

UNIVERSITY OF EDUCATION, WINNEBA

**An investigation into the academic success of Special Education needs learners in
the Early Childhood Education classrooms in the WA municipality**



MASTER OF EDUCATION

2024

UNIVERSITY OF EDUCATION, WINNEBA

**AN INVESTIGATION INTO THE ACADEMIC SUCCESS OF SPECIAL
EDUCATION NEEDS LEARNERS IN THE EARLY CHILDHOOD
EDUCATION CLASSROOMS IN THE WA MUNICIPALITY**

RUKAYA YAKUBU

220034425



**A Dissertation in the Department Early Grade Education, Faculty of Applied
Behavioural Sciences in Education, submitted to the School
of Graduate Studies in partial fulfillment of the
Requirements for the award of the degree
Master of Education
(Early Child Education)
In the University of Education, Winneba**

APRIL, 2024

DECLARATION

STUDENT'S DECLARATION

I, Rukaya Yakubu, declare that this thesis, with the exception of quotations and references contained in the published works which have all been identified and duly acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole, for another degree elsewhere.

SIGNATURE:

DATE:

SUPERVISOR'S DECLARATION

I hereby declare that the preparation and presentation of this work was supervised in accordance with the guidelines for supervision of thesis project as laid down by the University of Education, Winneba.

NAME OF SUPERVISOR: MADAM JUSTINA ADU

SIGNATURE:

DATE:



DEDICATION

To my Love, Mr. Iddrisu Atto.



ACKNOWLEDGEMENTS

I would like to express my heartfelt gratitude to Almighty Allah for the life and strength given me to pursue this programme. I would like to express my appreciation to my supervisor Madam Justina Adu, who offered deep insight and guided me throughout this project. I would also like to thank all the lecturers of Early Childhood Education Department for their selfless readiness to guide students. I am also indebted to my children; Rushdiyah and Israad for their support and time throughout my education. I am most appreciative to all my father Mr. Seidu Yakubu, my Uncles, Shiek Saeed Yahaya, Iddrisu Hanan and Atto Iddrisu for their support and encouragement, God richly bless you. Finally, I am most grateful to all the authors of the documents cited in my work, all the online, E-resources and the various software programmes which assisted me in diverse ways to make my work a success. May the Almighty God bless you all.

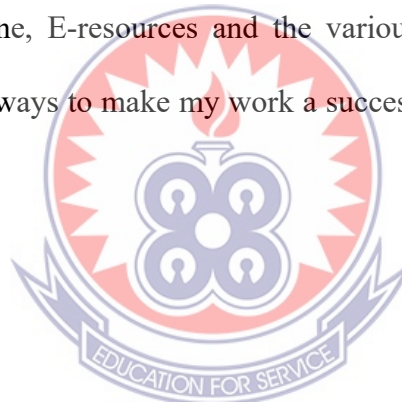
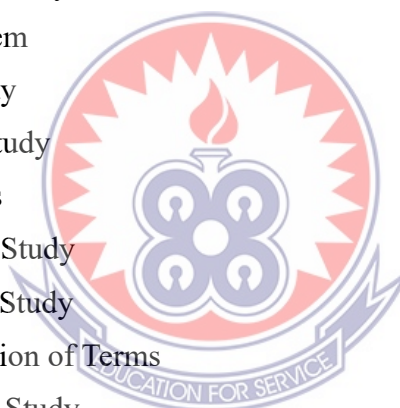


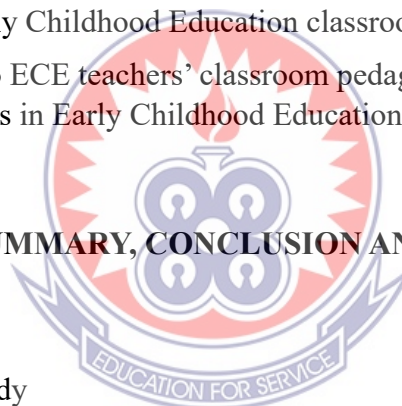
TABLE OF CONTENTS

Contents	Page
DECLARATION	iv
STUDENT’S DECLARATION	iv
DEDICATION	v
ACKNOWLEDGEMENTS	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	x
LIST OF FIGURES	xi
ABSTRACT	xii
CHAPTER ONE: INTRODUCTION	1
1.1 Background of the Study	1
1.2 Statement of Problem	5
1.3 Purpose of the Study	9
1.4 Objectives of the Study	9
1.5 Research Questions	9
1.6 Delimitation of the Study	10
1.7 Significance of the Study	10
1.8 Operational Definition of Terms	11
1.9 Organization of the Study	12
CHAPTER TWO: REVIEW OF RELATED LITERATURE	13
2.0 Overview	13
2.1 Theoretical Framework	14
2.2 Conceptual Framework	19
2.3 Definitions	21
2.1.1 Disability	21
2.1.2 Integration	21
2.1.3 Inclusion	22
2.1.4 Mainstreaming	22
2.1.5 Inclusive Education	22
2.1.6 Special Needs Education	23
2.4 International Policies and Conventions	23



2.4.1 Conventions on the Rights of the Child	24
2.4.2 Salamanca Statement and Framework for Action	25
2.4.3 Convention on the Rights of Persons with Disabilities	26
2.5 Special Education in Ghana: A Historical Overview	27
2.6 Importance of Inclusive Education	30
2.7 Identification of SEN Learners in Inclusive or Mainstream Classrooms	32
2.7.1 Factors that Inhibit the Early Identification of SEN Learners in Early Childhood Education Centres	37
2.8 Kinds of SEN Learners in Early Childhood Education Classrooms	38
2.9 Environmental Factors that Promote the Academic Success of SEN Learners in ECE Centres	41
2.9.1 School Accessibility and Physical Environment	41
2.9.2 Suitable School Building and Classroom Arrangement	43
2.10 Support Services that Promote the Academic Success of SEN Learners in Early Childhood Education Classrooms	46
2.11 Classroom Teaching Pedagogy Factors and Academic Success	48
2.12 SEN Children’s Behaviour and Attitudes and Academic Success	51
2.13 Parents and Family Involvement and Academic Success	52
2.14 Empirical Review	56
2.10 Summary of Chapter	57
CHAPTER THREE: METHODOLOGY	59
3.0. Overview	59
3.1 Research Paradigm	59
3.2 Research Approach	61
3.3 Research Design	62
3.4 Study Area	64
3.5 Population	65
3.6 Sample and Sampling Technique	65
3.7 Data Collection Instruments	66
3.7.1 Semi-Structured Interview Schedule	67
3.7.2 Observational Checklist	68
3.7.3 Trustworthiness	69
3.7.4 Credibility	69
3.7.5 Dependability	70
3.7.6 Transferability	71

3.7.7 Confirmability	71
3.8 Data Collection Procedures	72
3.9 Data Analysis Procedures	73
3.10 Ethical Considerations	74
CHAPTER FOUR: RESULTS AND DISCUSSIONS	75
4.0 Overview	75
4.1 Demographic Data	75
4.2 Analysis of the Reseach	75
4.3 Research Question 1: What is the kind of SEN learners present in Early Childhood Education classrooms in the Wa Municipality?	76
4.4 Research Question 2: How does the school environment promote the academic success of SEN learners in Early Childhood Education classrooms in the Wa Municipality?	90
4.5 Research Question 3: How do support services promote the academic success of SEN learners in Early Childhood Education classrooms in the Wa Municipality?	98
4.6 In what ways do ECE teachers' classroom pedagogies promote the academic success of SEN learners in Early Childhood Education classrooms in the Wa Municipality?	106
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS	116
5.0 Overview	116
5.2 Findings of the Study	116
5.3 Conclusions	117
5.4 Recommendations	119
5.5 Suggestion for Further Study	121
1.5 Limitations of the Study	121
REFERENCE	123
APPENDICES	136



LIST OF TABLES

Table	Page
1: Checklist Data on the kind of SEN learners at Early Childhood Education classrooms in the Wa Municipality.	85
2: Checklist Data on Existing the Nature of School Environment Promote the Academic Success of SEN Learners In Early Childhood Education Classrooms in The Wa Municipality	95
3: Checklist Data on The Support Services that Promote Academic Success of SEN Learners In Early Childhood Education Classrooms in The Wa Municipality	103
4: Checklist Data on ECE Teachers' Classroom Pedagogies Promote the Academic Success of SEN Learners In Early Childhood Education Classrooms in The Wa Municipality	112



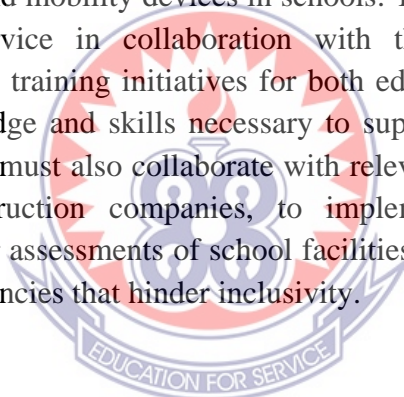
LIST OF FIGURES

Figure	Page
1: Conceptual Framework: Adaptation of the Strategies Intervention Model	19



ABSTRACT

The purpose of the study was to investigate into the academic success of Special Education needs Learners in the early childhood education classrooms within the Wa Municipality of the Upper West Region of Ghana. The study adopted the qualitative research approach. The illustrative case study design was adopted for this study. The semi-structured interview guide and an observational checklist were utilized to gather data from 15 participants involving 14 Early Childhood Education teachers and 1 Special Education Coordinator for the study. The snowball sampling technique and purposive sampling techniques were used in selecting the participants for the study. The data was analyzed using thematic analysis procedures. The findings of the study revealed that limited training on special education for teachers and parents results in insufficient knowledge about disabilities and are compounded by a lack of tools for early screening. The study again found that, environmental barriers affecting access, safety, and protection for SEN children, including insufficient infrastructure such as lack of ramps and poor ventilation, along with issues like classroom congestion and stigmatization. Again, the study found that, T a scarcity of special equipment like braille, hearing aids, and mobility devices in schools. The study recommends that; the Ghana Education Service in collaboration with the Wa Municipal Education Directorate strengthens training initiatives for both educators and parents, equipping them with the knowledge and skills necessary to support SEN children effectively. Accordingly, the MoE must also collaborate with relevant stakeholders, such as local authorities and construction companies, to implement necessary infrastructure upgrades. Also, regular assessments of school facilities must be conducted to identify and address any deficiencies that hinder inclusivity.



CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Education is a fundamental right essential for the development of individuals and societies. However, this right often faces challenges when ensuring equitable access for learners with Special Education Needs (SEN). Learners with disabilities are among the most marginalized in the educational system, particularly in developing countries like Ghana (UNESCO, 2020). In many regions, including the Wa Municipality of Ghana, efforts to include SEN learners in mainstream classrooms are hindered by limited resources, lack of teacher training, and societal attitudes towards disability (World Bank, 2019). Understanding the factors contributing to the academic success of SEN learners in early childhood education is crucial for creating inclusive and supportive learning environments (Kuyini & Desai, 2016).

