimately, the goal is to cultivate expert learners and provide every student with an equal opportunity to succeed, revolutionizing the way we approach teaching and learning (Craig, Smith, & Frey, 2022).

2.8.2. Differentiated Instruction

Differentiated instruction is a flexible approach to teaching and learning that recognizes the diverse ways in which students learn and their readiness to learn (Roberts & Inman, 2023). It involves offering students different pathways to achieve the same learning goal, taking into account their varied interests and learning styles. By tailoring tasks to individual students, it increases their engagement and likelihood of success. While setting different learning goals for students is an option, it is generally best to maintain high expectations for all students while providing different avenues for achieving those expectations (Tomlinson and Jarvis, 2023). Effective differentiation requires a deep understanding of each student, which can be achieved through on-going assessment (Magableh & Abdullah, 2020).

2.8.3. Collaborative Learning

One method to acknowledge the value of each student's contribution is to hold every student responsible for the overall performance of the learning group. This can be in the form of a final group project or a group-administered test, where the outcome will reflect the impact of any member not fulfilling their responsibilities (Abramczyk & Jurkowski, 2020, Huang, Xu, Zhu, & Zhou, 2020). Groups are created for various purposes, making it difficult to establish a universal model for the "best" way to form a group (Panagou, Kotsis & Stylos, 2022). However, random group assignments are rare in most educational settings (Kouis, Kyprianos, Ermidou, & Kaimaki, 2020). Typically, teachers form groups based on their perception of which students will collaborate effectively (Baranova et al., 2021).

Effective collaborative learning assists students in developing skills to work towards shared objectives while recognizing the individual contributions of group members (Qureshi, Khaskheli, Qureshi, Raza, & Yousufi, 2023). Collaborative learning encompasses different relationships among learners (Herrera-Pavo, 2021), such as paired student learning, study groups, and small group assignments (Mora, Signes-Pont, Fuster-Guilló, & Pertegal-Felices, 2020). Additionally, Hallahan, Kauffman & Pullen (2012) illustrate that cooperative learning is a strategy that can be utilized to include learners with special educational needs, including those with visual impairments, in regular classrooms. Mwakyeja (2013) affirms that cooperative learning is a strategy teachers can employ to integrate learners with visual impairments into their classrooms.

Encouraging discussions on communication, listening, and receiving feedback can boost student confidence and willingness to engage in learning activities. Additional support may be necessary for students unfamiliar with teamwork, gradually increasing challenges as confidence grows (de Prada Creo, Mareque, & Portela-Pino, 2021). Implementing a collaborative approach to inclusive teaching involves strategies like promoting teamwork, fostering a sense of community, and shared responsibility for learning. Practical approaches include assigning group tasks, engaging in group projects, and allowing time for students to compare and summarize their notes at the end of sessions (Lai, 2021).

Establishing ground rules for group work can empower students to work effectively in teams, improving their autonomy and group work skills (Sanger, 2020). These rules include contributing ideas, taking turns to speak, showing respect, avoiding criticism, seeking clarification, and summarizing (Munna & Kalam, 2021). Promoting pupil-led group work can

further enhance student collaboration and preparedness for higher education and employment (Finkelstein, Sharma, & Furlonger, 2021). Moreover, tutors should facilitate critical thinking and problem-solving skills, encouraging dialogue and discussion (Oosthuizen, De Lange, Wilmschurst, & Beatson, 2021). Students need to be actively involved in the learning process, thinking critically and taking ownership of their learning. This helps them recognize the gap between uninformed and well-informed opinions and builds a learning community (Riivari, Kivijärvi, & Lämsä, 2021).

Students and instructors often have difficulty communicating due to the nature of classes and the large class size (Negash, 2020). Students with disabilities face additional challenges due to social stigma and negative attitudes. It is important for these students to be able to communicate with their peers and ask questions for shared learning. To enhance communication, keeping the same groups for group work throughout the course or having an online discussion forum can be helpful. Creating a friendly and open environment for student questions is essential for an inclusive learning environment (Mitchell & Sutherland, 2020).

2.8.4. Teacher Development

One of the key approaches utilized by ministries of education to improve teachers' competencies and knowledge for promoting the inclusion of learners with visual impairments (LVI) is through teacher development. According to UNESCO (2005), there exists a strong connection between teacher development and inclusive education. When teachers are equipped with the necessary training to effectively integrate students with special educational needs, they are more likely to be self-assured in including all learners in the educational process (Bartolo, 2010). Teacher development serves a crucial role in fostering awareness regarding learner diversity and transforming perceptions and attitudes (Bowman, 2014).

2.8.5. Curriculum Adaptation

Teachers should possess the knowledge and skills required to modify their instructional approaches and classroom settings to cater to the diverse educational needs of their students. According to Hallahan, Kauffman, and Pullen (2012), adapting instruction is identified as a crucial strategy for inclusive education, particularly for learners with special educational needs like those with visual impairments. Asrat (2013) also emphasizes the role of teachers in making adaptations to both instructional practices and classroom environments. Hence, it is essential for teachers to undergo training on adaptation techniques to ensure the effective inclusion of all students in their classrooms.

2.8.6. Using Assistive Technologies and Materials

Paying attention to assistive technologies and materials is crucial for supporting learners with visual impairments. Research conducted by Lewis, Wheeler, & Carter (2017) highlights the significance of assistive technologies and materials in enhancing the educational experience of individuals with visual impairments and other sensory impairments. Negash (2020) further emphasize that the use of assistive technologies and materials plays a key role in facilitating the learning process for students with visual impairments, ultimately promoting their inclusion in the classroom setting. The studies by Mbelu (2011) & Bishop & Rhind (2011) primarily focus on disabilities and impairments, the majority of existing literature tends to address the challenges and barriers to including students with visual impairments in school settings, with limited emphasis on practical strategies for inclusive education.

Assistive technology provides an alternative method for people with impaired vision to access information and ideas. Individuals with vision impairments may struggle with reading printed materials, but tools such as Braille, large print materials, screen magnification, and screen readers can help them access information in different formats (Tuwaym & Berry, 2018). These technologies enable users to input and output information through typing devices and display text in braille, as well as use synthesized speech to navigate and understand digital content (Tuwaym & Berry, 2018). Additionally, audio tapes and recorders are commonly used to record information in alternate formats. Overall, assistive technology allows individuals with vision impairments to access information in ways that traditional methods may not always provide (Kelly & Smith, 2011).

This is particularly beneficial for visually impaired students who may not have access to resources in appropriate formats, as well as for those who need assistance with visual translation (Kelly & Smith, 2011). The use of assistive technology in education can provide essential support to students with visual impairments (Tuwaym & Berry, 2018). By implementing assistive technology in the educational setting, students with visual impairments can not only access information and ideas, but also participate more fully in academic activities, engage in discussions, and complete assignments on an equal footing with their sighted peers. In conclusion, assistive technology for students with visual impairments plays a pivotal role in their educational journey by allowing them to access information and ideas through alternative formats and participate more fully in academic activities (Silman et al., 2017).

2.9. Legal Framework for Inclusive Education

2.9.1. Laws and Policies

At the global level, 179 nations, including Ethiopia, have ratified the 1995 UN Convention on the Rights of Persons with Disabilities (2010), which emphasizes the importance of promoting and safeguarding the full and equal enjoyment of all human rights and fundamental freedoms for individuals with disabilities, while also advocating for respect for their inherent dignity. Ratifying countries are bound by legal obligations to implement measures outlined in the Convention (Kretzmer & Klein, 2021). These international agreements serve as legal frameworks for understanding and interpreting the practical actions taken by UN member countries in addressing disability-related issues (Peters, 2007). Over the past two decades, several countries have enacted non-discriminatory legislation to compel schools to provide inclusive education for all students (Bhatia, 2021).

During the 1990s, international conventions made significant progress in providing legal support for students with visual impairments in their education. The 1994 Salamanca Statement have been used as the basis for local policies and legislation in Ethiopia and other UN member countries to protect the rights of people with impairments ensure their inclusion in education at all levels. The United Nations Standard Rules aim to mobilize resources for people with impairments and promote inclusive education, particularly through Rule 6, which focuses on providing equal education opportunities. This rule aims to ensure that people with impairments have the same rights and obligations as others (Lang, 2009).

2.9.2. The National Laws

The United Nations Convention on the Rights of Persons with Disabilities provides African countries, including Ethiopia, with an opportunity to review their domestic laws related to disability rights. Ethiopia has incorporated the 1993 United Nations Standard Rules into its national constitution and legal frameworks, such as the Education Policy and Special Needs Education Program Strategy. The Ethiopian constitution, established in 1995, aims to ensure the overall rights and entitlements of its people. Although it does not specifically address inclusive education, new policies and strategies have been developed to include legislative statements regarding the education and inclusion of people with disabilities. The Special Needs Education Program Strategy, established in 2006, aims to identify and eliminate barriers to inclusive education by providing support and resources for students with disabilities.

CHAPTER THREE

RESEARCH METHODS

This chapter provided a comprehensive overview of the procedures and methods utilized for gathering and analysing data. It covered various key aspects such as the research approach, study design, data collection methods, the research site, population sampling, sample characteristics, size, and data analysis process as well as ethical considerations.

3.1. Research Approach and Design

The study utilized a qualitative research approach to investigate how teachers in inclusive classrooms teach students with visual impairments and the challenges they encounter. This approach involves collecting information from the participants to gain a comprehensive understanding of the teachers' and students' perspectives and the difficulties they face in teaching and learning. By observing teachers in their natural classroom settings, the study aimed to gather detailed insights into their teaching methods. This approach will further facilitate the acquisition of in-depth information from the research participants. Qualitative research typically centers on exploring broad research questions to gain a more comprehensive understanding of complex situations. This is achieved through the collection of extensive qualitative data and the inductive development of theory (Johnson & Christensen, 2012).

The case study design was utilized in this study. Case study design is qualitative research that involves an empirical investigation of a specific phenomenon. A case study delves deeply into real-life contexts and can be used to examine various cases, including individuals, organizations, processes, programs, institutions, and events (Yin, 2009). Moreover, a case study was selected due to its evolving nature. This indicates that, during the data collection process, adjustments can be made to the established procedures and settings. In a case study, it is feasible to implement new procedures to achieve the intended results (Gall, Gall, & Borg, 2007). By adopting the single-case design method, the studies allowed for an in-depth and thoroughly investigate the practice of teaching students with visual impairments in an inclusive classroom at Dagmawi Minilik Secondary School.

3.2. The Study Site

The study was conducted at Dagmawi Menelik Secondary School, established in October 1908 by Emperor Menelik II, has played a pivotal role in shaping modern Ethiopian

education. It was designed by Greek architects and engineers under the guidance of Egyptian educator Hana Salib and Coptic teachers. The school has overcome numerous challenges throughout its history. It is situated in Addis Ababa's Arat Kilo district, near the Testing Agency and Addis Ababa University.

It accommodates approximately 7,000 students within its vast 500,000 square meter campus. Offering both daytime and evening classes, with class sizes varying from a handful of students to as many as 48; the school boasts a dedicated team of 160 teachers. Notably, a significant portion of the student body comes from underprivileged backgrounds, with around 60% engaging in part-time work, such as shoe shining. The school's leadership team includes a director, vice director, and unit leaders for regular and Saturday class programs. The school was selected since there is a special integration unit focused on implementing inclusive education. Furthermore, its commitment to providing quality education for its diverse student body, embodying a rich history of educational innovation in Addis Ababa, the researcher motivated to conduct the research in this setting.

3.3. Population of the Study

In every study, there is a specific group of people or subjects from whom data related to the topic being researched are collected. According to Polit and Hungler (1999) cited in Mberimana (2018), the population refers to the total number of all the objects, individuals, or members that meet certain criteria. This study included a total population of 3127 comprising 3 school principals, 97 teachers, 27 students with visual impairments, and 3000 students without disabilities. This study focused on Dagmawi Menelik Secondary School, thus limiting the population to its students, teachers, and principals. However, the target population is likely broader than the study participants. It includes all students with visual impairments and students without disabilities enrolled in Grades 9 to 10 of inclusive classrooms, and the school principals and teachers at Dagmawi Menelik Secondary School.

3.4. Participants of the Study

It is important to specify the study participants by detailing the sampling method, sample size, and selection procedure for qualitative research. This will ensure that the findings yield rich and valuable data (Korstjens & Moser, 2017). All of the study's participants were drawn from Dagmawi Menelik Secondary School. The participants consisted of the school principal, regular and special teachers, students with visual impairments, and students without

disabilities. The study recruited participants from a total of 3110 populations, including 3 school principals, 97 teachers, 27 students with visual impairments, and 3000 students without disabilities. The inclusion criteria were: all the participant teachers should be those who were teaching the inclusive classroom, a minimum of bachelor's degree holders, have teaching experience of 10 years, and are willing to participate in this study. The learners without disabilities and with visual impairments were selected from Grades 9 and 10, and their age ranges were between 15 and 18. Participant students without disabilities were students learning in an inclusive classroom with students with visual impairments, and they will be high achievers. Participant students with visual impairments were students who are blind and low vision, are learning in inclusive classrooms, and were willing to participate in this study.

3.4.1. Sampling Technique

The typical method of selecting sites and participants in qualitative research involves using purposive sampling (Teddlie & Tashakkori, 2009:25). Purposive sampling has been found to be effective in qualitative case studies (Creswell, 2007). It is a deliberate strategy where the researcher selects specific sites and participants to gather the necessary information to gain a better understanding of the problem being investigated or to address the research questions (Creswell, 2007). Therefore, the researcher intentionally chose Dagmawi Menelik Secondary School, the oldest and largest school in Addis Ababa, as the site for this study.

Established in 1908, the school has a long history of enrolling students with visual impairment. The researcher selected this school purposefully because it has recently become a popular choice for students with visual impairment. In the academic year 2016 E.C around 200 students with visual impairment enrolled. The selection of participants was based on their unique ability to provide informative insights or privileged perspectives on the study topic, as well as their experience and qualifications in the subject area. As this is a qualitative study, the researcher was purposively select participants from the overall population of the school, including the school principal, regular and special teachers, students with visual impairments, and students without disabilities. Additionally, the researcher considered the characteristics such as level of education and gender, taking into accounts the experience and knowledge of the socio-cultural settings of the potential informants.

3.4.2. Sample Size

To achieve the goal, the study selected 1 school principal, 4 regular and special teachers, 3 students with visual impairments, and 3 students without disabilities.

3.5. Instrument for Data Collection

The aim of collecting data was to gather reliable information for analysis, in order to provide compelling and credible answers to the research inquiries. To accomplish this objective, a variety of data collection techniques such as observation and interviews were utilized (Canals, 2017 & Aguinis et al., 2021). Qualitative research data collection methods comprise observation, interviews, documents, and/or audio-visual materials (Creswell, 2007). Given that this study is qualitative in nature, the researcher employed interviews and observation to investigate the phenomena being studied.

3.5.1. Interviews

In this study, semi-structured interview questions were utilized during the interview to collect qualitative data from the participants. The advantage of semi-structured interview questions lies in the ability to delve deeply into specific areas of interest with confidence. Therefore, the researcher created a set of open-ended questions to conduct interviews and gather detailed information about the real-life experiences of the participants. As noted by Grut and Ingstad (2005), individual interviews are effective for collecting qualitative information, especially when more detailed insights are required. Consequently, the researcher conducted individual interviews with 11 participants using semi-structured questions to obtain in-depth qualitative data. Each face-to-face interview involved the researcher and one participant at a time, with the use of semi-structured questions centered on key themes or words (Grut & Ingstad, 2005). The in-depth interviews, lasting forty minutes with each participant, were guided by specific questions.

3.5.2. Observations

In this particular case, the researcher immersed in the study setting to observe students learning in inclusive classroom. The classroom observations were conducted two times for each classroom. The average duration of classroom observation was around 35 minutes.

3.6. Data Collection Procedures

Prior to commencing the research, approval was sought from pertinent authorities, including Addis Ababa University and Dagmawi Menelik Secondary School. Data was gathered from a total of 11 school principals, teachers, classrooms, and students through face-to-face interviews and classroom observations. The interview questions and observation checklists were created by the researchers, using the main research question and relevant literature as a guide. The developed questions were validated by an advisor and a field expert, written in English, and then translated into Amharic by a qualified local translator. The researcher, being familiar with the site and local language, was responsible for the fieldwork and obtaining permission from relevant stakeholders. Participants were also allowed to record the interview sessions and take notes. Once all participants have given their consent and understand that their involvement is voluntary and their anonymity is guaranteed, data collection commenced.

3.7. Data Analysis

The interpretation and description of raw data through data analysis is crucial to derive meaning and patterns from it (Bell, 2005). Qualitative data was gathered through interviews and classroom observations and was analysed using thematic analysis by categorizing and interpreting the data in relation to the research questions. The data from interviews were aligned with sub-questions, and themes emerged during the analysis. The analysis involved identifying broad themes and grouping participant responses into categories. Data analysis begins immediately after the initial data collection to ensure completeness and relevance, leading to the potential restructuring of data collection tools. Transcription from Amharic to English was occurred for the collected data, followed by thematic analysis to organize it. This process involved identifying, analysing, and reporting themes present in the field data. Direct quotations were used when reporting the collected information from research participants (Johnson & Christensen, 2012; Braun & Clarke, 2006). A comparison was also made between informant responses researchers insights and existing literature to discuss the issues and draw conclusion and recommendation.

3.8. Ethical Consideration

To ensure ethical standards, several key steps were taken. First, approval was obtained from the relevant authorities to proceed with the research study. Then, permission was sought from the appropriate entities to access specific locations, such as schools, for data collection purposes.

Prior to data collection, participants fully informed about the research objectives and procedures through consent letters. In addition, consent letters outlined the significance of their involvement in the study, emphasizing voluntary participation and the right to withdraw at any point (Creswell, 2009). Furthermore, to keep anonymity and confidentiality, participant identities were kept confidential by assigning codes instead of using their names. Data collected was treated with utmost confidentiality and was securely stored and subsequently erased after use to protect participant privacy based on Creswell (2009).

CHAPTER FOUR

RESULTS

4.1. Introduction

The study aimed to investigate the practice and challenges of teaching students with visual impairment in an inclusive classroom at Dagmawi Minilik Secondary School in Addis Ababa. It provided valuable insights into the current practices and challenges of teaching students with visual impairments in an inclusive classroom setting. It analysed the perspectives of school principals, regular and special teachers, students with visual impairments, and students without disabilities. The research explored the perception of students with visual impairments in learning in an inclusive classroom, the challenges they face, strategies used to overcome these challenges, adaptive teaching methods, and available resources and support systems at Dagmawi Minilik Secondary School. By highlighting the experiences of students with visual impairments, this study aimed to shed light on effective instructional methods, necessary accommodations, and potential barriers to success in inclusive education.

4.2. Demographic Characteristics of Study Participants

Table 1

Profile of the School Principal

No	Participant Code	Sex	Age	Subject Taught	Academic Qualification	Teaching Experience	Leadership Experience
1	P1	M	45	Leadership	MA	8 years	6 Years

Table 2

Profile of the Regular and Special Teachers

No	Participant Code	Sex	Age	Type of Subject Teaching	Academic Qualification	Teaching Experience	Teacher Type
1	T1	M	40	History	Degree	26	Regular
2	T2	M	46	English	Degree	26	Regular
3	T3	F	40	Geography	Degree	15	Regular
4	T4	M	50	Special needs supporter	Degree	31	Special

Table 3***Profile of Students with visual Impairment***

No	Participant Code	Sex	Age	Grade level	Types of visual Impairment
1	V1	M	17	10	Blind
2	V2	M	16	9	Blind
3	V3	F	18	10	Blind

Table 4***Profile of Students without Disability***

No	Participant Code	Sex	Age	Grade level
1	S1	F	16	9
2	S2	M	17	10
3	S3	F	16	9

The above 4 tables outline the profiles of the interviewed subjects and those observed. The school principal is represented by codes P1, the regular and special teachers by codes T1-T4, the students with visual impairments by codes V1-V3, and students without disabilities by codes S1-S3. Additionally, non-participatory observations with eight dimensions, including classroom information, activities, teaching techniques, aids, assessment strategies, students' learning, and extracurricular observations, were conducted. In general, demographic data for this category of respondents were analysed in terms of their age, gender, teaching experience, academic qualifications, type of subject taught, leadership experience, grade level, and type of visual impairments.

4.3. Perception of Students with Visual Impairments in Learning in Inclusive Classroom

The researcher presented a question to study participants regarding the perception of students with visual impairments in inclusive classrooms including how they feel, acceptance, and their attitudes in learning in inclusive classroom. The school principal, P1, indicated that students with visual impairments at our school feel supported and included in their learning

experiences. P1 explained that this perception is influenced by personalized accommodations, access to assistive technologies, teaching materials, and trained support staff, although there is still work to be done to fully facilitate everything. Additionally, the school's culture of empathy, understanding, and collaboration contributes to creating a sense of belonging and equal opportunities for all students. P1 also emphasized the school's commitment to promoting accessibility, embracing diversity, and facilitating academic and social growth for students with visual impairments. P1 stated his experience regarding the perception of students with visual impairments in inclusive classrooms as follow:

"As the school principal, I am delighted to share that our school is dedicated to creating an inclusive and supportive environment for students with visual impairments. We are committed to providing the necessary accommodations and resources tailored to meet their specific needs, including access to assistive technologies, specialized teaching materials, and trained support staff though we have scarcity of budget. Our school community promotes empathy, understanding, and active participation, ensuring that students with visual impairments feel valued and encouraged in all aspects of school life. We prioritize accessibility, embrace diversity, and foster a sense of belonging for every individual. While we have made significant progress, we recognize that there is always room for improvement. We are continuously working to enhance our practices and ensure that all students, regardless of their abilities, have the opportunities and support they need to succeed academically and socially."