The term Special Educational Needs (SEN) encompasses a variety of disabilities, ranging from physical impairments to cognitive, emotional, and behavioral difficulties (Mitchell, 2014). These learners often require additional support, specialized teaching strategies, and adaptive materials to achieve academic success. Global initiatives, such as the United Nations' Sustainable Development Goal 4 (SDG 4), emphasize inclusive and equitable education for all (UN, 2015). However, the practical implementation of these ideals in developing contexts like Ghana presents significant challenges (Forlin, 2015). The Ghanaian government has made strides toward inclusive education, notably with the introduction of the Inclusive Education Policy in 2013, which aimed to integrate SEN learners into mainstream classrooms (GOG, 2013). However, the practical outcomes of these policies, particularly in rural areas like Wa, remain under-researched (Avoke & Avoke, 2004).

Early childhood education plays a pivotal role in shaping the academic and social trajectories of learners, including those with special needs (Hayes et al., 2015). The early years are critical for cognitive and emotional development, and providing high-quality education during this stage is essential for lifelong learning and success (McLachlan et al., 2013). For SEN learners, early intervention is particularly important, as it can mitigate the challenges they face and enhance their ability to participate fully in the educational system (UNICEF, 2018). Despite the significance of early childhood education for SEN learners, the factors influencing their academic success in the Wa Municipality have not been thoroughly explored (GOG, 2013).

The educational landscape in Ghana has undergone several reforms aimed at improving access to quality education for all learners, including those with special needs (Okyere & Adams, 2018). However, challenges persist, particularly in rural areas where resources are limited, and teacher training on inclusive education is inadequate (Ametepee & Anastasiou, 2015). In the Wa Municipality, significant gaps remain in providing education for SEN learners. This is often due to a combination of factors, including a lack of specialized facilities, inadequate teacher training, and societal stigma towards individuals with disabilities (Dzomeku & Adusei, 2021). As a result, many SEN learners are excluded from the educational system or face significant barriers to academic success (Owusu et al., 2019).

The academic success of SEN learners is influenced by factors such as the availability of appropriate teaching materials, teacher attitudes and training, classroom environment, and parental involvement (Hayes et al., 2015). Research has shown that inclusive classrooms, where SEN learners are taught alongside their typically developing peers, can positively affect the academic and social development of SEN learners (Hornby, 2015). However, the success of inclusive education largely depends

on the preparedness of teachers, the availability of resources, and the support provided to learners with special needs (Alhassan & Abosi, 2014). In the Wa Municipality, investigating how these factors facilitate or hinder SEN learners' academic success in early childhood classrooms is crucial (Owusu et al., 2019).

Teacher preparedness is one of the most critical factors influencing SEN learners' success in inclusive classrooms (Forlin, 2015). In many parts of Ghana, including the Wa Municipality, teachers lack the necessary training to effectively teach learners with special needs (Ametepee & Anastasiou, 2015). Inclusive education requires that teachers adapt their teaching strategies to meet the diverse needs of learners, which can be particularly challenging in resource-constrained environments (Alhassan & Abosi, 2014). Many teachers in Ghana report feeling ill-equipped to handle SEN learners, especially in early childhood education settings where learners require specialized support to succeed (Okyere & Adams, 2018). This lack of preparedness significantly impacts SEN learners' academic success, as teachers struggle to provide the individualized attention and support these learners need (Kuyini & Desai, 2016).

In addition to teacher preparedness, the availability of resources is crucial to SEN learners' academic success (Hornby, 2015). Inclusive education requires specialized materials and equipment, such as Braille textbooks, hearing aids, and assistive technology (UNESCO, 2020). However, these resources are scarce or unavailable in many rural areas of Ghana, including the Wa Municipality (Ametepee & Anastasiou, 2015). The lack of appropriate materials hinders SEN learners' ability to fully participate in the classroom and achieve academic success (Owusu et al., 2019).

The classroom environment also plays a vital role in SEN learners' success (Forlin, 2015). Research shows that a supportive classroom environment enhances SEN learners' academic performance and social development (Hayes et al., 2015). Inclusive

classrooms must ensure that learners feel valued and supported by teachers and peers (Hornby, 2015). However, societal attitudes toward disability often negatively influence the classroom environment (Owusu et al., 2019). In Ghana, there is still significant stigma attached to disability, which can result in SEN learners being marginalized or excluded by their peers (Ametepee & Anastasiou, 2015). Creating a supportive and inclusive classroom environment is essential for SEN learners' academic success (Hayes et al., 2015).

Parental involvement is another critical factor in SEN learners' academic success (UNICEF, 2018). Research shows that parental support and involvement in a child's education are key predictors of academic achievement, particularly for learners with special needs (Hornby, 2015). In the Wa Municipality, examining the role of parents in supporting their children's education, particularly in advocating for their inclusion in mainstream classrooms and providing additional support at home, is vital (Owusu et al., 2019). Many parents of SEN learners face significant challenges, including a lack of information about their children's rights and the available resources (Okyerere & Adams, 2018). Understanding parental involvement in SEN learners' academic success is crucial for this study (Kuyini & Desai, 2016).

In conclusion, this study seeks to investigate the academic success of SEN learners in early childhood education classrooms in the Wa Municipality of Ghana. Despite the Ghanaian government's commitment to inclusive education, significant challenges remain, particularly in rural areas where resources are limited, and teacher training is inadequate (GOG, 2013). By exploring the factors contributing to SEN learners' academic success, this study aims to provide insights into effectively implementing inclusive education in early childhood settings in the Wa Municipality. The findings of

this study can inform policy and practice to improve educational outcomes for SEN learners in Ghana (UNESCO, 2020).

1.2 Statement of Problem

Education is a fundamental human right, but the inclusion of children with Special Educational Needs (SEN) remains a significant challenge in many parts of the world, including Ghana. The educational system in Ghana, particularly in rural areas like the Wa Municipality, continues to grapple with implementing inclusive education policies. Despite Ghana's efforts to ensure inclusive education through policies like the Inclusive Education Policy of 2013, which aims to integrate SEN learners into mainstream classrooms (GOG, 2013), many SEN learners still face numerous obstacles that hinder their academic success. This challenge becomes more acute in early childhood education classrooms, where foundational skills critical to lifelong learning are established (McLachlan, Fleer & Edwards, 2013). The crux of the problem lies in the gap between policy intentions and practical implementation, particularly in rural settings.

The academic success of learners with SEN in Ghana's early childhood classrooms is influenced by various factors, including teacher preparedness, availability of resources, classroom environment, and societal attitudes towards disability (Forlin, 2015). Teachers are critical in ensuring that SEN learners receive the support and attention they need to succeed academically. However, in the Wa Municipality, many teachers lack the necessary training to effectively cater to SEN learners, which undermines the principles of inclusive education (Ametepee & Anastasiou, 2015). This lack of preparedness leads to a situation where teachers struggle to implement inclusive strategies, leaving SEN learners at a disadvantage compared to their peers. This problem is compounded by the fact that early childhood education is a critical stage in

a child's development, and a failure to address the needs of SEN learners at this stage can have long-term consequences on their academic and social outcomes (UNICEF, 2018).

In addition to teacher preparedness, the availability of resources is a major obstacle to the academic success of SEN learners in early childhood education in the Wa Municipality. Inclusive education requires specialized teaching materials and equipment, such as Braille textbooks, assistive technology, and speech therapy tools, which are often unavailable in rural schools (Hornby, 2015). Without these essential resources, teachers are unable to provide the tailored support that SEN learners require, and as a result, these learners struggle to keep up with their typically developing peers. The absence of resources further exacerbates the challenges faced by SEN learners, who already encounter difficulties in accessing quality education due to societal stigmatization and exclusion (Okyerere & Adams, 2018).

The classroom environment is another significant factor affecting the academic success of SEN learners in the Wa Municipality. Research has shown that a supportive and inclusive classroom environment is essential for the academic and social development of SEN learners (Hayes, Petrie, & Visscher, 2015). However, in many rural schools, classrooms are overcrowded, poorly resourced, and often fail to accommodate the specific needs of SEN learners. In such environments, SEN learners are at a heightened risk of being marginalized or excluded from meaningful participation in classroom activities. The arrangement of desks and the overall classroom setup may not be conducive to inclusive education, further hindering the academic progress of these learners (Gaurdino & Fullerton, 2013). Additionally, societal attitudes toward disability play a crucial role in shaping the classroom environment. In Ghana, disability is often stigmatized, and this stigma is reflected in the way SEN learners are treated by both

their peers and educators (Ametepee & Anastasiou, 2015). The negative attitudes and low expectations that teachers and peers may have toward SEN learners can have a detrimental effect on their academic success, leading to feelings of isolation and discouragement.

Moreover, parental involvement is another critical factor that affects the academic success of SEN learners. Parental support is essential for ensuring that SEN learners receive the attention and resources they need to succeed academically (UNICEF, 2018). However, in the Wa Municipality, many parents of SEN learners are not fully aware of their children's educational rights or the resources available to them (Owusu, Boakye & Adusei, 2019). This lack of awareness often leads to a lack of advocacy for their children's inclusion in mainstream classrooms. Additionally, some parents may hold negative perceptions of their children's abilities due to societal attitudes toward disability, which can further limit their involvement in their children's education. The lack of parental involvement compounds the challenges faced by SEN learners, making it difficult for them to achieve academic success in early childhood education classrooms (Hornby, 2015).

Despite the efforts made by the Ghanaian government to promote inclusive education, the practical challenges of implementing inclusive education policies in rural areas like the Wa Municipality remain significant. The disparity between the policy framework and its implementation is a critical issue that needs to be addressed. For instance, while the Inclusive Education Policy (2013) calls for the inclusion of SEN learners in mainstream classrooms, the reality on the ground is that many schools lack the necessary infrastructure, resources, and trained personnel to effectively implement this policy (Ametepee & Anastasiou, 2015). Furthermore, the policy's focus on integrating SEN learners into mainstream classrooms often overlooks the unique challenges that

these learners face in early childhood education settings, where individualized support is crucial for academic success (Kuyini & Desai, 2016).

There is also a significant gap in research on the academic success of SEN learners in early childhood education in rural areas of Ghana. While much of the existing research focuses on inclusive education at the primary and secondary levels, there is limited empirical data on how SEN learners perform academically in early childhood classrooms, particularly in rural settings like the Wa Municipality (Okyere & Adams, 2018). This lack of data makes it difficult to develop targeted interventions that address the specific needs of SEN learners at this critical stage of their education.

The problem of ensuring academic success for SEN learners in early childhood education classrooms in the Wa Municipality is thus multifaceted. It involves addressing issues related to teacher training, resource availability, classroom environment, societal attitudes, and parental involvement. Without addressing these issues, SEN learners will continue to face significant barriers to achieving academic success, which will, in turn, limit their opportunities for social inclusion and economic participation later in life (Forlin, 2015). There is a pressing need for more research to investigate the factors influencing the academic success of SEN learners in early childhood education in the Wa Municipality and to develop practical solutions that can be implemented at the local level.

This study, therefore, seeks to investigate the factors that affect the academic success of SEN learners in early childhood education classrooms in the Wa Municipality. By exploring these factors, this research aims to contribute to the development of inclusive education practices that are tailored to the unique needs of SEN learners in rural areas. The findings of this study are expected to inform policymakers, educators, and parents

about the best practices for promoting academic success among SEN learners, thereby improving their educational outcomes and overall quality of life (UNESCO, 2020).

1.3 Purpose of the Study

The purpose of the study was to investigate into the academic success of Special Education Needs Learners in the early childhood education classrooms within the Wa Municipality of the Upper West Region of Ghana.