Teacher T1 reported that their school has made commendable progress in creating an inclusive environment for students with visual impairments, but there is still on-going work to be done to further improve students' engagement, happiness, and collaborative support within the inclusive classroom setting. T1 emphasized the reflective approach that allows them to acknowledge successes while striving for continuous enhancement in supporting all students effectively. Teacher T2 raised concerns about the level of engagement and learning experiences of students with visual impairments in the inclusive classroom at her school. He highlighted issues such as limited participation, lack of interest, and a sense of detachment among these students. This underscores the need for additional support and intervention to improve their engagement and perception of learning. While emphasizing the importance of collaborative efforts among special educators, regular teachers, and support staff, T2 also noted that the current support has not consistently met the needs of students with visual

impairments. The T2 expressed the perception of students with visual impairments in inclusive classrooms as follow:

"I have observed concerning signs regarding student engagement and their perception of learning experiences. Some students show limited participation, lack of interest, and a sense of detachment, indicating the need for targeted interventions and further investigation. Additionally, students with visual impairments may not be experiencing significant satisfaction in their academic and social interactions within the classroom, as shown by signs of disinterest, frustration, and social isolation. These highlight the urgency of implementing strategies to improve student well-being. Furthermore, the collaborative efforts of educators and support staff seem to have gaps, with limited individualized support and coordination issues identified. It is crucial to enhance communication, implement tailored interventions, and foster stronger collaboration to better support students with visual impairments in their learning journey within the inclusive classroom environment."

In responding to the statement T3 said that students with visual impairments in their school often have a unique perception of their learning experiences within the inclusive classroom setting. She articulated that their perception may be influenced by various factors, such as their level of comfort with adaptive technology, the support they receive from educators and peers, and their sense of inclusion and belonging in the classroom community. The T3 added that positive interactions, encouragement from teachers, and opportunities for active participation can contribute to a student with visual impairments feeling valued, empowered, and confident in their ability to learn and succeed.

Special Teacher T4 observed that students with visual impairments in inclusive classroom settings show varying levels of engagement and perception towards their learning experiences. The T4 emphasizes tracking the use of adaptive technology and students' comfort levels in learning tasks. Both T3 and T4 teachers agreed that students with visual impairments find happiness in their academic and social interactions within the inclusive classroom. T4 stated positive indicators which include active engagement, enthusiasm, and positive relationships with peers and teachers. T4 highlighted the collaborative efforts among special educators, regular teachers, and support staff, which help students, feel supported and empowered. The special teacher, T4, expressed the perception of students with visual impairments in inclusive classrooms as follows:

"As a special education teacher, I employ a range of methods to assess the engagement and perception of students with visual impairments in inclusive classrooms. This involves monitoring their use of adaptive technology, evaluating their comfort levels, and observing their independence in completing tasks. Through my experience, I have found that these students experience happiness in both their academic and social interactions within the inclusive classroom. Positive indicators of their emotional well-being include smiling during interactions, active participation in group discussions, and expressing satisfaction with their progress. Students with visual impairments value the collaborative efforts of educators and support staff, feeling included and valued as active participants in the classroom community. The teamwork and individualized strategies implemented by the educators significantly contribute to the students' sense of belonging and confidence in their educational journey."

Three students with visual impairments shared their perspectives on learning in inclusive classrooms. Student V1 expressed happiness about learning in the inclusive classroom, citing specific examples that have positively impacted their learning. He mentioned that having access to braille materials and using adaptive technology such as computer jaws may help them participate more actively in class discussions and complete assignments independently. V3 also mentioned that the supportive attitude of their teachers and peers has contributed to their sense of happiness and inclusion in the classroom, despite the need for additional support services.

Students V2 and V3 explained that the inclusive classroom setting hinder their academic and social development as a student with a visual impairment. They pointed out that factors such as desk arrangements, teacher awareness, availability of assistive technology, and the inclusive curriculum are limited, leading to a negative perception of inclusive education. Their inability to effectively access materials and participate in class activities has created a sense of exclusion and hindered academic progress. On the issue of learning in inclusive classrooms V3 said:

"I have faced challenges in the inclusive classroom environment that have hindered my academic growth and social interactions. The lack of support from teachers and peers has made it difficult for me to seek help when needed and form positive relationships within the classroom community. Additionally, the limited access to learning materials and a lack of understanding and support from

educators have added to my negative experience in the inclusive classroom setting. Students with visual impairments also face similar obstacles, including hindered learning experiences, academic progress, and social interactions. Inadequate teacher support, inaccessible materials, non-inclusive curriculum, and a lack of collaborative opportunities are key factors contributing to our dissatisfaction and academic struggles in the inclusive classroom."

On the issue of perception of students with visual impairments in inclusive classrooms students without disability had a mixed idea. Student S1 observed that some students with visual impairments adapt well to the inclusive environment, showing resilience and bringing unique perspectives to discussions and projects. However, she also noted the obstacles they face, such as the lack of accessible materials and the need for more support. In responding to the statement S2 explained:

"In my classroom, students with visual impairments have varying experiences and perspectives on the inclusivity of the environment. While some appreciate the support and accommodations that help them navigate their learning journey, others feel frustrated by the lack of accessibility and understanding from their peers. They consistently express the need for the school to strive towards creating a more welcoming and inclusive space where everyone's needs are met and valued."

Students S2 and S3 expressed that students with visual impairments have mixed feelings about the support they receive, with some thriving in the inclusive atmosphere while others feel frustrated by limitations in resources and accommodations.

4.4. Challenges Students with Visual Impairments Face and Strategies Used in Inclusive Classroom to Overcome Challenges

All study participants were questioned about the challenges faced by students with visual impairments in inclusive classrooms, as well as the strategies employed to overcome these challenges. The school principal responded to the inquiry by stating:

"I am keenly aware of the challenges that students with visual impairments face in our school's inclusive classrooms. One of the main obstacles they encounter is the lack of accessible learning materials and resources, which can impede their academic progress and full participation in classroom activities. Additionally, some students struggle to receive the individualized support they need from teachers and peers to fully engage in the learning process. To tackle these challenges, our school has implemented various strategies and initiatives to ensure that all educational materials

are available in multiple formats to cater to the diverse needs of students with visual impairments. This includes providing Braille materials, audio resources, and utilizing assistive materials to enhance the learning experience. We also prioritize professional development for teachers to equip them with the knowledge and skills needed to effectively support students with visual impairments in the inclusive classroom. Our school actively engages with parents, special education professionals, and community organizations to create a holistic support system for students with visual impairments. We hold regular meetings and discussions to address individual student needs and develop personalized education plans. Despite budget constraints, we are committed to continuously improving our practices and resources to ensure that every student receives the support they need to succeed."

The primary challenges that students with visual impairments face in the inclusive classroom, as well as the strategies employed to overcome these challenges, were discussed by all regular and special education teachers. The primary challenges faced by students with visual impairments in inclusive classroom settings include difficulties accessing and engaging with learning materials such as computers, braille materials, and braille paper, as well as dealing with an inaccessible school environment including unclean toilets and improper classroom and school compound arrangements. To address these challenges, V3 stated that teachers collaborate with special education professionals and utilize tools like audio recordings, tactile materials, and enlarged texts to make the curriculum more accessible. He added that clear communication and individualized support are also provided to ensure that students with visual impairments can fully participate in classroom activities. The regular Teacher T2 put the following ideas on the issue of challenges students with visual impairments faced:

"I have noticed that students with visual impairments often face difficulties navigating the physical classroom environment and accessing visual aids or displays. They also encounter challenges in social interactions and collaborative work within the inclusive classroom setting. To tackle this issue, I collaborate closely with the special education teacher and school administration to create a more inclusive physical space. This involves organizing classroom layouts, using clear signage, and incorporating tactile teaching aids. Additionally, I provide verbal descriptions and alternative instructional methods to ensure that all students can actively participate in learning activities."

The special education teacher shared the strategies he used to help students with visual impairments overcome challenges they currently face and may encounter in the future as follow:

"In my role as a special education teacher, I am dedicated to providing support for students with visual impairments in the inclusive classroom, despite budget constraints. I offer tailored instruction, personalized assistance, and access to assistive technologies to enrich their academic experience. Working alongside general education teachers, I collaborate to create adaptations and adjustments to the curriculum, assessments, and classroom activities, ensuring that students with visual impairments can fully engage and thrive in the inclusive classroom. Through teamwork and advocacy for the diverse needs of these students, we aim to establish an inclusive and nurturing learning environment that fosters their academic and social growth. I cultivate a supportive classroom atmosphere that celebrates diversity and promotes peer interaction. I facilitate group tasks that encourage teamwork and communication skills, and I provide guidance to ensure that all students, including those with visual impairments, feel included and supported within the classroom community."

Concerning the challenges students with a visual impairment face in inclusive classroom all of the participants stated students with visual impairments face various challenges that in an inclusive classroom. Four of the students (S1, S2, S3, and V3) highlighted difficulties in accessing learning materials such as computers, braille materials, and braille paper. They also mentioned issues with an inaccessible school environment including: unclean toilets and improper classroom and school compound arrangements. Additionally, two students (V1 and V2) emphasized the limitations in teacher awareness, the lack of individualized education plans (IEP), and the shortage of tutorials and specialized classes for students in grades nine and ten.

In responding to the statement about the most significant challenges he faces as a student with a visual impairment in the inclusive classrooms, how these challenges affect his learning experience, and how these were addressed or resolved, the V1 articulated as follows:

"As a student with a visual impairment in an inclusive classroom, I faced significant challenges due to the lack of accessible learning materials and resources. Accessing printed materials, visual aids, and digital content is often a struggle, impacting my ability to fully engage in lessons and complete assignments independently. These

obstacles not only affected my academic performance but also diminished my confidence and sense of belonging in the classroom. To overcome these challenges, I tried to collaborate with my peers, teachers and the school's support staffs to receive materials in alternative formats such as Braille and audio recordings."

In responding to the statement about the most significant challenges he faces as a student with a visual impairment in the inclusive classrooms, how these challenges affect his learning experience, and how these were addressed or resolved, the V2 articulated:

"In an inclusive classroom setting, I faced the primary challenge of limited understanding and support from some teachers and classmates regarding my visual impairment. This often led to feelings of isolation and being overlooked when it came to adapting lessons, providing accommodations, or receiving assistance. The lack of awareness and empathy hindered my participation in group activities, discussions, and collaborative projects, impacting my overall learning experience and social interactions. To address this challenge, I have been proactive in advocating for my needs, educating my peers and teachers about visual impairments, and working with the school's special education team to implement supports and accommodations that promote inclusivity and understanding in the classroom."