1.4 Objectives of the Study

Specifically, the study seeks to:

1. identify the type of SEN of learners in Early Childhood Education classrooms in the Wa Municipality.
2. investigate how school environment promotes the academic success of SEN learners in Early Childhood Education classrooms in the Wa Municipality.
3. ascertain how support services promote the academic success of SEN learners in Early Childhood Education Classrooms in the Wa Municipality.
4. determine how teachers' classroom pedagogies promote the academic success of SEN learners in Early Childhood Education classrooms in the Wa Municipality.

1.5 Research Questions

1. What is the type of SEN of learners in Early Childhood Education classrooms in the Wa Municipality?
2. How does the school environment promote the academic success of SEN learners in Early Childhood Education classrooms in the Wa Municipality?
3. What support services promote the academic success of SEN learners in Early Childhood Education classrooms in the Wa Municipality?

4. How do teachers' classroom pedagogies promote the academic success of SEN learners in Early Childhood Education classrooms in the Wa Municipality?

1.6 Delimitation of the Study

This study which mainly sought to investigate the academic success of Special Education Needs learners at the early childhood education classrooms was conducted in the Wa Municipality of the Upper West Region of Ghana. The study focussed on identifying SEN learners in the Early Childhood Education classrooms and also determining the kind of school environment and support services present in the Early Childhood Education centres and how they promote the academic success of SEN learners. The study also investigated how teachers' classroom pedagogies promote the academic success of SEN learners in the Early Childhood Education classrooms. The study focussed on Early Childhood Education centres and classrooms within the Wa Municipality. The qualitative research approach was mainly used to conduct this study.

1.7 Significance of the Study

The researcher aspired that the study's outcomes would offer valuable insights for policymakers, educational administrators, private Early Childhood Education providers, and various stakeholders involved in early childhood education. These insights could aid in crafting developmentally suitable practices and making practical decisions to improve the implementation of Inclusive Education within the Municipality. Furthermore, the study's findings could serve to raise awareness among the Municipal Education Directorate, private Early Childhood Education providers, and other stakeholders about the challenges encountered by ECE teachers in executing Inclusive Education practices. The research serves as a spring board to generate interest for further research into the other aspects of inclusion education in Ghana especially

Wa Municipal in the Upper West Region. The findings throw more light on the factors that promote the academic success of special needs children in the Wa municipality. The research document will also serve as a reference material to students and lecturers, and may also lead to investments into inclusive education in the municipality by interested stakeholders.

1.8 Operational Definition of Terms

Disability: Disability refers to the negative aspects of the interaction between individuals with a health condition (such as cerebral palsy, Down syndrome, depression), and personal and environmental factors (such as negative attitudes, inaccessible transportation and public buildings, and limited social supports)” (ICF 2013 cited in WHO 2015).

Integration: The term integration can mean anything if used in different scenarios. Therefore, for the benefit of this study it will be used as an educational terminology. It is referred to as “the commitment to educate each child to the maximum extent appropriate in the school and classroom he or she would otherwise attend if not placed in special education” (Rogers, 2018).

Inclusion: According to UNESCO, inclusion is seen as a process of addressing and responding to the diversity of needs of all children, youth and adults through increasing participation in learning, cultures and communities, and reducing and eliminating exclusion within and from education. (UNESCO 2016).

Inclusive Education: Inclusive education (IE), as an educational approach, is a process of addressing and responding to the diverse needs of all children through increasing involvement in learning, cultures and communities; and reducing exclusion within and from education (UNESCO, 2016).

Special Needs Education: Special needs education is seen as any form of “education designed to facilitate the learning of individuals who, for a wide variety of reasons, require additional support and adaptive pedagogical methods in order to participate and meet learning objectives in an educational programme” (UNESCO 2018).

1.9 Organization of the Study

The study is organized into five main chapters. The First Chapter highlights the background to the study, statement of the problem, purpose of the study, research questions, and significance of the study. The chapter also deals with the delimitations of the study, limitations, and definition of terms. Chapter Two reviews related literature on the topic under study. The Third Chapter, describes the method that was adopted for the study. It covers the research design, population, sample and sampling techniques, research instrument, data collection procedure and data analysis plan. Chapter Four delves into the data analysis and interpretation of data collected. The Fifth and Final Chapter gives a summary of the findings, conclusions drawn and the recommendations offered to educational administrators, the government, and other stakeholders interested in the provision of quality education in the country. It also makes suggestions for further studies.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Overview

This section gives an overview of the chapter concerning existing literature on the subject matter. The section provides review of issues with respect to inclusion, as well as inclusive education. It also aims to review research studies on the approaches adopted to promote the academic success of children with special needs. The review outlines certain pertinent terminologies, which are key to the understanding of special educational needs and examines the importance of inclusive education. These concepts are explored by looking at it from the perspective of the child, family, the teacher and the school. This chapter has been organised according to the following strands and sub-strands:

1. Theoretical Framework
2. Conceptual Framework
3. Definition of Terminologies
4. International Policies and Conventions
5. Special Education in Ghana: A Historical Overview
6. Importance of Inclusive Education
7. Identification of SEN Learners in Inclusive or Mainstream Classrooms
8. Kinds of SEN Learners in Early Childhood Classrooms
9. Environmental Factors that Promote the Academic Success of SEN Learners in ECE Centres
10. Factors that Inhibits the Academic Success of Children with Special Needs
11. SEN Children's Behaviour and Attitudes and Academic Success
12. School Factors and Academic Success



13. Classroom Teacher, Teaching Pedagogy Factors and Academic Success
14. Parents and Family Involvement and Academic Success
15. Empirical Review
16. Chapter Summary

2.1 Theoretical Framework

This study is underpinned by two main theories, which are the Theory of Behaviourism and the Theory of Cognitivism.

The Theory of Behaviourism

The development of the theory of Behaviourism is credited to four scholars namely: Pavlov (1849-1936) who is best known for his contribution to the theory of behaviourism mostly through his work in classical conditioning or stimulus substitution (Dembo, 1994); Thorndike (1874-1949) who is best known for his emphasis on the application of the methods of 'exact science' to educational problems (Al-Shammari, Faulkner & Forlin, 2019); Watson (1878-1958) widely regarded as the most influential of all the founding fathers of Behaviourism who argued for the value of psychology which concerned itself with behaviour in and of itself, not as a method of studying consciousness; and Skinner (1904-1990) who like other behaviourists believed in the stimulus-response pattern of conditioned behaviour.

According to Nalliah and Idris (2014) the Theory Behaviourism is one of the classical theories of learning and also recognized as the oldest. Harold and Corcoran (2013) summarize the key principles of behaviourism that support education as: behaviour is learned, behaviour is governed by the setting in which it occurs, teaching does not occur without learning, learning equates to changing behaviour, behaviour is governed by what follows actions, and there needs to be a focus on the observable. The application

of the Theory of Behaviourism to inclusive education is seen as part of the emphasis on student behaviour and performance in manipulating stimulus materials (Ertmer & Newby, 2013) which are seen in the inclusion of popular instructional methodologies such as explicit or direct instruction (Al-Shammari, 2019). Explicit or direct instruction methodologies break down learning tasks into their smallest elements and a step-by-step process provided by a teacher and followed by students during instruction (Zhang et al., 2016). These methodologies are widely used for teaching students with special educational needs in inclusive education classrooms. Al-Shammari, Al-Sharoufi and Yawkey (2008) reports that the method has shown positive research results with students with special needs in general education classrooms.

During the instructional process, Behaviourists assess learners to determine at what point to begin instruction and which re-enforcers are most effective (Al-Shammari, Faulkner & Forlin, 2019). As explained by Ertmer and Newby (2013), the role of teacher's during the instructional process is according to the Behaviourists is to:

1. determine which cues can elicit the students' desired responses;
2. arrange practices where prompts are paired with the target stimuli which are expected to elicit the responses in the 'natural' setting; and
3. arrange environmental conditions so that students can make the correct responses in the presence of those target stimuli and receive reinforcement for those responses.

In fact, the Theory of Behaviourism underlies many teaching methodologies that are currently practiced especially as interventions for learners with special needs in inclusive education settings. These teaching methodologies according to Hattie (2008) include direct instruction, functional behavioural analysis, and assessment, evaluation, and feedback. Al-Shammari, Faulkner and Forlin (2019) in explaining each of these

methodologies stated that direct instruction is commonly delivered in a teacher-led environment during which the teacher facilitates student learning through targeted lessons, for example, the teacher introduces a lesson, teaches a structured lesson, monitors student understanding, and receives student feedback to ensure understanding. They explained the Functional behavioural analysis as a methodology that categorizes and targets specific behaviours and their antecedents to change disruptive behaviours in the classroom, and encourage positive behaviour changes. A functional behavioural analysis of a student would involve using a chart with specific targeted behaviours monitored for frequency, time of day, antecedents, and consequences (Al-Shammari, Faulkner & Forlin, 2019). The authors also explained that formative assessment, evaluation, and feedback assess the progression of learning and examine the gaps where remediation or even enrichment is necessary. An example of this in a behaviouristic classroom is the use of "Exit slips" which involves questions posed by teachers and students answer before leaving the classroom for the day including: "things I learned," "things I found interesting," and "questions I still have" (Al-Shammari, Faulkner & Forlin, 2019).

By way of summary, this study hinges itself to the fact that the Behaviourist Theory which proposes that in inclusive or mainstream schools, SEN learners' academic success largely depends on their behaviour and performance in manipulating stimulus materials and that this behaviour or level of performance is learned, governed by the setting in which learning occurs, results in changing behaviour and related actions. This presupposes that given the right environment, support services and effective teaching methodologies, SEN learners can thrive and perform excellently when placed in inclusive or mainstream classrooms.

The Theory of Cognitivism

The theory of Cognitivism was propounded by Swiss Psychologist Jean Piaget. The theory essentially focuses on the attributes of one's thinking, memory, self-reflection, and motivation to learn (Al-Shammari, Faulkner & Forlin, 2019). Piaget suggested that every developmental stage in a child's life presented different abilities and processes of learning (Evgeniou & Loizou, 2012). Under this theory, effective teaching and learning hinges on thought processes and their importance in learning, including memory, thinking, reflection, abstraction, and metacognition, which are all needed in the learning process (Petersen, 2014). Such teaching and learning according to Ertmer & Newby (2013, p. 60) "must be based on a student's existing mental structures or schema to be effective." Cognitive approaches to teaching and learning acknowledges the processes of mental planning, goalsetting, and organizational strategies, thus making knowledge meaningful and helping learners be more organized and able to relate new information to existing knowledge stored (Al-Shammari, Faulkner & Forlin, 2019).

In terms of the application of Cognitivism in inclusive education settings, emphasis is laid on mental information processing and interactions in guiding student learning (Ertmer & Newby, 2013). SEN learners are generally encouraged to express and connect their prior knowledge, learning experiences, and abilities to learn new information being provided to them (Al-Shammari, Faulkner & Forlin, 2019) and this goes a long way to improve their learning and also enhance their motivation for learning. Those instructional strategies such as framing, outlining, mnemonics, concept mapping, and advance organizers should be specifically used to support the cognitive needs of students with special educational needs.

According to Tunmer, Chapman, Greatney and Prochnow (2002) as cited in (Al-Shammari, Faulkner & Forlin, 2019), there are some principles or assumptions that are

directly relevant to the process of designing and planning learning instruction or methodologies, which include:

1. emphasis on the active involvement of the learner in the learning process (i.e. self-planning, monitoring, and revising techniques);
2. use of hierarchical analyses to identify and illustrate prerequisite relationships (i.e., cognitive task analysis procedure);
3. emphasis on structuring, organizing and sequencing information to facilitate optimal processing (i.e., use of cognitive strategies such as outlining, summaries, synthesizers, advance organizers); and
4. creation of learning environments that allow and encourage students to make connections with previously learned material (i.e., recall of prerequisite skills, use of relevant examples, analogies).

In inclusive education settings, Cognitivism is implemented through the use of teaching methodologies or pedagogies which foster learning activities including the use of the Preview, Question, Read, Reflect, Recite, and Review (PQ4R), writing to learn, outlining and mapping method (Slavin, 2009), note-taking (Boyle & Rivera, 2012), underlining (Swanson, Orosco, & Lussier, 2014) and summarizing (Wittrock & Alesandrini, 1990). Aside these, other pedagogies also used under Cognitivism especially for SEN learners in inclusive education as well as mainstream classrooms include various metacognitive strategies such as study skills, concept mapping, and reciprocal teaching (Al-Shammari, 2019; Hornby, 2015). Al-Shammari, Faulkner & Forlin (2019) supplies that the use of these instructional approaches has shown positive results among students with special needs in general education classrooms which helps them to assimilate and accommodate information.

2.2 Conceptual Framework

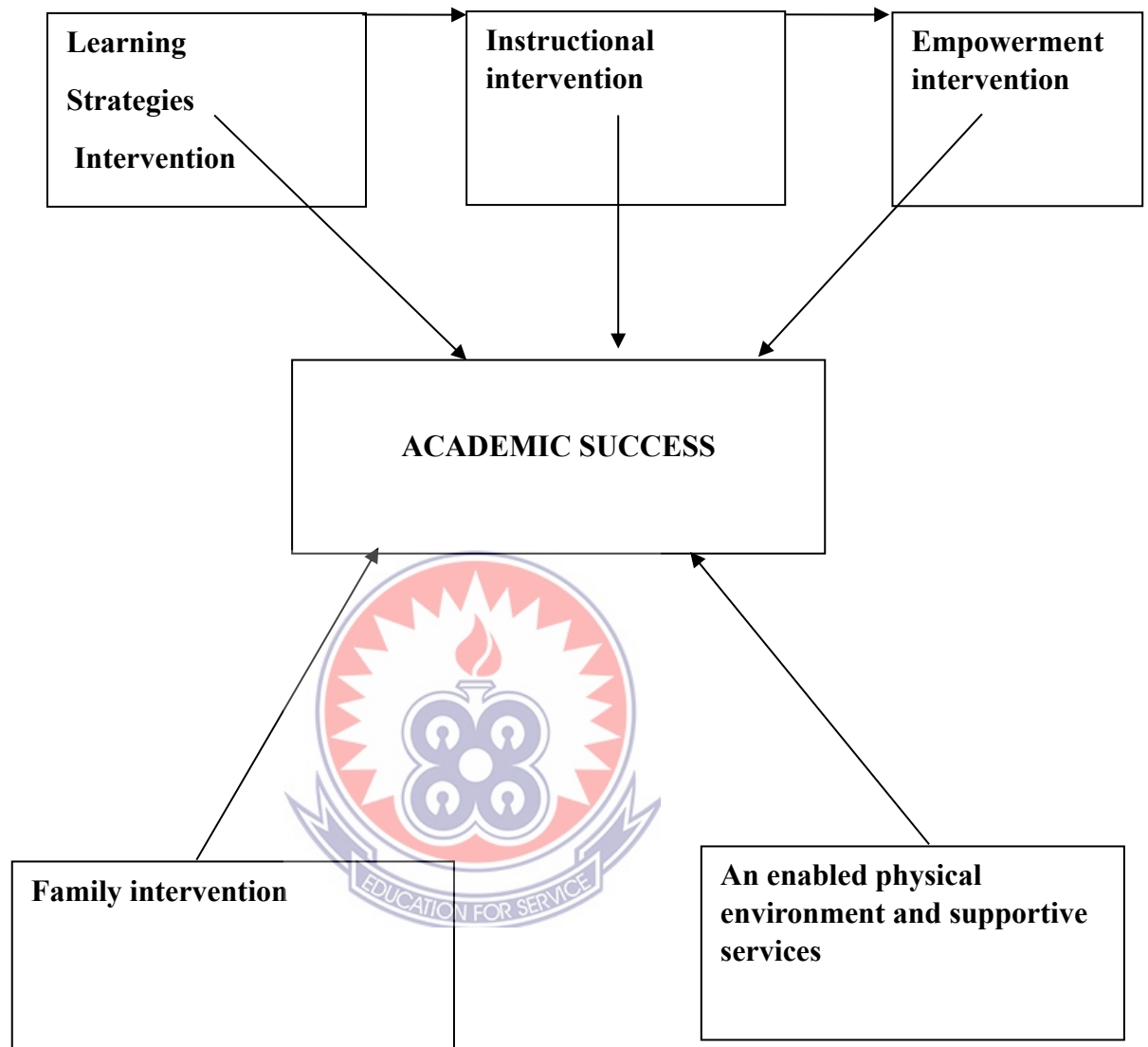


Figure 2.1: Conceptual Framework: Adaptation of the Strategies Intervention Model

Source: Adopted and modified from the University of Kansas Institute for Research in Learning Disability (KU-IRLD)

There are a number of theoretical and empirical arguments that can be used to explain how different factors promote the academic success of children with special educational

needs. Among these are the strategies intervention model (SIM) and the instructional strategy model. Others are the observational learning theory and guided learning theory. This study adopts the strategies intervention model (SIM) as the closest model that provides the theoretical justification for the study of the factors promoting academic success of children with special needs. SIM was developed by three researchers from the University of Kansas Institute for Research in Learning Disability (KU-IRLD). The goal of the model is to promote learning among children without it necessarily being done by teachers. At its very core, the model adopts three (3) approaches of intervention that includes learning strategies interventions (teaching students various learning strategies); instructional interventions (teachers using teaching and learning aids to promote understanding); and empowerment interventions (encouraging students to give up their best and promoting good relationships with their peers in class).

The strategies intervention model is extended to include family intervention as well as an enabled physical environment and availability of supportive resources. While the latter takes into account the environment within which teaching and learning take place, the former is taken to include interventions emanating from support given by family members to a special child. This framework was adapted in this work to show how the different factors proposed helps to further understand the academic success of special needs children in Ghana. Figure 2.1 is the diagram of the theoretical framework.

2.3 Definitions

In order to have a full understanding of the study there is the need to understand the key concepts, which are the focus of the study. These concepts include disability; integration; inclusion; mainstreaming; inclusive education; and special educational needs.

2.1.1 Disability

According to the International Classification of Functioning, Disability and Health (ICF), disability is defined as “an umbrella term for impairments, activity limitations, and participation restrictions. Disability refers to the negative aspects of the interaction between individuals with a health condition (such as cerebral palsy, Down syndrome, depression), and personal and environmental factors (such as negative attitudes, inaccessible transportation and public buildings, and limited social supports)” (ICF 2013 cited in WHO 2015). This indicates that disability goes beyond just a medical disorder, but can be perceived from the social and environmental points of view.

2.1.2 Integration

The term integration can mean anything if used in different scenarios. Therefore, for the benefit of this study it will be used as an educational terminology. It is referred to as “the commitment to educate each child to the maximum extent appropriate in the school and classroom he or she would otherwise attend if not placed in special education” (Rogers, 2018). Rogers, (2018) further argues that “inclusion brings the support services to the child rather than moving the child to the services and requires only that the child will benefit from being in the class rather than having to keep up with the other students”. The integration means the process where children with special educational needs (SEN) are physically placed in general education classrooms without any provisions made for their training and learning process.

2.1.3 Inclusion

According to UNESCO, inclusion is seen as a process of addressing and responding to the diversity of needs of all children, youth and adults through increasing participation in learning, cultures and communities, and reducing and eliminating exclusion within and from education. It involves changes and modifications in content, approaches, structures and strategies, with a common vision that covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all children (UNESCO, 2016).

2.1.4 Mainstreaming

Mainstreaming, as used in education literature, can mean the provision of educational support services for special educational needs children to remain in mainstream schools which will reduce the proportion of children who drop out as a result of the lack of appropriate educational facilities (Smith et al, 2018). Friend and Bursuck (2016) further argue that mainstreaming involves the placement of children with special educational need in inclusive classrooms if only their academic success can be met with little assistance, or even when they can cope without meeting these expectations.

2.1.5 Inclusive Education

Inclusive education (IE), as an educational approach, is a process of addressing and responding to the diverse needs of all children through increasing involvement in learning, cultures and communities; and reducing exclusion within and from education (UNESCO, 2016). This means educating children with special educational needs in regular education settings. It is worth noting that IE goes beyond mere placement of special educational needs children in inclusive schools; it entails the acceleration of teaching and learning needs of special educational needs children. It further entails the provision of modified curriculum and teaching methodologies to meet the educational

needs of these children (Farid, 2014). Inclusive education further looks at the strengthening and capacitation of the education system to meet the educational needs of all learners, which can serve as a pathway to the achievement of education for all (EFA). Inclusive education therefore takes into consideration a replacement and adaption of the content of curriculum, practices, approaches, structures and strategies, which aims to meet the educational and social needs of all children regardless of their age, gender or disability in a mainstream educational system (UNESCO, 2016).

2.1.6 Special Needs Education

Special needs education is seen as any form of “education designed to facilitate the learning of individuals who, for a wide variety of reasons, require additional support and adaptive pedagogical methods in order to participate and meet learning objectives in an educational programme” (UNESCO, 2018). A number of reasons are given for the provision of such an educational approach including the fact that some children are physically disadvantaged; others have behavioural disorders; intellectual disabilities; and emotional imbalances. Educational programmes in inclusive schools sometimes have similar curriculum to those offered in non-inclusive educational systems. The only difference is that the inclusive school’s curriculum takes into consideration the individual needs of the children as well as the provision of specific resources (e.g. specially trained personnel, equipment, or space); and if possible, modified educational curriculum. This educational approach can either be delivered for individual learners within an existing educational programme or be offered in a detached classroom different from the other classes (UNESCO, 2018).

2.4 International Policies and Conventions

A number of international policies have been put in place to support the rights of the disabled and, for that matter, special needs children who, as individuals, deserve respect

and an opportunity to participate in all activities in the society in which they live. However, this study focuses on only three main international policies and conventions which tend to highlight and devote sections on the rights of children with special needs to education: The Convention on the Rights of the Child; the Salamanca Statement; and the recent Convention on the Rights of Persons with Disabilities. These were selected because they are endorsed by the majority of countries worldwide. Unlike the other conventions, which are on specific special needs categories like the 1971 Declaration on the Rights of Mentally Retarded Persons and the Policy on the Rights of Deaf Children to Education, the three policies talk about all forms of disabilities. The majority of the other conventions are regionally focused whereas these three policies were adopted at world conferences on the rights of children and persons with disabilities. Examples include the 2004–2013 Arab Decade of Disabled Persons; 2001–2009 African Decade of Disabled Persons; and 1993–2002 Asian and Pacific Decade of Disabled Persons. These three conventions emphasize the necessity to educate every child with special needs to unearth their full potential. They also enjoin the state to uphold these rights to the optimum level.