Student V3 shared her thoughts in response to the question about the most significant challenges she faced as a student with a visual impairment in inclusive classrooms. She discussed how these challenges impacted her learning experience and how they were addressed or resolved as follow:

"As a student with a visual impairment in an inclusive classroom, I know there are lots of challenges in my school. I have faced significant challenges in navigating the physical environment and accessing educational materials independently. Furthermore, locating resources, finding my way around the classroom, and interacting with visual aids or technology that may not be fully accessible have been on-going struggles. Additionally, encountering unclean and sometimes locked toilets has been a frustration in addition to inaccessible school environment. I believe that a lack of awareness among teachers has led to inadequate academic support for me. When we asked facilities from the school they always raised budget shortage. These challenges have impacted my ability to participate in hands-on activities, engage in visual demonstrations, and collaborate effectively with my peers. To address these obstacles, I have worked closely with my teachers, the school's special education

team, and my peers to develop personalized strategies and adaptations that support my mobility, access to materials, and overall learning experience."

The observation of visually impaired students in inclusive settings revealed that they sometimes face significant challenges that hinder their educational experience. These challenges include limited access to educational materials like braille textbooks or audio formats, which can impede their learning and active participation in class activities. Additionally, the lack of accessibility features in the school environment, such as classroom infrastructures and navigational aids, further complicates the situation for visually impaired students, impacting their ability to navigate independently and fully engage in the learning process. It was also noted that there were no instances of social isolation or stigma that hindered students' sense of belonging within the school community.

4.5. Strategies to Adapt Teaching that Suit the Needs of Students with Visual Impairments in Inclusive Classrooms

In answering the questions about the strategies to adapt teaching that suit the needs of students with visual impairments in inclusive classrooms; the school principal stated that the school has made it a priority to provide professional development opportunities for teachers in inclusive classrooms to better support students with visual impairments. P1 also explained his thought as follow:

"As school principal I encourage collaborative planning sessions involving special education teachers and support staffs have been effective in developing individualized strategies and accommodations for these students. Accessible materials such as braille and braille papers have enhanced learning outcomes, while multisensory teaching approaches like tactile diagrams and models used in classes have successfully engaged students with visual impairments. Peer support programs have fostered a sense of inclusion and support within the school community. Continuous monitoring of student progress and on-going support are key factors in meeting the academic and social-emotional needs of students with visual impairments. Despite budget shortages, the school prioritizes inclusive practices, creating diverse learning environments that lead to positive academic outcomes for all students, including those with visual impairments."

In responding to the statement about strategies to adapt teaching that suit the needs of students with visual impairments in inclusive classrooms three regular teachers (T1, T2, and T3) said that they adapt teaching methods by incorporating multisensory approaches to cater

to the diverse needs of students with visual impairments. T2 expressed that he provides materials in various formats, such as braille and digital recording to ensure accessibility. Furthermore, I encourage collaborative learning activities that promote peer interaction and support for all students, including those with visual impairments. Regarding promoting Inclusion of students with visual impairments in inclusive classrooms T3 said:

"To foster an inclusive and successful learning environment, I prioritize creating a classroom atmosphere that is both welcoming and supportive. I actively engage in open communication with students who have visual impairments in order to better understand their individual needs and preferences. Additionally, I collaborate closely with special education teachers to ensure that appropriate accommodations and modifications are in place to support their learning and participation in classroom activities. My teaching methods include facilitating group discussions where students with visual impairments take the lead, utilizing question-and-answer techniques, and providing auditory explanations to enhance the learning experience."

Concerning the strategies to adapt teaching that suit the needs of students with visual impairments in inclusive classrooms special Education teacher, T4, provided effective techniques and accommodations possible as she can. As a special education teacher, she found that providing individualized support and accommodations tailored to the specific needs of students with visual impairments is crucial for their academic progress. Techniques such as using tactile materials and auditory cues have been effective in facilitating their learning and engagement in the inclusive setting. She also collaborates with regular teachers to ensure that lesson plans are modified to meet the learning goals of these students. In his direct wording T4 said:

"I prioritize the holistic development of students with visual impairments over solely focusing on classroom activities. This involves nurturing their independence, encouraging self-advocacy, and providing social-emotional support. I collaborate closely with other support staff, offering orientation and mobility guidance to new students and addressing their unique needs to ensure they have the necessary resources for success. Through effective techniques and accommodations, both regular and special education teachers work together to create an inclusive and supportive environment that fosters academic progress. But, there is still much to be

done to facilitate the education of students with visual impairments in the school setting."

In answering the question about the strategies to adapt teaching that suit the needs of students with visual impairments in inclusive classrooms All three students with visual impairments (V1, V2, and V3) and all students without disability (S1, S2, and S3) mentioned that their teachers primarily use verbal descriptions to accommodate the needs of students with visual impairments. Additionally, V2 highlighted that group discussions and question-and-answer techniques are employed to enhance the learning experience for students with visual impairments, while V3 emphasized the importance of peer support and collaboration to make a positive impact on their educational experience in inclusive classrooms.

During the interview, students S1, S2, and S3 acknowledged the challenge of using a one-size-fits-all teaching method for students with visual impairments. They emphasized the need for teachers to adapt their methods to accommodate the diverse learning styles and needs of these students. Student S3 shared the following insight:

"Teachers face the challenge of accommodating the diverse learning needs of students with visual impairments in inclusive classrooms. While some efforts have been made to incorporate a variety of teaching methods and accommodations, there is still room for improvement. It is essential for teachers to tailor their strategies to individual student needs and provide on-going support to ensure the success of students with visual impairments. Specific accommodations, such as access to digital recorders, extra time for assignments and tests, tactile learning activities, additional practice opportunities, and detailed verbal instructions, have proven to be particularly helpful. However, the implementation of these accommodations varies among teachers."

The researcher observed that teachers made efforts to address the needs of visually impaired students by incorporating effective teaching strategies. These strategies included encouraging students with visual impairments to ask and answer questions, promoting their active participation, and boosting their confidence in sharing their perspectives. Additionally, teachers allowed extra time for activities, enabling these students to work at their own pace and showcase their abilities without feeling rushed. Furthermore, implementing discussion methods and collaborative learning activities fostered mutual support among students, making those with visual impairments active learners within the group.

4.6. Available Resources and Support Systems to Facilitate the Education of Students with Visual Impairments in Inclusive Classrooms

Concerning the availability of resources and support systems to facilitate the education of students with visual impairments in inclusive classrooms, the study participants unanimously reported limited availability of resources and support systems for students with visual impairments in inclusive classrooms in their school. When asked about this, the school principal shared his perspective as follow:

"In some cases, students with visual impairments in inclusive classrooms may lack the necessary support and resources due to budget constraints. However, it is crucial to find alternative strategies and advocate for these students' needs. At our school, we have taken steps to address this by maximizing available resources, prioritizing the needs of visually impaired students, and being creative with existing materials. We have also sought donations and grants for specialized equipment and formed partnerships with the community to enhance support for these students even though the result was not as enough as we thought. Additionally, we have provided training to teachers, staff, students, and families about the specific needs of visually impaired students, emphasizing the importance of inclusion and accessibility in the learning environment."

In answering the question about the resources and support systems regular teachers T1 and T2 highlighted the ability of regular teachers to adapt their teaching strategies despite limited resources. They emphasized the use of low-cost or no-cost accommodations, such as incorporating verbal descriptions into lessons. Additionally, T3 stressed the importance of collaboration with colleagues and sharing best practices to better support students with visual impairments. She added that encouraging peer support among students in the classroom was also mentioned as a way to provide additional assistance, with peer buddies helping with reading materials, guiding around the school, and assisting with hands-on activities to promote a sense of belonging and inclusion.

The teacher T4 emphasized the importance of collaboration between regular teachers and special education teachers, as well as support staff, to share resources, knowledge, and strategies for supporting students with visual impairments. Despite limited resources and support systems, the school has fostered partnerships with local organizations, businesses, and community members to gather donations, volunteers, and alternative resources that can

benefit these students. However, the impact of these efforts has not been fully recognized. T4 described this issue as:

"Despite facing limited resources and lack of support, the collective effort and advocacy from the school principal and teachers have enabled our school to create partial inclusive and supportive environment for students with visual impairments. By leveraging existing resources, promoting collaboration, and seeking community involvement, the school is working towards ensuring that all students receive the support they need to thrive academically and socially."

On the issue of resources and support for Student with Visual Impairment all students with visual impairments (V1, V2, and V3) and those without disabilities (S1, S2, and S3) expressed that there is a lack of specific resources to support inclusive education, such as braille textbooks, audio materials, and assistive technology devices. Students without disabilities (S1, S2, and S3) also mentioned that the school has made efforts to improve by providing additional teacher training, educating students on inclusive practices, and establishing a peer support system. However, all student participants believe that these efforts are not sufficient to fully include students with visual impairments. Student with visual impairment, the V3 also expressed her feeling as follow:

"Honestly speaking, to better assist students with visual impairments, the school should make significant efforts to improve the provision of resources. This can be achieved by establishing a designated quiet study area equipped with accessibility features. Personally, I find the greatest support from my classmates. Some of my friends are always willing to act as my "seeing eye" in class, describing visuals and taking detailed notes. Additionally, having access to the IT Lab during breaks allows me to modify digital materials for better visibility, despite limited computer resources."

In his statement S2 stated that acknowledging the limited resources and support available, students without disabilities sometimes serve as beneficial resources to enhance the educational journey of students with visual impairments in the inclusive environment. The study participants unanimously agreed that through collaboration, empathy, and a shared commitment to inclusivity, schools can create a feeding program for visually impaired students, even in a secondary school setting.

The researcher observed that teachers were not effectively utilizing a wide range of teaching materials to cater to the diverse learning needs of visually impaired students, which hindered

their academic success and engagement. However, by adapting written texts to alternative formats like braille or audio devices, equal access to educational resources can be ensured, promoting literacy development. Unfortunately, these adaptations were not being implemented in the classroom, thus limiting visually impaired students' access to written information and their integration into the inclusive classroom environment.

CHAPTER FIVE

DISCUSSION

The research findings were meticulously examined and organized into four key thematic areas, shedding light on the practice and challenges of teaching students with visual impairment in an inclusive classroom at Dagmawi Minilik Secondary School. These themes encompass the theme 1 perception of students with visual impairments in inclusive classrooms, theme 2 the specific challenges they face and strategies employed to overcome these obstacles, theme 3 strategies to adapt teaching, and theme 4 the available resources and support systems at Dagmawi Minilik Secondary School. These themes were identified to better understand the main objectives of the study delving into the learning practice of students with visual impairments.

Ultimately, to inform future strategies and interventions to enhance the educational experiences of students with visual impairments in inclusive classrooms, responses from all respondents were compiled and analyzed to achieve these results. The data was gathered through in-depth interviews with a school principal, four regular and special teachers, three students with visual impairments, and three students without disabilities. Non-participatory observations were conducted across eight dimensions, including classroom information, classroom activities, teaching techniques, teaching aids, assessment strategies, students' learning, and extracurricular observations. Separate guided questions were used for the forty-minute in-depth interviews with all 11 participants, tailored to the school principal, regular and special teachers, students with visual impairments, and students without disabilities.