2.4.1 Conventions on the Rights of the Child

In 1989, world leaders decided that children under the age of eighteen or who were still under their parents' care needed a special convention. By November 2009, 194 countries had ratified and accepted the Convention on the Rights of the Child (CRC). The CRC is seen to be one of the early conventions that focused on the total inclusion of all forms of child rights be it social, economic, political, civil or cultural rights (Ainscow, 2016). The convention was written because it had become clear that children were abused and mistreated and needed to be protected, and to show that children had their rights as human beings. The convention is founded on respect for the dignity and

worth of each individual regardless of race, colour, gender, language, religion, opinions, origins, wealth, birth status, or ability. In the 1990s, as a result of the staging of two major international conferences in Jomtien, 1990, and in Dakar, 2000 on the promotion of education for every child, the Education for All (EFA) strategy was adopted (UNESCO, 2016 as cited in Ainscow, 2016). The EFA, which is one of UNESCO flagship policy on education, aimed at promoting access, participation and retention of all children in school to unearth their full potential (Ainscow, 2016). The Jomtien conference is credited with laying the grounds for the adoption and integration of persons prone to be excluded from fully participating in the acquisition of knowledge in an educational institution. Although inclusive education as an educational approach was not explicitly discussed during the Jomtien conference, it served as a framework for the development and promotion of inclusive education (Ainscow, 2005).

2.4.2 Salamanca Statement and Framework for Action

The Salamanca Statement and Framework for Action came into existence in 1994 during the World Congress on Special Needs Education in Salamanca, Spain: 92 governments and 25 organisations adopted it. The Salamanca Statement is seen as the first reference point on international policies whose focus is centred on children with special needs and disability in particular. The policy outlined the procedure and processes for the adoption, promotion and implementation of inclusive education in schools around the world. The statement highlighted the fact that inclusive education could lead to the achievement of the Education for All (EFA) goals. It had the vision of putting education at the doorstep of special needs children in an inclusive educational environment (UNESCO, 2016). The Salamanca Statement also re-echoed the idea of access and participation of all children in a safe and secured educational atmosphere as being a right of every child in the world. It also espoused that, if these goals are adhered

to as well as the provision of child centred pedagogy and learning aides, it will go a long way to enhance the learning abilities and academic achievement of children with special needs in schools (ibid).

2.4.3 Convention on the Rights of Persons with Disabilities

The recent international convention geared towards the protection of the rights of persons with disability is the Convention on the Rights of Persons with Disabilities. It is an international human rights treaty of the United Nations intended to protect the rights and dignity of persons with disabilities. It came into force on 3 May 2008 after it was adopted by the United Nations General Assembly on 13 December 2006, and opened for signature on 30 March 2007.

Although the convention on the Rights of Persons with Disabilities talks of all forms of rights of persons with disability, the focus of Article 24 of the Convention is on the education of persons with disabilities. Excerpts from the Article 24 enjoin countries to recognize the right of persons with disabilities to education by enabling them to realise this right without discrimination and on the basis of equal opportunity (UNESCO, 2016). It also implores countries to promote the inclusion of children with special educational needs to be included in the educational system at all levels. It further went on to state that, for countries to realise this right, appropriate measures must be taken. These include the employment of teachers, including teachers with disabilities, who are qualified in sign language and/or Braille; as well as training professionals and staff who work at all levels of education. These teachers employed should be equipped with the needed educational skills and knowledge as the provision of adequate resources and materials to support persons with disabilities (UN, 2014).

2.5 Special Education in Ghana: A Historical Overview

In the recent past, special education in schools has gained significant attention in the world and Sub-Saharan Africa is no exception. It is aimed at providing the needed support, services, adaptation and accommodation to students with disabilities (Lewis, 2017). This assistance is offered to special educational needs children to enhance their educational participation in a less restrictive environment. In the past, the traditional model to the implementation of special educational needs programmes required bringing children to the special education services (ibid). The inclusive model of special education requires bringing the special education services to the child. More so, inclusive education (IE) is a theme at the forefront of current educational debates and a goal embedded in the attainment of universal primary education and gender equity in the Millennium Development Goals (MDGs). It is perceived as a form of education geared towards the education of children with special needs in developed and developing countries (Ainscow, 2016). More so, as purported by Slee and Allan (2013), it is described as a social movement, which talks against the exclusion of special educational needs (SEN) children in the educational system. The Salamanca Statement enjoins 92 countries' governments to adopt inclusive education as part of their educational systems and policies by "enrolling all children in regular schools, unless there are compelling reasons for doing otherwise" (UNESCO, 2016). To achieve this global goal of inclusive education, agencies as well as institutions called for support to come out with better and more efficient approaches to promoting inclusive education (ibid).

The development of special schools in Ghana followed the same pattern as in many other countries. According to Anson-Yevu (2015), before the introduction of Western education, special needs children or students did not participate in formal educational

programmes. The care of the disabled, the sick, the aged and orphans had always been the responsibility of the family in Ghana (both nuclear and extended) as well as the care of those who were able-bodied (ibid). Special schools were established during the mid-1940s when the Basel missionaries established a school for students with visual impairment in Begoro and Akropong- Akwapim. These schools were later followed by the emergence of special schools for other disability categories (Avoke and Avoke, 2004). According to Abosi (2007) (as cited in Schedule of Events for the Twelfth Biennial Conference in Windhoek, Namibia, 2011), the early missionaries concentrated on disabilities that were noticeable such as visual impairment, mental retardation and hearing impairment. Invisible disability categories that affected learning and/or behaviour were either not recognized by the missionaries or not given any special consideration. It was after independence (1959) when education was at the top of the government's agenda, that the then Government of Ghana took over the education of children with special educational needs. This led to the inclusion of special education in the educational system in the first Act of Parliament of the country. This act gave the government the sole responsibility of putting in place measures to train and rehabilitate children with disabilities in the country (Anson, 2015).

This Act was used to initiate the free education for all children with all forms of disability and special needs. The Act also called for the establishment of a special education division that would be mandated to see to the wellbeing and education of children with disabilities. The division was mandated to provide professional advice with regard to the identification of children with disabilities; and was tasked to develop programmes to cater for the educational needs of these children. The division, through its resource persons, was also mandated to take parents and guardians of special needs children through a series of education and counselling to make them come to terms with

the fact that their children could still be educated even though they have certain disabilities. Other roles of the division included the acquisition of teaching and learning aides as well as equipment for the training of persons with disabilities; and to support universities to train special educational needs teachers to be placed in almost every basic school to see to the welfare of special needs children (GES, 1995).

In 1994, Ghana participated in the UNESCO conference in Salamanca, Spain. It was at this conference that participants from various countries drafted the Salamanca Statement. The Salamanca Statement called for the inclusion of children with special needs in schools that cater for both special needs children and the non-special needs children. It also called for the adoption of a child focus pedagogy, which it believed would effectively cater for the educational needs of children with disabilities. Delegates at this conference saw the adoption of inclusive schools where special needs children are mainstreamed as the most effective way of breaking the chain of discrimination special needs children are confronted with in their quest to be educated. The statement called for the creation of a conducive school environment for the realisation of the full potential and academic success of children with special needs, which in the long run led to the achievement of education for all (UNESCO, 2016). As a result of Ghana's participation in the Salamanca conference, there was intensification of efforts on the part of the Ghanaian government to address the needs of children with SEN. These efforts took the form of collaboration with non-governmental organizations (NGOs) to develop programmes such as the community-based rehabilitation to reform the service delivery and improve educational opportunities for children with disabilities who were still unreached (Torto, 2000).

Furthermore, efforts to achieve UNESCO's mandate of free universal education for all by 2015 led to the launching of the Free Compulsory Universal Basic Education

(FCUBE) programme in 1996. FCUBE focused on improving the quality of teaching and learning, increasing educational access, and participation of all school-aged children including free educational resources and establishment of local educational agencies to provide efficient management of education (Agbenyega, 2015). Equally important, the Ghanaian Education Strategy for 2003-2015 adopted inclusion as a policy with the goal of providing equitable educational opportunities to all children, ensuring that students with less severe special educational needs are incorporated into mainstream schools by 2015 (Torto, 2013). All these policies led to increased enrolment of students, including students with disabilities, leading to overcrowded classrooms (Avoke, 2004), further compounding the challenge of providing quality education for students with disabilities.

2.6 Importance of Inclusive Education

For every individual to harness his/her full potential and contribute substantially to the growth of the society in which they live, they need to be educated (Colleen, 2013). Therefore, inclusive education is seen as a vital tool for the creation of equal opportunities for people to harness their skills and to use the knowledge gained to improve their wellbeing. Therefore, in societies where there is unequal access to education, there is bound to be educational inequalities, which will hinder people's ability to harness their potential (Colleen, 2013). Indeed, inclusive education should be a priority for all, especially children because it is very important for their future (Colleen, 2013). By simply including children with special educational needs in inclusive schools, it goes a long way to better their wellbeing as they will be able to socialize among their peers and take part in learning activities that broaden their knowledge (Kingston *et al.*, 2003 as cited in Colleen, 2013).

Inclusive education ensures that all children have an equal right to be educated in regular schools and participate equally in activities, irrespective of their differences (Colleen, 2013). Inclusive education follows the fundamental belief in the UN Human Rights Charter, which enjoins every human being to be treated equally. This, therefore, calls for inclusive schools to put into practice the idea of all children being treated equally in class. Inclusion of SEN in regular classes not only gives disabled children the opportunity to attend school, it also gives them the opportunity to be part of the society and participate in it meaningfully (Colleen, 2013). Most importantly, it equips them with skills and knowledge necessary to seek formal employment and contribute to their society (UNESCO, 2016).

Inclusive education promotes education as the central part of both individual well-being and the well-being of the nation as a whole (Manoharan & Singal, 2017). It has been said that “education benefits not just children, but families and communities, and whole countries. It improves job chances and prosperity; promotes health and prevents disease” (ibid). Education plays a very important role in the lives of people. UNESCO (2018), states that education is required by “human beings to be able to survive, to develop their full capacities, to live and work in dignity, to participate fully in development, to improve the quality of their lives, to make informed decisions...” Through IE, every child will obtain life skills that are effective tools for empowerment and social transformation in their lives (Colleen, 2013).

Disability in children is inevitable; and there is an increasing need for quality education that prepares SEN children to go out and live independently in society. Education provides the platform from where people discover their innate talents, which are then used for the development of the community and nation as a whole: it is a key factor in the development of people and communities. Therefore, to deny a child education

because of any form of disability will be detrimental to the person as well as the society's development. However, disabled children cannot thrive in life if teachers have negative attitudes towards them, and are not willing to include and teach them. There is the need for a more rigorous and comprehensive learner sensitive pedagogical approach to the needs of SEN children in mainstreamed educational institutions.

2.7 Identification of SEN Learners in Inclusive or Mainstream Classrooms

Identification is an important exercise that allows teachers to detect learners with specific learning difficulties or disabilities and recommend them for assistance or treatment so that they can function successfully in and out of school (Biljana, Despina & Jadranka, 2014). National Council for Special Education (2014) advises that early identification of children's developmental and learning problems is key to understanding the children's developmental and learning conditions to refer them to a specialist for further assessment and give them needed support in school and at home. This helps to increase the chances of preventing or minimising further deterioration of their conditions (Soma, Kissiedu & Nyame, 2023). As Heward (2013) supplies, the achievement of this as a common goal requires collaboration between schools and families. Early identification involves a timely and comprehensive assessment of learners' abilities, interests, strengths, and weaknesses and informs stakeholders on the right intervention plans to be adopted to help learners who may be at risk of certain disabilities or developmental delays to avoid further complications of their situations and limitations to their educational opportunities (Ho, 2007). This is especially important because any delays in identification can have serious consequences on learners as it usually causes difficulties or disabilities to aggravate and even persist throughout adulthood, resulting in poor self-esteem development and motivation (Biljana et al., 2014). The World Health Organisation (WHO, 2012) proposes certain

processes for the identification of disabilities in Early Childhood centres such as early screening, pre-referral, referral, diagnosis, assessment, eligibility, placement, intervention plan, monitoring, and re-evaluation.

Screening

Screening constitutes the first step towards identifying SEN learners in schools. The Minnesota Disability Law Center (2010) proposes the use of a test or an interview for this purpose. Screening can also be done before birth (prenatal screening) and after birth (postnatal screening) to detect certain impairments and some health conditions associated with certain disabilities (World Health Organisation, 2012). Soma Kissiedu and Nyame (2023) revealed that as part of the screening process, learners are closely watched systematically and their vision, hearing, school attendance, and academic records carefully reviewed to identify the difficulties they encounter in the classroom. This helps to identify children's developmental, linguistic or speech, social, physical or health anomalies as compared to normative tendencies of their age group (Parham, 2016). The outcome of screening may lead to the referral of some learners for an educational evaluation (Minnesota Disability Law Center, 2010). Screening also provides parents and teachers real-time feedback on children's performance, mastery of skills, and learning progress across subject areas and reveals traits in children that pertain to some risks related to some possible learning or behavioural disorders so that they can be helped as early as possible with an intervention process (Soma, Kissiedu and Nyame, 2023). Screening therefore helps to prevent learners from lagging academically (National Centre for Learning Disabilities, 2020).

Re-Referral and Referral

Referral involves the process of referring learners suspected as SEN learners to the appropriate professionals such as special education teacher or counsellor in the school for remediation action to be taken for such a learner. Soma, Kissiedu and Nyame (2023) explains that the referral process starts with pre-referral activities, which are steps taken by classroom teachers to ensure the child's success in class. Learners who are unsuccessful during pre-referral are then referred, and the child's parents' consent is sought for the child to be evaluated (Family Network on Disabilities, Inc, 2011). Pre-referral refers to the interventions initiated by the classroom teacher to help learners suspected of having some disabilities overcome their learning difficulties or emotional and behavioural problems before referring them for an educational evaluation (Minnesota Disability Law Center, 2010). This means that learners with disabilities are primarily identified in the school by the classroom teacher who, after a series of observations and pre-referral services aimed at helping the child benefit from classroom instructions, refers him/her for diagnosis and assessment through the special education teacher or the school counsellors (Ahmad, 2015). The special education teacher or the school counsellors then identify traits associated with certain disorders or disabilities in the child, and in consultation with the school seeks the concern of the child's parents to refer him to a licensed medical facility for medical confirmation or certification through diagnosis and assessment (Ahmad, 2015).

Diagnosis

Diagnosis is made for medical certification of the existence of a disability in a child through a variety of formal assessments (Soma, Kissiedu and Nyame, 2023). Diagnosis paves the way for the provision of intervention services for certified children (Ahmad, 2015). The medical model of assessment requires that, as it is done in medicine, the

correct diagnosis must be made to identify the suspected difficulties, disabilities, or exceptionalities alongside the appropriate intervention or effective treatment to address the condition (National Council for Special Education, 2014). Before placing an individual within a specific diagnostic category, valid assessments must be done. This is a cyclical process that promotes a timely identification of developmentally delayed learners who may need some form of corrective and supportive measures or intervention to realise their potential (World Health Organisation, 2012).

Evaluation

Soma, Kissiedu and Nyame (2023) posits that educational evaluation, also called assessment, is done to establish if a learner has a disability that prevents him from learning or making progress in school. Before deciding that your child is or is not eligible for exceptional student education, a team of people must conduct an individual evaluation of your child's educational strengths and needs (Bureau of Exceptional Education and Student Services, 2012). Usually, the school makes guardians sign a consent form to show that they agree to the evaluation (Bureau of Exceptional Education and Student Services, 2012). The evaluation relies on critical information from parents about the "child's academic, developmental and medical history, along with the communication patterns and linguistic usage and efficiency of the child" (Ahmad, 2015, p. 2) and several approaches and assessment tools to determine the type of disability present in the child, the present levels of the child's performance and educational needs. It also determines if the child will need specially designed instruction and/or related services and if there is a need for some accommodations or modifications to be made in favour of the child (Family Network on Disabilities, Inc, 2011).

The evaluation is usually carried out by a team from diverse disciplines consisting of a special education teacher, a psychologist, a therapist, a doctor or nurse, a counsellor, a social worker, and the child's parents (Soma, Kissiedu and Nyame, 2024). Information provided by evaluation helps in writing an individual education programme or individual family service plan (IFSP) for the identified learner with a disability (Minnesota Disability Law Center, 2010).

Eligibility

SEN learners present various levels and degrees of exceptionality for which a specific type of intervention is required in each case. Some children have one disability, and others have more than one; one child with a disability may need only a little extra help while another child may need more services because their learning needs are more intense; some children will need SEN services for only a short time; however, others will need help throughout their school years (Soma, Kissiedu and Nyame, 2023). Early Special Education (ESE) services are designed to give each child the special help they need (Bureau of Exceptional Education and Student Services, 2012). The Pennsylvania Training and Technical Assistance Network (2018) provides that a learner may be eligible for special education if he or she:

1. has an intellectual disability, emotional disturbance, an orthopaedic impairment, a hearing impairment, deafness, a speech or language impairment, a visual impairment (including blindness), autism, traumatic brain injury, other health impairment, a specific learning disability, deaf-blindness, or multiple disabilities and
2. needs special education, as determined by an evaluation team. Your child must meet both qualifications to be eligible for special education.

Placement

Placement refers to the specific place where the child will receive such special education services, depending on the nature and severity of his disabilities (Soma, Kissiedu and Nyame, 2023). This according to Grindal et al., (2019) may be a full-inclusion placement in a general education classroom, a partial inclusion placement in the least restrictive environment, or a substantially separate placement in a special education school. Soma et al., (2023) however cautions that children with disabilities must be taught as much as possible in the school and the classroom they would attend if they were not disabled. This calls for the provision of aid and support that will help children stay in a regular classroom before opting to place them on a more restrictive placement (Bureau of Exceptional Education and Student Services, 2012).

2.7.1 Factors that Inhibit the Early Identification of SEN Learners in Early Childhood Education Centres

There is plethora of factors that inhibit the early identification of SEN learners in schools especially at the Early Childhood Education Centres. These factors either prevent the identification totally or delays it. In each case, early remediation actions can therefore not be implemented to salvage the situation. Ahmad (2015) identifies that factors that inhibit the early identification and assessment of learners with disabilities are associated with inadequate knowledge or ignorance about various kinds of disabilities, inadequate policies, lack of proper diagnosis and timely intervention, as well as issues of acceptance, stigma, and labelling. Aiyaleso (2017) also found that factors such as parents' negative attitudes, inadequate logistics to screen and diagnose learners with various degrees of impairments or disabilities, as well as inadequate qualified personnel or specialists to conduct professional assessment and plan

intervention programmes for the identified learners inhibit proper identification of SEN learners.

Grindal, Schifter, Schwartz and Hehir (2019) citing Harry and Klinger (2014) revealed that in most cases identification results in labelling and stigmatisation and causes teachers and even parents to have low expectations of the identified learners' abilities to succeed in the general education classroom. Aside the labelling and stigmatisation, Soma, Kissiedu and Nyame (2023) also revealed that there is the fear of misidentification which can affect early identification negatively when learners who could benefit from the general education curriculum are wrongly identified as having a disability and placed in a special education classroom. This causes parents as well as some teachers to resist all forms of early identification (Grindal et al., 2019).

2.8 Kinds of SEN Learners in Early Childhood Education Classrooms

The kinds of SEN that learners have especially in ECE centres are numerous and have therefore been grouped according to categories.

Lee (2023) explains that The Individuals with Disabilities Education Act (IDEA) in America requires public schools to provide Special Education services to eligible students under the following disability categories:

Specific Learning Disability (SLD): The SLD category covers a specific group of learning challenges which impede a child's ability to read, write, listen, speak, reason, or do mathematics. Disabilities that could fall under this category include Dyslexia which affects a learner's skill or ability to read and spell words accurately and fluently characterized by difficulties in phonological awareness, verbal memory and verbal processing speed; Dyscalculia which refers to weaknesses in learners pertaining to misunderstanding of the meaning of numbers and general inability to apply

mathematical principles to solve problems, and is shown specifically when learners lack effective counting skills, number identification and ability to do simple arithmetic mentally; and dysgraphia which is a written expression disorder and is shown in the inability of the learner to translate thoughts into writing appropriate for their age in spite of exposure to lessons in age-appropriate skills.

Other health impairment: Lee (2023) explains that the “other health impairment” category covers conditions that limit a child’s strength, energy, or alertness. Attention Deficit Hyperactivity Disorder (ADHD) is one example of disability under this activity. ADHD is seen in the inability of the learner to focus or pay attention or sit still, impulsive behaviours as well as hyperactivity.

Autism Spectrum Disorder (ASD): Lee (2023) explains that ASD is a developmental disability. Its symptoms consist of a wide range of disabilities that mainly affects a child’s social and communication skills and thus their general behaviour.

Emotional Disturbance: Lee (2023) refers to various mental health issues that could fall under the “emotional disturbance” category as anxiety disorder, schizophrenia, bipolar disorder, obsessive-compulsive disorder, and depression.

Speech or Language Impairment: Under this category, Lee (2023) states that learners possess disabilities related to speech or language. It is characterised by stuttering, trouble pronouncing words or making sounds with the voice and inability of learners to understand words or express themselves.

Visual Impairment, including blindness: The Visual Impairment category includes both partial sight and blindness. Lee (2023) explains that if eyewear can correct a vision problem, then it doesn’t qualify under this category of disability.

Hearing impairment: Lee (2023) explains that Hearing Impairment refers to all forms of hearing loss which is not covered by the definition of deafness and it can change over time. He explains further that being hard of hearing is not the same thing as having trouble with auditory or language processing. Deafness is a category of disability that covers learners who cannot hear most or all sounds even with a hearing aid.

Deaf-blindness: Learners with a diagnosis of deaf-blindness have both severe hearing and vision loss, with their communication and other needs being so unique that programmes or interventions for just the deaf or blind cannot meet them (Lee, 2023).

Orthopaedic Impairment: With orthopaedic impairment, learners generally lack function or ability in their bodies. An example is cerebral palsy (Lee, 2023).

Intellectual Disability: Lee (2023) explains that learners with this type of disability have below-average intellectual ability and also, they may have poor communication, self-care, and social skills.

Traumatic Brain Injury: This disability has to do with brain injury caused by an accident or some kind of physical force (Lee, 2023).

Multiple Disabilities: Lee (2023) explains that a learner with multiple disabilities has more than one condition covered by IDEA and this creates educational needs that can't be met in a programme designed for any one disability.