5.1. Perception of Students with Visual Impairments in Learning in Inclusive Classroom

This study explored the perception of students with visual impairments (VI) in inclusive classrooms. Despite the school's commitment to creating an inclusive environment and providing accommodations and support staff, it was observed that students with visual impairments did not feel happy in inclusive classrooms. They faced limited participation and a sense of detachment. The findings of the study conducted by Miyauchi (2020) further support the notion that without effective inclusive educational practices, special needs students may be included in regular classes but still face marginalization. This failure to provide appropriate accommodations has a negative impact on their learning. Contrary to the aforementioned findings, a study conducted by Lee, Cheausuwantavee, & Roberts (2023)

revealed that students with visual impairments actually prefer inclusive schools. This is because they have the opportunity to study alongside their peers without visual impairments, allowing them to form close friendships. These friendships not only provide support in their learning and mobility, but also bring joy and happiness to their school experience. The presence of friends allows them to engage in conversations, play together, and truly enjoy their time at school.

The study findings revealed that students with visual impairments have varying perspectives on learning in inclusive classrooms. While some students feel supported and included, others face significant challenges. These challenges include limited access to learning materials, lack of teacher awareness and individualized support, and a sense of social isolation within the classroom. It is important to note that some students with visual impairments thrive in these environments, while others face accessibility limitations. Supporting these findings, Lee et al. (2023) explain that students with visual impairments also have the opportunity to assist their friends in the classroom. For example, they can remind their friends to listen to the teachers, follow instructions, avoid being disruptive, and focus on their studies. Additionally, studies by Bowman (2014) highlights the crucial role of teacher development in fostering awareness of learner diversity and transforming perceptions and attitudes towards individual differences and Aldabas (2020) noted that teachers in regular classroom settings often lack sufficient training to effectively teach students with diverse needs (Aldabas, 2020).

The study findings revealed that although the school culture prioritizes creating a supportive environment for students with visual impairments, there is room for improvement in terms of personalized accommodations, access to assistive technologies, and trained support staff. By addressing these areas, we can foster a stronger sense of belonging and ensure equal opportunities for visually impaired students. In line with these suggestions, Grum & Bobinski (2005) argue that by addressing perceptions, educators and policymakers can create inclusive settings that not only promote a culture of learning and empowerment but also enable visually impaired students to reach their full potential and make meaningful contributions to society.

The research findings underscored the importance of continuously enhancing the provision of personalized accommodations, access to assistive technologies, and well-trained support staff. These measures are crucial in ensuring that students with visual impairments feel valued, empowered, and confident in their ability to learn and thrive. The study conducted by Shore et al. (2022) further supports these findings by emphasizing the significance of inclusive classrooms, which are specifically designed to be more accessible for students with

disabilities, including those with visual impairments. Providing alternative formats of learning materials, such as braille or audio, can greatly empower students to actively engage with the curriculum on their own. Additionally, McNicholl, Desmond, & Gallagher (2023) highlight the importance of exposing students to individuals who have successfully overcome challenges and achieved remarkable accomplishments and this exposure can inspire students to believe in their own abilities and significantly boost their confidence in navigating the world independently.

5.2. Challenges Students with Visual Impairments Face and Strategies Used in Inclusive Classroom to Overcome Challenges

The study findings investigated that students with visual impairments encounter numerous challenges in inclusive classrooms, which can hinder their academic progress and full engagement in classroom activities. Some of the main obstacles that these students face include the lack of accessible learning materials and resources, insufficient individualized support, and inaccessible school environments. Belay & Yihun (2020) and Verdier (2016) argue that the challenges faced by students with visual impairments in inclusive classrooms are diverse and complex. These challenges encompass difficulties in accessing and comprehending visual materials, navigating the physical environment, participating in group activities, and receiving appropriate support and accommodations.

According to the study findings, students with visual impairments encounter a multitude of challenges in inclusive classrooms. One of the primary obstacles they face is the unavailability of accessible learning materials and resources. This lack of accessibility can hinder their academic progress and prevent them from fully participating in classroom activities. These findings are supported by Tom, Mpekoa, & Swart (2018) that states it is important to note that inclusive settings may not always provide the necessary accommodations and support for visually impaired students, such as assistive technology, braille materials, or specialized professionals like vision teachers or orientation and mobility specialists.

Furthermore, the study findings showed that students with visual impairments frequently encounter challenges when it comes to navigating the physical classroom environment and accessing visual aids or displays. Unfortunately, these difficulties can worsen their overall educational experience. A study conducted by Asamoah et al. (2018) supports these findings, addressing the fact that visually impaired students often face physical barriers hinder their mobility and independence. These barriers include inaccessible classrooms, playgrounds, and

facilities, making it incredibly challenging for visually impaired students to effectively navigate their surroundings.

Furthermore, the research findings brought attention to the challenges faced by students with visual impairments in receiving the necessary personalized support from both teachers and peers. This lack of support can often lead to feelings of isolation and being overlooked, which in turn hinders their ability to fully engage with the curriculum and actively participate in classroom activities. Additionally, there is a shortage of tutorials and specialized classes available for students in grades nine and ten, further exacerbating the situation.

In line with these findings, Emmers, Baeyens, & Petry (2020) also support the notion that students with disabilities frequently encounter negative attitudes from school staff, which can make them feel unwelcome in regular school settings. This creates a significant barrier to their full inclusion and participation. It is crucial that we address these challenges and work towards providing the necessary support and resources for students with visual impairments. The study emphasized that by doing so; we can ensure their equal access to education and create an inclusive environment that fosters their overall growth and development.

The study findings depicted that to better support students with visual impairments, schools have implemented various strategies to address the challenges they face. These strategies include providing educational materials in multiple formats, such as braille and audio, and offering professional development for teachers to equip them with the necessary knowledge and skills. Collaboration among school communities is also encouraged to ensure the success of visually impaired students. Research conducted by Belay & Yihun (2020) highlights the importance of creating a physical environment that caters to the needs of visually impaired students. This can be achieved by implementing measures such as tactile paving, audible signals at pedestrian crossings, and accessible signage. These enhancements greatly assist visually impaired students in navigating their surroundings with ease. Furthermore, Boyle & Topping (2012) emphasize the significance of teachers being aware of the diversity in their classrooms and continuously receiving professional development support. This ensures that teachers are well-prepared to meet the unique needs of visually impaired students and provide them with the best possible education. By implementing these strategies and fostering a supportive environment, schools can create an inclusive educational experience for students with visual impairments.

5.3. Strategies to Adapt Teaching that Suit the Needs of Students with Visual Impairments in Inclusive Classrooms

The study findings indicate that teaching students with visual impairments in inclusive classrooms requires a comprehensive approach that addresses their unique needs and promotes academic success. To achieve this, educators should consider implementing strategies such as providing alternative formats of materials, collaborating with special education professionals, and creating inclusive physical spaces. This finding is consistent with studies by Kelly (2016), Miyauchi (2020), and Cox & Dykes (2001). According to Kelly (2016), teachers need to possess an open-minded attitude, knowledge about visual impairments, and appropriate strategies to ensure that these students can fully participate in the educational experience. Additionally, Miyauchi (2020) emphasizes the importance of teachers understanding the specific challenges faced by students with visual impairments and taking proactive measures to modify their teaching methods and create a supportive environment. By adapting their strategies to accommodate the needs of these students, teachers can ensure that instruction is accessible, inclusive, and engaging (Cox & Dykes, 2001).

The study findings explained the providing verbal descriptions and alternative instructional methods can also ensure that all students can actively participate in learning activities. Teachers collaborate with special education professionals to create adaptations and adjustments to the curriculum, assessments, and classroom activities, ensuring that students with visual impairments can fully engage and thrive in the inclusive classroom. Moreover, school prioritizes professional development for teachers to equip them with the knowledge and skills needed to effectively support students with visual impairments. Several studies, including those by Hallahan, Kauffman, and Pullen (2012), Ajani (2018), and Asrat (2013), support these findings. Adapting instruction is identified as a crucial strategy for inclusive education, particularly for learners with special educational needs like those with visual impairments (Hallahan, Kauffman, & Pullen, 2012). Asrat (2013) emphasizes the role of teachers in making adaptations to both instructional practices and classroom environments. We believe that the most effective professional development occurs within the school environment, where teachers can learn from each other through collaboration. However, it is important to note that the availability of adequate staffing may impact the implementation of such collaborative practices and is not always directly related to inclusive education (Ajani, 2018).

The study findings reveal the positive impact of collaborative planning sessions involving special education teachers and support staff in developing individualized strategies for students with visual impairments. The implementation of multisensory teaching approaches, such as tactile diagrams and models, has significantly improved learning outcomes. Additionally, peer support programs have successfully fostered a sense of inclusion and support within the school community. These findings are supported by previous studies conducted by Loreman, Deppeler, & Harvey (2005) and Qureshi et al. (2023). To promote the inclusion of visually impaired learners, various strategies have been identified, including teacher development, classroom adaptations, cooperative learning, peer tutoring, collaborative teaching, and the use of assistive technologies and materials (Loreman, Deppeler, & Harvey, 2005). Effective collaborative learning plays a crucial role in helping students develop skills to work towards shared objectives while recognizing the individual contributions of group members (Qureshi et al., 2023).

The study highlighted the importance of verbal descriptions, group discussions, and question-and-answer techniques to enhance the learning experience for students with visual impairments. This emphasizes the need for teachers to adapt their methods to accommodate the diverse learning styles and needs of students with visual impairments. The studies by Lai (2021), Sanger (2020), and Finkelstein, Sharma, & Furlonger (2021) support the study findings. Implementing a collaborative approach to inclusive teaching involves promoting teamwork, fostering community, and shared responsibility for learning. Practical strategies include assigning group tasks, engaging in projects, and allowing time for students to compare and summarize notes (Lai, 2021). Establishing ground rules empowers effective teamwork, improving autonomy and group skills (Sanger, 2020). These rules encompass contributing ideas, respectful communication, seeking clarification, and summarizing (Munna & Kalam, 2021). Pupil-led group work enhances collaboration and prepares students for higher education and employment (Finkelstein, Sharma, & Furlonger, 2021).

5.4. Availability of Resources and Support Systems for Students with Visual Impairments in Inclusive Classrooms

The study findings identified that there are limited resources and support systems for students with visual impairments, citing budget constraints as a major challenge. However, the school administrations emphasized the importance of finding alternative strategies and advocating for the needs of visually impaired students. The school has taken steps to address this limitation by maximizing available resources, prioritizing the needs of visually impaired

students, and being creative with existing materials. The study by Kelly & Smith (2011) aligns with the findings, stating that academic and social self-efficacy is crucial for fostering self-determination and equipping students with visual impairments for success in adult life. Inclusive education is a powerful tool that can greatly benefit students with visual impairments by increasing their independence and self-efficacy. Furthermore, Shore et al. (2022) add that inclusive education allows students with visual impairments to interact with their peers and develop social skills in a supportive environment, helping them build self-confidence and increase their independence by fostering positive relationships with others.