Subbey (2017) also categorized young children with special needs as follows;

- **Sensory Deviation:** this category of special needs includes learners with visual and hearing impairments and communication disorders.
- **Physical Deviations:** this class of special needs covers learners with physical or orthopaedic and health impairments.

- **Mental Deviations:** this category involves children with intellectual disability or learning difficulties and giftedness or talentedness.
- **Emotional Deviations:** this class of special needs include learners who are emotionally disturbed and have emotional behaviour disorders (EBD).

2.9 Environmental Factors that Promote the Academic Success of SEN Learners in ECE Centres

A favourable school and classroom environment is a very important factor that can ensure the full integration and academic success of all learners especially SEN learners. Turlubekova, Biryukov, Magrupova, Kishibekova and Bugubayeva (2023) defines a favourable environment as an environment whose condition ensures environmental safety and protection of public health, conservation of biodiversity, prevention of pollution, sustainable functioning of ecological systems, reproduction and rational use of natural resources. Anabi et al. (2018) asserts that environmental factors play a vital role in the support and development of children with special educational needs, which include the physical, social and behavioural characteristics surrounding the child, as defined by the International Classification of Functioning, Health and Disability (ICF).

2.9.1 School Accessibility and Physical Environment

Effective inclusive schools are schools that are easily accessible and have a conducive school environment to cater for the needs of special educational needs children. Therefore, the accessibility and environment of inclusive schools plays a significant role in the promotion of the academic success of these children. It is for this reason that school buildings and classroom layout should be structured to accommodate students with disabilities. The environment must be accessible to all children, including those with physical disabilities, especially with the availability of suitable infrastructural conditions, such as adapted buildings, accessible ramps, elevators, wide doorways,

among others, which allow children with special education needs (SEN) to move freely within educational institutions (Turlubekova et al., 2023)

Research has shown that an accessible physical school environment, coupled with a favourable infrastructure, is likely to advance educational access to SEN children and consequently increase their academic success (Polat, 2019). This can be also be seen in a study conducted by Schoger (2020) where he put together the general and able students as well as the special educational needs children in a special education learning environment. The results of the study were positive in the sense that it led to the enhancement of the academic success of the special educational needs children. This was due to the fact that they were able to work in an environment in which they were comfortable. These also led to them developing friendships with their peers, and having a sense of respect, which increased their self-esteem, and their cognitive learning significantly (Schoger, 2020).

To allow for students with physical and mobility disability and other sensory disability especially to access school and their classrooms as well as other facilities, schools should avoid architectural elements such as flight of stairs to rooms and slippery outdoor surfaces, as well as heavy doors and narrow doorways (Winter and O'Raw 2010). The presence of these elements constitutes physical barriers to inclusive education (Ackah-Jnr & Danso, 2018). Lewis and Doorlag (2006) in support of this assertion stated that eliminating architectural barriers such as small doorways and poor room spacing and layout, will ensure that children with disability are safe and can move freely in the school, which in turn, allows for more effective use of facilities. Aside the facilities mentioned above, Ackah-Jnr and Danso (2018) stated that bathroom facilities such as toilets and urinals that are adapted or specially designed, are important for inclusive education schools.

Allen and Cowdery (2015) add that it is essential to reduce unwanted environmental sounds or acoustics as these external and internal (chronic) noise impact classroom climate and comfort of children as it distracts students from their work or interfere with their ability to hear others speaking (Higgins et al. 2005).

2.9.2 Suitable School Building and Classroom Arrangement

Effective educators consider the classroom environment and make necessary adaptations in order to make sure that it facilitates academic and social needs of students (Friend and Bursuck, 2016). Since one of the primary preconditions for inclusive education is a suitable classroom arrangement that contributes to learning and development of all students (including those with special educational needs), it is important to form a universal design so that all students have physical access to all materials and activities (Farid, 2014). One of the basic components of a classroom that can be changed is the arrangement of the students' desks and chairs. This issue has been quite well researched and debated by educationalists. The arrangement of desk in a circular manner in a classroom is seen as a good classroom sitting arrangement that is likely going to promote the learning of children in the classroom. This will more likely lead to an improvement in the academic success of SEN children. This approach to the classroom sitting arrangement works better with smaller class sizes (Gaurdino & Fullerton, 2013). More so, numerous studies have shown that a student sitting in the front row of the class will invariably have a higher chance of outperforming their colleagues seated in other areas of the class (Totusek & Staton-Spicer, 2013). There is also the belief that the front row of a classroom offers fewer distractions, which allows the student to be more focused on the teacher. SEN learners could therefore be seated in the front row as far as their condition permits in order to allow them to effectively take part in lesson activities.

The Centre for Universal Design (1998) defines universal design “as the design of products and environments to be usable by all people without the need for adaptation or specialized design” (p.6). Universal design has seven principles that are used as reference points when describing how buildings, and in this case classrooms, are to be designed in order for it to be considered a disability friendly infrastructure. The first principle talks about equitable use of a building such that every individual, no matter the person’s abilities, is able to use it. The second principle talks about the building being flexible to use by adapting to individual preferences and abilities. The third principle talks about the design being simple and intuitive to use, such that any user can easily understand its usage, no matter the person’s experience and knowledge. The fourth principle involves building designs that enables the user to understand its usage no matter the user’s physical abilities. The fifth principle entails the design being tolerant to error by minimizing hazards and the adverse effects of accidental or unintended actions. The sixth principle of universal design talks about the fact that the design should be such that people would not have to exert too much energy to use it in an efficient and comfortable manner. The size and space for approach and use is the seventh principle. It involves the provision of appropriate size and space for approach, reach, manipulation, and use regardless of the user’s body size, posture, or mobility (Center for Universal Design, 1998). Therefore, if a classroom is able to meet these principles as proposed by the Centre for Universal Design, then that classroom and building qualifies to be a disability friendly classroom.

Dilnesaw (2017) stated that the physical environment in a classroom can promote active-learning. The physical environment (classroom layout and appearance which entails how posters and picture materials are displayed; the sitting positioning of children in class; and children’s access to learning materials) contribute a lot to promote

the active-learning method. According to Dilnesaw, there should be adequate well-maintained and furnished classrooms to effectively conduct teaching-learning process. Therefore, the place where the child is positioned in the class; the way the classroom materials are arranged; the effects of the sound environment; and the condition of a building play a vital role in enhancing or retarding the teaching-learning process of visually impaired children especially.

As part of the suitable school building and class arrangement, it is also important for inclusive education schools to also consider class ventilation (Higgins et al. 2005, Lewis and Doorlag 2006) and lighting (Cheryan et al. 2014). Proper ventilation prevents stuffiness in classrooms, enhancing the general comfort and well-being of children and teachers (Higgins et al. 2005, Lewis and Doorlag 2006). Adequate lighting, that is, natural and artificial illumination has been identified as an important element of inclusive education schools and classrooms, which makes teachers and students to feel comfortable during teaching and learning (Cheryan et al. 2014). Tanner (2008) conducted a study that investigated the effects of school design on student outcomes and it was revealed that poorly lit classrooms cause students to feel a jet lag. It was also found out that students exposed to more natural light in their classrooms performed better than students exposed to less natural light. Inclusive classes that are well-light and free from glare are important for all learners, especially students with visual impairments since they may require improved lighting (Ackah-Jnr & Danso, 2018).

Tanner (2008) again hinted that room decoration is important because it can affect the attractiveness of classrooms. Effective furnishings, pictures, posters and displays of education materials and equipment therefore can enhance the visual appeal of inclusive classrooms and the engagement of all children (Ackah-Jnr & Danso, 2018).

2.10 Support Services that Promote the Academic Success of SEN Learners in Early Childhood Education Classrooms

The availability of educational support services and resources in mainstream schools is seen as one of the school factors that tend to promote the academic success of special educational needs children. In this instance, a resource is a source of aid or support that may be drawn upon when the need arises in order to execute a task (Tamakloe, Amedahe & Atta, 2005). Similarly, a learning resource is that which the student or learner himself/herself prepares and/or uses to make learning easier than it would have been if he had not prepared and used it. They are also referred to as instructional aids or devices (Nacino-Brown, Oke and Brown, 2016). According to Nacino-Brown, Oke and Brown (2016), these aids and devices make learning clearer and more interesting and include: visual materials such as three-dimensional materials like objects; printed materials like textbooks; and graphics in the form of posters, maps and diagrams. All these, in diverse ways, help make teaching and learning more efficient and beneficial for children with special educational needs.

The importance of resources in teaching and learning can therefore not be overemphasized. These resources, together with support, play a crucial role in effective teaching and learning. When applied to inclusion, the need for these resources and support become even more determinative. Teachers in inclusive settings need to augment their teaching with the use of such resources. It is only then that their teaching can be meaningful and beneficial to children with special education needs. The lack of, or inadequate, provision of these therefore spells disaster for children with disabilities and the practice of inclusion.

Research has shown that the continuous absence of disabled children in mainstream schools is as a result of the bad perceptions and attitudes of teachers; and the lack of

teaching and learning aids and support services for the proper inclusion of children with special educational need (Agbenyega et al., 2015). This predicament clearly points to the perceptions certain stakeholders of education have towards full inclusion in Ghanaian basic schools. Negative or positive vibes towards inclusive education may be dependent on what educators see to be lacking in the regular school system (Agbenyega et al., 2015). This underscores the importance of teacher support, and provision and availability of resources for inclusion to be successful.

Cele (2023) posits that a variety of resources such as teaching materials, special equipment (such as braille, hearing aids, mobility devices like wheelchairs and white canes, magnifying screens), additional personnel, new teaching approaches, curriculum, or other learners and other resources, especially those that go beyond what the teacher can give are important support services that are needed to support SEN learners in schools. She goes ahead to list stakeholder support services such as teachers, parents, communities, school districts, curriculum developers, training institutions, and education entrepreneurs as just a few of the stakeholders that are essential to the success of the inclusion process in all areas.

One other type of support services for SEN learners is the specialized services and therapeutic support which must be implemented in a coordinated fashion and integrated with general early care and education services. Counselling service is a very important support service under this kind of support service. According to UNESCO (2012) counselling includes assisting pupils to overcome their emotional problems and change their maladjusted behaviours. It also helps pupils fulfil their potentials and facilitates their overall adjustment, both in school and society (Ocansey & Gyimah, 2016). Counselling further enables pupils to make optimum use of available opportunities for the successful achievement of their life goals (Lunenborg, 2010). Essentially, the

special characteristics of SEN learners often create difficulties in respect of their socialization, reading and writing, comprehension, concentration and physical ability (Ocansey & Gyimah, 2016) as well as bullying (Hoover & Stenhjem, 2003). Counselling services will help the learners overcome these challenges and get motivated to in their academic pursuits.

Funding policies support is also an important support service. This encompasses the pooling of resources and the use of incentives to increase access to high quality inclusive opportunities. Quality frameworks (e.g., program quality standards, early learning standards and guidelines, and professional competencies and standards) should reflect and guide inclusive practices to ensure that all early childhood practitioners and programs are prepared to address the needs and priorities of infants and young children with disabilities and their families.