The study revealed the challenges faced by schools in providing adequate resources and support for students with visual impairments in inclusive classrooms. While some studies by Lewis, Wheeler, & Carter (2017), Negash (2020), and Mihegwa, Mutsotso, & Masibo (2020) oppose these findings, Tom, Mpekoa, & Swart (2018) support them. Research conducted by Lewis, Wheeler, & Carter (2017) highlights the significance of assistive technologies and materials in enhancing the educational experience of individuals with visual impairments and other sensory impairments. Negash (2020) further emphasizes that the use of assistive technologies and materials plays a key role in facilitating the learning process for students with visual impairments, ultimately promoting their inclusion in the classroom setting. It is important to note that visually impaired students may struggle to access visual information presented in the classroom, such as graphs, charts, and other visual aids, which can impact their understanding of certain subjects and hinder their overall learning experience (Mihegwa, Mutsotso, & Masibo, 2020). Unfortunately, inclusive settings may not always provide the necessary accommodations and support for visually impaired students, including the lack of assistive technology, braille materials, or support from specialized professionals such as vision teachers or orientation and mobility specialists (Tom, Mpekoa, & Swart, 2018).

The study findings identified that despite limited resources, efforts from school administrators, teachers, and community partnerships are being made to create a supportive environment for visually impaired students. This highlights the importance of adapting teaching strategies to accommodate visually impaired students, despite limited resources, and emphasizes the use of low-cost or no-cost accommodations. Supporting the findings, the study by Binder-Olibrowska, Godycki-Ćwirko, & Wrzesińska (2022) elaborated that students with visual impairments encounter difficulty accessing educational material presented in visual formats, such as graphs, videos, maps, and diagrams. On the other hand, Miyauchi (2020) supports the findings revealing that materials are not always provided in advance for

transcription into the student's preferred format, such as braille, electronic format, large print, or audio.

Finally, the study findings identified that the availability of resources and support systems for students with visual impairments in inclusive classrooms was limited. The studies by Kuriakose, Shrestha, & Sandnes (2022) and Manitsa & Doikou (2022) are consistent with these findings. This lack of access to quality educational materials significantly hinders the ability of students with visual impairments to participate and succeed in education (Kuriakose, Shrestha, & Sandnes, 2022). Without resources, specialist assistance, and changes to the physical environment, visually impaired students struggle to access the same curriculum as sighted students (Manitsa & Doikou, 2022).

CHAPTER SIX

CONCLUSION AND RECOMMENDATION

6.1. Conclusion

The study emphasized the critical practice and challenges faced by students with visual impairments in inclusive classrooms and the importance of implementing diverse strategies to support their academic and social development.

The perception of students with visual impairments in inclusive classrooms is influenced by various factors, including personalized accommodations, access to assistive technologies, and the attitudes of educators and peers. While some students with visual impairments thrive in inclusive classrooms, others face obstacles that hinder their academic and social development. However, by prioritizing accessibility, awareness, and empathy, the school is trying to ensure that students with visual impairments receive the support they need to succeed and reach their full potential academically.

The study highlighted the critical challenges that students with visual impairments encounter in inclusive classroom settings. It underscores the importance of implementing diverse strategies and initiatives to ensure these students receive the necessary support to thrive academically and socially. While progress has been made in making learning materials accessible and enhancing teacher awareness, there is still room for improvement in creating fully inclusive environments that cater to the diverse needs of students with visual impairments.

Furthermore, the study highlighted the importance of providing adequate resources and support systems for students with visual impairments in inclusive classrooms. While the school has made efforts to address limitation, more needs to be done to ensure that students with visual impairments have equal access to educational resources and opportunities. The findings indicated the existing gaps in resources and support systems for students with visual impairments in inclusive classrooms. While some progress has been made through collaborative efforts and creative solutions, there is still a need for increased accessibility and tailored resources to fully support the academic and social growth of these students.

6.2. Recommendations

Based on the study findings, the following recommendations are suggested as valuable insights for stakeholders concerned with addressing the education of students with visual impairment and improving their academic achievements. Based on the study findings, specific recommendations for school principals, teachers, and students:

For school principals:

1. **Enhanced Accessible Resources:** School principals should prioritize the procurement and provision of accessible learning materials in various formats, along with assistive technologies tailored to the diverse needs of students with visual impairments.
2. **Improve School Infrastructure:** Address and rectify accessibility issues within the school environment to enhance mobility and independence for students with visual impairments.
3. **Advocacy and Awareness:** Promote awareness initiatives about visual impairments among staff, students, and the community to foster a more supportive school environment.
4. **Advance Support:** Ensure ongoing advocacy and support for students with visual impairments, including the establishment of peer support systems to promote inclusivity and a sense of belonging within the school community.

For Teachers:

1. **Professional Development:** Teachers should engage in continuous training programs focused on effective strategies for supporting students with visual impairments, ensuring they are equipped with the necessary skills and knowledge.
2. **Collaborative Efforts:** Encourage collaboration among educators, special education professionals, and students to develop personalized strategies and adaptations that cater to individual learning needs.
3. **Adapt Teaching Methods:** Teachers should adapt their instructional methods to provide personalized accommodations that promote empathy and collaboration, ensuring that all students can participate fully in classroom activities.

For Students:

1. **Peer Support Systems:** Students should be encouraged to participate in peer support initiatives that foster inclusivity and collaboration among classmates, helping to create a sense of community and belonging.
2. **Engagement in Advocacy:** Students with visual impairments should be empowered to engage in advocacy efforts, raising awareness about their needs and promoting a more inclusive school environment.
3. **Active Participation:** Students should be encouraged to take an active role in their learning by utilizing available resources and support systems to enhance their educational experiences and outcomes.

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APPENDIX 1

ADDIS ABABA UNIVERSITY

COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES

DEPARTMENT OF SPECIAL NEEDS AND INCLUSIVE EDUCATION

Consent Letter

Date _____

Dear _____,

I hope this letter finds you well. My name is Habtamu Mengesha, and I am a student at the University of Addis Ababa College of Education and Behavioural Studies, currently pursuing a Master of Art in Special Needs and Inclusive Education.

I am reaching out to request your participation in an interview for my research project titled "The Practice and Challenges of Teaching Students with Visual Impairment in an Inclusive Classroom at Dagmawi Minilik Secondary School." Your insights and experiences will be invaluable in contributing to the central theme of the study.

Please be assured that any information you provide will be kept strictly confidential and used solely for the purpose of this study to enhance the education of learners with visual impairments in the inclusive classroom at Dagmawi Minilik Secondary School. Your participation in this study is entirely voluntary, and you are welcome to ask any questions or decline to respond to any questions.

I genuinely appreciate your willingness to consider participating in this interview, and I am grateful for your time and contribution to this important research. Thank you for your consideration.

Warm regards,

Habtamu Mengesha

Interview Guide for School Principal

I. Background Profile of the School Principal

1. Sex: Male Female
2. Type of subject he/she was taught _____
3. Age: _____
4. Academic qualification: _____
5. Teaching Experience: _____
6. Leadership experience: _____

II. Interview Guiding Questions for School Principal

A. Perception of students with visual impairments in learning in inclusive classroom

1. Do you think that students with visual impairments feel supported and included in their learning experiences in your School? If yes, explain their perception!
2. How do you explain the learning experiences of students with visual impairments inclusive environment?

B. Challenges students with visual impairments face and strategies used in inclusive classroom to overcome challenges

1. From your perspective, what are the main challenges that students with visual impairments encounter in the inclusive classrooms at your school, and how does the school address these challenges?
2. How does the school collaborate with stakeholders to provide comprehensive support for students with visual impairments facing difficulties in the inclusive classroom setting?

C. Strategies to adapt teaching that suit the needs of students with visual impairments in inclusive classrooms

1. How does the school assist teachers in adapting teaching strategies to cater to the diverse needs of students with visual impairments within inclusive classrooms?
2. Can you provide successful teaching strategies that have been implemented to meet the learning needs of students with visual impairments at your school?

D. Available resources and support systems to facilitate the education of students with visual impairments in inclusive classrooms

1. What resources and support systems are currently in place at your school to facilitate the education and inclusion of students with visual impairments in inclusive classrooms?
2. How does the school collaborate with external organizations or agencies to ensure that students with visual impairments have access to necessary resources and support systems?

Interview Guide for Teachers

I. Background Profile of the Teacher

1. Sex: Male Female
2. Type of subject he/she is teaching _____
3. Age: _____
4. Academic qualification: _____
5. Teaching Experience: _____
6. Type of teacher: _____

II. Interview Guiding Questions

A. Perception of students with visual impairments in learning in inclusive classroom

1. From your observations and interactions with students with visual impairments, how do you gauge their level of engagement and perception of their learning experiences within the inclusive classroom setting at your school?
2. Do students with visual impairments experience happiness in both their academic and social interactions within the inclusive classroom? If so, what are the indicators of their positive feelings?
3. How do students with visual impairments feel about their learning through the collaborative efforts of special educators, regular teachers, and support staff?

B. Challenges students with visual impairments face and strategies used in inclusive classroom to overcome challenges

1. From your perspective and as educator, what are the primary challenges that you have observed students with visual impairments facing within the inclusive classroom setting in your school, and how do you address these challenges?

C. Strategies to adapt teaching that suit the needs of students with visual impairments in inclusive classrooms

1. How do you adapt your teaching methods or classroom environment to accommodate the diverse needs of students with visual impairments and promote their inclusion and success in your school?
2. What techniques or accommodations have you found most effective in facilitating the academic progress and overall development of students with visual impairments in the inclusive setting?

D. Available resources and support systems to facilitate the education of students with visual impairments in inclusive classrooms

1. What resources and support systems do you utilize to enhance the educational experience and overall well-being of students with visual impairments in inclusive classrooms in school?
2. How do you collaborate with other teachers or professionals to ensure that students with visual impairments have access to necessary resources and support services for their education within the inclusive environment?

Interview Guide for Students with visual impairments

I. Background Profile of the Student

1. Sex: Male Female
2. Age: _____
3. Grade level: _____
4. Type of visual impairment: _____

II. Interview Guiding Questions for Students with visual impairments

A. Perception of students with visual impairments in learning in inclusive classroom

1. Do you feel happy about your learning in the inclusive classroom? If yes, share any specific examples that have positively impacted your learning?
2. Do you believe that inclusive classroom setting enhances your academic growth and social interactions as a student with a visual impairment? If yes, How?

B. Challenges students with visual impairments face and strategies used in inclusive classroom to overcome challenges

1. What are the most significant challenges you face as a student with a visual impairment in the inclusive classrooms at your school? How do these challenges affect your learning experience? How it was addressed or resolved?

C. Strategies to adapt teaching that suit the needs of students with visual impairments in inclusive classrooms

1. How do teachers adapt their teaching strategies to better meet your educational needs as a student with a visual impairment in the inclusive classroom? Are there specific methods or accommodations that have been particularly helpful to you?
2. What more could be done by teachers to ensure that teaching strategies are effectively tailored to support students with visual impairments in the inclusive classroom setting?

D. Available resources and support systems to facilitate the education of students with visual impairments in inclusive classrooms

1. What specific resources and support systems have you found beneficial in facilitating your education as a student with a visual impairment in the inclusive classrooms?
2. How do you think the school can improve its provision of resources and support systems to better assist students with visual impairments in their educational journey within the inclusive environment?

Interview Guide for Students without Disabilities

I. Background Profile of the Student

1. Sex: Male Female
2. Age: _____
3. Grade level: _____

II. Interview Guiding Questions for Students without Disabilities

A. Perception of students with visual impairments in learning in inclusive classroom

1. How do you perceive the learning experiences of your peers with visual impairments in the inclusive classroom? Have you noticed any positive impacts or challenges they face in their educational journey?
2. How do you describe the way students with visual impairments perceive an inclusive classroom setting that supports their diverse needs within the school environment?

B. Challenges students with visual impairments face and strategies used in inclusive classroom to overcome challenges

1. From your observations, what do you consider to be the main challenges that students with visual impairments encounter in inclusive classrooms?

C. Strategies to adapt teaching that suit the needs of students with visual impairments in inclusive classrooms

1. How do you notice teachers adapting their teaching strategies to cater to the needs of students with visual impairments in inclusive classrooms in your school? Are there specific approaches that you find effective or impactful in supporting diverse learners within the classroom?
2. What more can be done to enhance the inclusivity and effectiveness of teaching strategies for students with visual impairments in the inclusive classroom setting?

D. Available resources and support systems to facilitate the education of students with visual impairments in inclusive classrooms

1. What resources and support systems have you observed being utilized to facilitate the education of students with visual impairments in the inclusive classrooms in your school?
2. How do you think the school can improve its provision of resources and support systems to better assist students with visual impairments in their educational journey within the inclusive environment?

APPENDIX 2
Observation Checklist

Observation will be conducted to answer the 3 basic research questions based on classroom observation.

I. Challenges Faced by Visually Impaired Students in Inclusive Settings

- | | | | | |
|---|-----|--------------------------|----|--------------------------|
| 1. Limited access to educational materials. | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 2. Social isolation and stigma. | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 3. Inaccessible school environment. | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 4. Inaccessible classroom infrastructures. | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 5. others _____ | | | | |
-
-

II. Teaching Strategies

- | | | | | |
|--|-----|--------------------------|----|--------------------------|
| 1. Students with VI ask and answer questions. | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 2. Allowance of extra time during activities. | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 3. Teachers use differentiated instruction. | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 4. Applying collaborative learning. | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 5. Adapt curriculum for students with VI. | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 6. Using Assistive Technologies and Materials. | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 7. others _____ | | | | |
-
-

III. The use of teaching materials

- | | | | | |
|--|-----|--------------------------|----|--------------------------|
| 1. Using visual and audio devices and tactile materials. | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 2. Encouraging the use of learning devices | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 3. Adapting written texts | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 4. Using braille materials | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 5. others _____ | | | | |
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APPENDIX 3
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የትምህርት እና የባህሪ ጥናት ኮሌጅ
የልዩ ፍላጎት ትምህርት ክፍል

ቀን _____

ውድ _____

ይህ ደብዳቤ በደንብ እንደሚያገኝዎት ተስፋ አደርጋለሁ። ሀብታሙ መንገሻ እባላለሁ በአዲስ አበባ ዩኒቨርሲቲ የትምህርት እና የባህሪ ጥናት ኮሌጅ ተማሪ ነኝ። በአሁኑ ወቅት በልዩ ፍላጎት እና አካቶ ትምህርት የማስተርስ እየተከታተልኩ ነው። በዳግማዊ ሚኒሊክ 2ኛ ደረጃ ት/ቤት የማየት እክል ያለባቸው ተማሪዎችን አካቶ ክፍል ውስጥ የማስተማር ልምድ እና ተግዳሮቶች በሚል ርዕስ ምርምር ለማድረግ መረጃ እየሰብሰብኩ እገኛለሁ። ስለሆነም በቃለ መጠየቅ እንድትሳተፉ እየጠየኩ ምላሽዎ የጥናቱን ማዕከላዊ ጭብጥ ለማሟላት ከፍተኛ አስተዋጽኦ ያበረክታል። ከቃለ-መጠይቁ የሚሰበሰበው መረጃ ለጥናቱ ዓላማ ብቻ እንደሚውል እና ሚስጥራዊ ሆኖ እንደሚቆይ ላረጋግጥሎት እወዳለሁ። ስለሆነም ከዚህ በታች ለተዘረዘሩት ጥያቄዎች ግልፅ እና እውነተኛ ምላሽ ለመስጠት ትብብርዎን በትህትና እጠይቃለሁ። ማንኛውንም ዓይነት መረጃ ማካፈልዎን ለመቀጠል ምንም ዓይነት ግዴታ እንደሌለብዎት እና በቃለ መጠይቁ ሂደት ውስጥ በማንኛውም ጊዜ ተሳትፎዎን መቋረጥ እንደሚችሉ እና ቃለ-መጠይቁ ለአንድ ሰዓት ሊቆይ እንደሚችል ላሳውቅዎት እፈልጋለሁ። ቃለ መጠይቁን በዲጂታል መቅረጫ መመዘገብ እንድችል የእርስዎ ፈቃድ ያስፈልገኛል። በመሆኑም የጥናቱ የመጨረሻ ሰነድ ተቀባይነት ካገኘ በኋላ የተመዘገበው መረጃ ይሰረዛል። በመጨረሻም፣ ለሳተፍዎ እና ለቃለ መጠይቁ ፍቃድዎን ስለሰጡኝ እና ለጥናቱ ስኬት ለሚኖረው አስተዋጽኦ ከፍተኛ በመሆኑ በቅድሚያ ከሌብ የመነጨ ምስጋናዬን እና አክብሮቴን እገልጻለሁ።

ከሰላምታ ጋር,
ሃብታሙ መንገሻ

የቃለ መጠይቅ መመሪያ ለትምህርት ቤት ርዕሰ መምህር

I. የትምህርት ቤቱ ርዕሰ መምህር ዳራ መገለጫ

1. ጾታ: ወንድ
2. የተማረው የትምህርት ዓይነት: _____
3. ዕድሜ: _____
4. የትምህርት ዝግጅት: _____
5. የማስተማር ልምድ:- _____
6. የአመራር ልምድ: _____

II. የቃለ መጠይቅ ጥያቄዎች ለትምህርት ቤት ርዕሰ መምህር

U. የማየት እክል ያለባቸው ተማሪዎች በአካቶ ክፍል ውስጥ መማር ላይ ያላቸው ግንዛቤ

1. የማየት እክል ያለባቸው ተማሪዎች በት/ቤትዎ ውስጥ የመማር ልምዳቸው ድጋፍ ያገኙ እና ተሳታፊ እንደሆኑ የሚሰማቸው ይመስልዎታል? አዎ ከሆነ፣ አመለካከታቸውን ያብራሩ!
2. የማየት እክል ያለባቸው ተማሪዎች በአካቶ አካባቢ የመማር ልምዳቸውን እንዴት ያብራራሉ?

ለ. የማየት እክል ያለባቸው ተማሪዎችን ያጋጠሟቸው ችግሮች እና ችግሮችን ለማሸነፍ በአካቶ ክፍል ውስጥ ጥቅም ላይ የሚውሉ ስልቶች

1. ከእርስዎ እይታ አንጻር የማየት እክል ያለባቸው ተማሪዎች በት/ቤትዎ ውስጥ ባሉ አካቶ ክፍሎች ውስጥ የሚያጋጥሟቸው ዋና ዋና ተግዳሮቶች ምንድን ናቸው? ትምህርት ቤቱን እንዲሁ ተግዳሮቶች የሚፈታው እንዴት ነው?
2. ትምህርት ቤቱ ከባለድርሻ አካላት ጋር በመተባበር የማየት እክል ያለባቸው ተማሪዎች በአካቶ ክፍል ውስጥ ሁሉን አቀፍ ድጋፍ ለመስጠት እንዴት ይሰራል?

ሐ. የማየት እክል ያለባቸውን ተማሪዎች በአካቶ ክፍል ውስጥ ፍላጎታቸውን የሚያሟላ ትምህርትን የማላመድ ስልቶች

1. ትምህርት ቤቱ መምህራን የማስተማር ስልቶችን በማጣጣም በተለያዩ ክፍል ውስጥ የማየት እክል ያለባቸውን ተማሪዎች ፍላጎት ለማሟላት የሚረዱ እንዴት ነው?
2. በትምህርት ቤትዎ ውስጥ የማየት እክል ያለባቸውን ተማሪዎች የመማር ፍላጎት ለማሟላት የተተገበሩ ውጤታማ የማስተማር ስልቶች ያብራሩ?

መ. የማየት እክል ያለባቸው ተማሪዎችን በአካቶ ክፍል ውስጥ ትምህርትን ለማመቻቸት የሚገኙ ግብዓቶች እና የድጋፍ ሥርዓቶች

1. የማየት እክል ያለባቸውን ተማሪዎች በአካቶ ክፍል ውስጥ ለማስተማር እና ለማካተት በአሁኑ ጊዜ በት/ቤትዎ ውስጥ ምን ግብዓቶች እና የድጋፍ ስርዓቶች አሉ?
2. የማየት እክል ያለባቸው ተማሪዎች አስፈላጊ ግብዓቶችን እና የድጋፍ ሥርዓቶችን እንዲያገኙ ትምህርት ቤቱ ከድርጅቶች ወይም ኤጀንሲዎች ጋር እንዴት ይተባበራል?

የቃለ መጠይቅ መመሪያ ለትምህርት ቤት መምህራን

I. የመምህሩ ዳራ መገለጫ

1. ስም: ወንድ
2. እያስተማረ ያለው የትምህርት ዓይነት: _____
3. ዕድሜ: _____
4. የትምህርት ዝግጅት: _____
5. የስራ ልምድ:- _____
6. የመምህር አይነት: _____

II. የቃለ መጠይቅ ጥያቄዎች ለትምህርት ቤት መምህራን

ሀ. የማየት እክል ያለባቸው ተማሪዎች በአካቶ ክፍል ውስጥ መማር ላይ ያላቸው ግንዛቤ

1. ባደረጋችሁት ምልከታ እና ግንኙነት፣ የማየት እክል ያለባቸው ተማሪዎች በትምህርት ቤት ውስጥ ባለው የክፍል ውስጥ ያላቸውን የተሳትፎ ደረጃ እና የመማር ልምዶቻቸውን እንዴት ይገመግማሉ?
2. የማየት እክል ያለባቸው ተማሪዎች በአካቶ ማህበራዊ ግንኙነታቸው በአካቶ ክፍል ውስጥ ደስተኛ ናቸው? ከሆነስ የአዎንታዊ ስሜታቸው አመለካኞች ምንድን ናቸው?
3. የማየት እክል ያለባቸው ተማሪዎች በልዩ ፍላጎት እና በመደበኛ መምህራን እና በድጋፍ ሰጪ ሰራተኞች ትብብር ጥረት ስለመማራቸው ምን ይሰማቸዋል?

ለ. የማየት እክል ያለባቸው ተማሪዎችን ያጋጠሟቸው ችግሮች እና ችግሮችን ለማሸነፍ በአካቶ ክፍል ውስጥ ጥቅም ላይ የሚውሉ ስልቶች

1. ከእርስዎ እይታ እና መምህር እንደመሆኖ፣ በትምህርት ቤት ውስጥ ባሉ አካቶ ክፍሎች ውስጥ የማየት እክል ያለባቸው ተማሪዎችን የሚያጋጥሟቸው ዋና ዋና ተግዳሮቶች ምንድን ናቸው? ትምህርት ቤቱስ እነዚህን ተግዳሮቶች የሚፈታው እንዴት ነው?

ሐ. የማየት እክል ያለባቸውን ተማሪዎች በአካቶ ክፍል ውስጥ ፍላጎታቸውን የሚያሟላ ትምህርትን የማላመድ ስልቶች

1. የማየት እክል ያለባቸው ተማሪዎች የተለያዩ ፍላጎታቸውን ለማስተናገድ እና በትምህርት ቤት ውስጥ እንዲካተቱ እንዲሁም ስኬታማ እንዲሆኑ የማስተማር ዘዴዎቻችን ወይም የክፍል አካባቢዎን እንዴት ያስተካክላሉ?
2. የአካቶ ማህበራዊ እድገትን እና የማየት እክል ያለባቸውን ተማሪዎችን በአካቶ አቀማመጥ ውስጥ በማመቻቸት ረገድ? በትምህርት ቤት ውስጥ የማየት እክል ያለባቸውን ተማሪዎች የመማር ፍላጎት ለማሟላት ከተተገበሩ ውጤታማ የማስተማር ስልቶች እና መስተንግዶዎች በጣም ውጤታማ የሆኑት የትኞቹ ናቸው?

መ. የማየት እክል ያለባቸው ተማሪዎችን በአካቶ ክፍል ውስጥ ትምህርትን ለማመቻቸት የሚገኙ ግብዓቶች እና የድጋፍ ሥርዓቶች

1. በትምህርት ቤት ውስጥ ባሉ አካቶ ክፍሎች ውስጥ የማየት እክል ያለባቸውን ተማሪዎች ለማስተማር እና ለማካተት በአሁኑ ጊዜ በትምህርት ቤት ውስጥ ምን ግብዓቶች እና የድጋፍ ስርዓቶችን ይጠቀማሉ?
2. የማየት እክል ያለባቸው ተማሪዎች በአካቶ አካባቢ ውስጥ ለትምህርታቸው አስፈላጊ ግብዓቶችን እና የድጋፍ አገልግሎቶችን እንዲያገኙ ከሌሎች መምህራን ወይም ባለሙያዎች ጋር እንዴት ይተባበራሉ?

የቃለ መጠይቅ መመሪያ የማየት እክል ላለባቸው ተማሪዎች

I. የተማሪው/ዋ ዳራ መገለጫ

1. ጾታ: ወንድ ስ
2. ዕድሜ: _____
3. የክፍል ደረጃ: _____
4. የማየት እክል አይነት: _____

III. የቃለ መጠይቅ ጥያቄዎች የማየት እክል ላለባቸው ተማሪዎች

ሀ. የማየት እክል ያለባቸው ተማሪዎች በአካቶ ክፍል ውስጥ መማር ላይ ያላቸው ግንዛቤ

1. በአካቶ ክፍል ውስጥ በመማርዎ ደስተኛ እንደሆኑ ይሰማዎታል? አዎ ከሆነ፣ በመማርዎ ላይ በጎ ተጽዕኖ ያሳደሩ የተወሰኑ ምሳሌዎችን ያጋሩ?
2. የማየት እክል ያለባት ተማሪ እንደመሆኖ መጠን የአካቶ መማሪያ ክፍል ውስጥ ማካተቶ የአካዳሚክ እድገትዎን እና ማህበራዊ ግንኙነቶችዎን እንደሚያሳድግ ያምናሉ? አዎ ከሆነ፣ እንዴት?

ለ. የማየት እክል ያለባቸው ተማሪዎችን ያጋጠሟቸው ችግሮች እና ችግሮችን ለማሸነፍ በአካቶ ክፍል ውስጥ ጥቅም ላይ የሚውሉ ስልቶች

1. በትምህርት ቤትዎ ውስጥ ባሉ አካቶ የመማሪያ ክፍሎች ውስጥ የማየት እክል ያለበት ተማሪ እንደመሆኖ የሚያጋጥሙዎት ፈተናዎች ምንድን ናቸው? እነዚህ ፈተናዎች የመማር ልምድዎን እንዴት ይጎዳሉ? እንዴትስ መፍትሄ አገኙ?

ሐ. የማየት እክል ያለባቸውን ተማሪዎች በአካቶ ክፍል ውስጥ ፍላጎታቸውን የሚያሟላ ትምህርትን የማላመድ ስልቶች

1. በአካቶ ክፍል ውስጥ የማየት እክል ያለበት ተማሪ እንደመሆንዎ መጠን የትምህርት ፍላጎቶችዎን በተሻለ ሁኔታ ለማሟላት መምህራን የማስተማሪያ ስልቶቻቸውን እንዴት ያስተካክላሉ? በተለይ ለእርስዎ ጠቃሚ የሆኑ ልዩ ዘዴዎች ወይም መስተንግዶዎች አሉ?
2. የማስተማር ስልቶች በክፍል ውስጥ የማየት እክል ያለባቸውን ተማሪዎች ለመደገፍ በብቃት የተዘጋጁ መሆናቸውን ለማረጋገጥ በመምህራን ምን ማድረግ አለባቸው?

መ. የማየት እክል ያለባቸው ተማሪዎችን በአካቶ ክፍል ውስጥ ትምህርትን ለማመቻቸት የሚገኙ ግብዓቶች እና የድጋፍ ሥርዓቶች

1. በትምህርት ክፍሎች ውስጥ የማየት እክል ያለበት ተማሪ እንደመሆኖ ትምህርትዎን በማመቻቸት ረገድ ምን ምን ልዩ ግብዓቶች እና የድጋፍ ሥርዓቶች ጠቃሚ ሆነው አግኝተዋል?
2. ትምህርት ቤቱ የማየት እክል ያለባቸውን ተማሪዎች በአካቶ አካባቢ በሚያደርጉት የትምህርት ጉዞ በተሻለ ለመርዳት የግብአት አቅርቦትን እና የድጋፍ ስርዓቱን ማሻሻል የሚችለው እንዴት ይመስልዎታል?

የቃለ መጠይቅ መመሪያ አካል ጉዳተኛ ላልሆኑ ተማሪዎች

I. የተማሪው/ዋ ዳራ መገለጫ

1. ጾታ: ወንድ ሴት
2. ዕድሜ: _____
3. የክፍል ደረጃ: _____

II. የቃለ መጠይቅ ጥያቄዎች አካል ጉዳተኛ ላልሆኑ ተማሪዎች

ሀ. የማየት እክል ያለባቸው ተማሪዎች በአካቶ ክፍል ውስጥ መማር ላይ ያላቸው ግንዛቤ

1. በአካቶ ክፍል ውስጥ የማየት እክል ያለባቸውን እኩዮችህ/ሽን የመማር ልምድ እንዴት ትገነዘባለህ/ሽ?
በትምህርት ጉዟቸው ላይ የሚያጋጥሟቸውን አዎንታዊ ተጽእኖዎች ወይም ተግዳሮቶች አስተውለው ከሆነ ይዘርዝሩ!
2. የማየት እክል ያለባቸው ተማሪዎች በትምህርት ቤት አካባቢ ውስጥ ፍላጎታቸውን የሚደግፍ አካቶ ክፍል እንዴት የሚገነዘቡ ይመስሎታል?

ለ. የማየት እክል ያለባቸው ተማሪዎችን ያጋጠሟቸው ችግሮች እና ችግሮችን ለማሸነፍ በአካቶ ክፍል ውስጥ ጥቅም ላይ የሚውሉ ስልቶች

1. መከፈቅ ምልክታት፣ የማየት እክል ያለባቸው ተማሪዎች በአካቶ ክፍል ውስጥ የሚያጋጥሟቸው ዋና ዋና ተግዳሮቶች ምን ምን እንደሆኑ ያስባሉ?

ሐ. የማየት እክል ያለባቸውን ተማሪዎች በአካቶ ክፍል ውስጥ ፍላጎታቸውን የሚያሟላ ትምህርትን የማላመድ ስልቶች

1. በትምህርት ቤት ውስጥ ባሉ አካቶ ክፍሎች ውስጥ የማየት ችግር ያለባቸው ተማሪዎችን ፍላጎት ለማሟላት መምህራን የማስተማር ስልቶቻቸውን ሲያመቻቹ እንዴት ያስተውላሉ? በክፍል ውስጥ የተለያዩ ተማሪዎችን በመደገፍ ረገድ ውጤታማ ወይም ተፅእኖ ያላቸው የሚያገኟቸው ልዩ አቀራረቦች ካሉ ይዘርዝሩ?
2. የማየት እክል ላለባቸው ተማሪዎች የማስተማር ስልቶችን አካታችነት እና ውጤታማነት ለማሳደግ በአካቶ ክፍል ውስጥ ምን ማድረግ ይቻላል?

መ. የማየት እክል ያለባቸው ተማሪዎችን በአካቶ ክፍል ውስጥ ትምህርትን ለማመቻቸት የሚገኙ ግብዓቶች እና የድጋፍ ሥርዓቶች

1. በትምህርት ቤት ውስጥ ባሉ አካቶ ክፍሎች ውስጥ የማየት እክል ያለባቸው ተማሪዎችን ትምህርት ለማሳለጥ ምን ግብዓቶች እና የድጋፍ ሥርዓቶች ሲጠቀሙ ተመልክተዋል?
2. ትምህርት ቤቱ የማየት እክል ያለባቸውን ተማሪዎች በአካቶ አካባቢ በሚያደርጉት የትምህርት ጉዞ በተሻለ ለመርዳት የግብአት አቅርቦትን እና የድጋፍ ስርዓቱን ማሻሻል የሚችለው እንዴት ይመስልዎታል?