2.11 Classroom Teaching Pedagogy Factors and Academic Success

The literature suggests that pedagogy is a critical factor in the academic success of children with special educational needs (Porter et al., 2011; Schoeman, 2013; Lundeen and Lundeen 2015); and that teachers who receive training in innovative teaching techniques are more accommodating and tolerant towards special educational needs children in inclusive classrooms (Porter et al., 2016). More so, the recognition of inequalities among certain group of learners and putting in place varying teaching techniques to create an enabling environment for all learners in lesson delivery are some of the key qualities and roles of tutors in special schools (Schoeman, 2013).

Further to this, Lundeen and Lundeen (2015), found collaborative teaching, which infuses special education into the regular syllabus, enhanced the academic performance of special educational needs children. Under this approach, both the special and regular teachers choose the teaching materials, learning strategies, study skills, curriculum

formats and evaluation methods. By comparing the academic performance before the introduction of the collaborative teaching delivery to those after the implementation, Lundeen and Lundeen (2015), observed that all students in the programme performed equivalently although there were substantial variables in reading comprehension grades of students with special needs.

The level of achievements of special educational needs children in inclusive schools, to a large extent, hinges on several factors - one of which is teaching and learning methods adopted by the teacher (Farid, 2014). Teaching strategy has appeared to improve the academic success across the levels of education for students both with and without special educational needs (Fisher et al., 1995). Other techniques that have boosted educational attainments of SEN children are the usage of adapted teaching and learning materials to complement the usage of textbooks in teaching and learning processes in classrooms (Gersten *et al.*, 2017); and the use of an intuitive approach to the study of science.

Empirically, Meijer (2015) examines the factors affecting effective classroom practices in inclusive settings for 7 European countries. Results from the study indicate that participatory teaching and learning, shared problem-solving and the grouping of both SEN and non-SEN children were seen to enhance the learning outcomes of special educational needs children and inclusive education as a whole. For instance, in the case of The Netherlands, Meijer (2015) found peer-tutoring to be one of the effective methods of teaching which is seen to develop both the cognitive and emotional beings of learners. However, further results identify behaviour, social and/or emotional problems as most important limitations in the inclusive setting hence retarding the academic progress of children with special needs. McDonnell *et al.*, (2017), assess a programme which uses class-wide peer tutoring while relying on the collaboration of both special

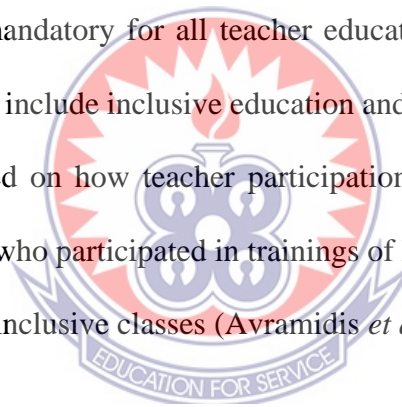
and general teachers. They used children with disability as their main sample during their baseline study by putting them in a class where learning was taking place, with tutors asking questions to pupils while the general teachers provided social reinforcement. They further adopted appropriate teaching methods which included class-wide peer tutoring and multi-component curriculum. Results of the study indicated an improvement in the academic performance of special educational needs students.

The Education for All initiative influenced classroom teachers to adopt a more inclusive education pedagogic suitable for both SEN and non-SEN children. The attitude of the class teacher towards students has a major impact on the success of all students, particularly those with special needs (Farid, 2014). Classroom teachers must be able to exhibit different pedagogic skills such as acting, demonstrating, experimenting, and other innovative methods in providing equal education opportunities for all students, including those with SEN.

European Agency for Development in Special Needs Education (2010) argue that the quality of the teacher contributes more to learner achievement than any other factor such as class size, class composition, or background. European Agency for Development in Special Needs Education (2010) attests that “it is the knowledge, beliefs and values of the teacher that create an effective learning environment for all students, making the teacher a critical influence in education for inclusion and the development of the inclusive school” (p. 7). Research has also shown that there is a call for teachers to be equipped with the needed subject knowledge, attitudes and teaching methods skills to facilitate the learning process of young people to achieve educational development through the application of different teaching methods. It further argues that, in order to promote the learning outcomes of children, it will be prudent to

incorporate best classroom practices in teacher education training (European Commission Communication Improving the Quality of Teacher Education, 2007, as cited in Farid, 2014).

The literature also suggests that the level at which primary school teachers are trained, and the incorporation of inclusive education courses for all teacher education trainings, tends to equip teachers with the necessary technical knowledge and skills which make such teachers competent enough to handle inclusive classes (Franzkowiak, et al, 2019; Avramidis *et al.*, 2019). Following a survey of primary school teacher training Franzkowiak et al (2019), as cited in European Agency for Development in Special Needs Education (2010, p.27) recommended that “introductory courses on inclusive education should be mandatory for all teacher education students, and bachelor and masters courses should include inclusive education and combined degree programmes. Also, studies conducted on how teacher participation in special education trainings indicates that teachers who participated in trainings of high quality are seen to be more competent in teaching inclusive classes (Avramidis *et al.*, 2019).



2.12 SEN Children’s Behaviour and Attitudes and Academic Success

One aspect of the children’s empowerment component of the strategies intervention model talks about how non-SEN children in the same class with SEN children can promote the academic success of SEN children. This implies that children with special needs can not only learn desired behaviours from their peers but can also learn academically within the inclusive classrooms. It is often the view that able children can be the best teachers for their colleague special needs children. It adopts the cooperative learning approach, which involves social interaction amongst the children (Slavin, 2018). By using social interaction and active experiences in learning, children will be able to pass on knowledge to one another. These methods also promote social

communication skills that children need in their adult life. When children work together, they can be paired with slower learners from time to time. When children learn together and are able to engage in discussions on different ideas there is no limit to what types of knowledge the students can learn from each another. Peer tutoring and learning is seen as one of the best approaches to inculcating effective listening and communication skills in children with special educational needs (Harding, 2017).

More so, Gutman and Vorhaus (2012) examined the impact of pupil behaviour and wellbeing on educational outcomes of children. Results from their study show that children with relatively higher levels of emotional, behavioural, social and school wellbeing, on average, perform better in schools and are more engaged in school activities.

2.13 Parents and Family Involvement and Academic Success

Parental involvement is one of the key areas of importance when it comes to the promotion of the academic success of SEN children. It has long been seen as a positive strategy toward the implementation and promotion of inclusive education worldwide. This section of the literature review looks at how parental involvements in the education of SEN children influence their academic success in school. This review is done in relation to how the level of education of parents influences the educational success of their SEN children; how parents' attitudes towards SEN children impact on the academic success; and how the socio-economic status of families, especially parents, influence the academic success of SEN children.

While recognizing the importance of laws and policy documents, the role of the parents in ensuring the success of inclusive education cannot be over emphasized. Acknowledging the crucial role of parents is a key factor in the early identification of the impediments to inclusive education. Parents are usually seen as advocates since

their observation and first-hand information provide the nature of the barriers a learner with special educational needs experiences (Porter et al., 2016; Schoeman, 2013). Thus, parents not being in the position to provide vital information about their children's state of being could potentially affect the efforts towards a successful inclusive education. According to Zedan (2018), "Parental involvement implies the dedication of resources by parents for the benefit of the child, and the total number of activities in which the parents can participate, so as to contribute either directly or indirectly towards the education of their children". Research has also suggested that meaningful parental involvement is highly recognized as one of the most important approaches for successful inclusive practice. Furthermore, research has indicated that parental/family involvement in the educational development of their SEN children has contributed to improving their educational outcomes in relation to learning and school success (Drake, 2019).

Research studies conducted in recent times has revealed that parental involvement of children with special educational needs in both in school and at home tends to increase the learning outcomes of such children. Studies have highlighted the fact that children, especially special needs children, are likely to achieve much better academic results and increase the time spent in learning when there is a good working relationship between school authorities and parents (Jeynes, 2015). Other empirical studies done in the United States indicates the extent of impact on the academic success of SEN children resulting from parental involvement on learning success was 0.51 for every school and 0.70 to 0.74 for elementary schools located in urban areas (Hattie, 2016; Jeynes, 2015). Further to this, Hattie (2016) indicated that the size of interventions in education was recorded at 0.4. This gives the impression that data on parents"

involvement above the 0.4 percentage would definitely influence the increase in children's academic performance.

a. Level of Education of Parents

Studies have shown that parents who are not highly educated are unlikely to see the need to take a keen interest in the learning activities of their children because of their low self-esteem and confidence in the management of the schools where their SEN children are attending. Leyser and Kirk (2014) indicated that parents with higher education show a more constructive attitude to inclusive practice than those with lower levels of education. Epstein (2010) also reported that educated parents who take a keen interest in the school activities of their SEN children are bound to impact positively on their children's interest in schooling and learning, which will then be translated into an improvement in their academic performance.

b. Parents Attitudes towards SEN Children and Inclusive Education

Parents' attitude towards SEN children and inclusive education in general has influenced the academic success of SEN children in mainstream schools. The literature reviewed revealed that parents who have a positive attitude towards the inclusion of SEN children in mainstream schools tend to promote the academic success of SEN children. A great number of reports reviewed showed how parents seem to have a positive feeling towards inclusion. For example, some research studies revealed that parents of SEN children reported positively and affirmed that the idea of inclusion aids their offspring to understand who they are, and at the same time, encourages them to accept differences in others (Gallagher *et al.*, 2017). It is also reported by some research studies (Heyam Lutfi El Zein, 2018) that in most cases it is the parents and families of these SEN children who call on schools and governments to include children with special educational needs and not isolate them in special schools. This is reported by

Heyam Lutfi El Zein (2018), that “It was the parents of the children with special needs who first knocked at the doors of schools and demanded a proper education for their children”.

c. Socio-Economic Status of Families

There is evidence through several research studies (Bornstein, Hahn, Suwalsky, and Haynes, 2015) which show the relationship between socio economic status of parents and their levels of involvement in the education of their SEN children in mainstream schools. Socioeconomic status generally “refers to a measure of an individual or family’s relative economic and social ranking and can be constructed based on father’s education level, mother’s education level, father’s occupation, mother’s occupation, and family income” (Bornstein *et al.*, 2015 as cited in Green *et al.*, 2017). There have been mixed reactions and results concerning how the socioeconomic status of a family or parents of SEN children influence the academic success of their wards. While some researchers are of the view that socioeconomic status and parents’ involvement is positively related and therefore promotes the academic success of SEN children in schools (Lareau, 2002); other researchers do not see how the socioeconomic status of parents influence positively their involvement in the school activities of their SEN children or can impact on their academic success, (Bornstein *et al.*, 2015; Delgado-Gaitan, 2018). More so, according to Afolabi, *et al.* (2013), there is this common assertion, which creates a link between the socioeconomic status and parental involvement as mutually connected concepts such that the more stable socioeconomic status of a family, the more likely they are bound to be involved in the education of their SEN children. The reverse is also true (Davis-Kean and Eccles, 2015; Diamond and Gomez, 2014).

2.14 Empirical Review

This section provides a review of the findings of various studies that have been conducted on SEN learners' education in mainstream or inclusive schools.

Gomda, Sulemana and Zakaria (2022) conducted a study that examined the inclusion of Persons with Disabilities (PWDs) in formal education in Ghana. The study revealed that interventions targeting inclusive education in Ghana are disjointed and sporadic. It was also discovered that the developmental plans of successive administrations have ignored the needs of vulnerable children, particularly children with impairments. The study therefore recommended that educational stakeholders consider including the needs of disabled children into standard educational planning and provisioning.

Danso (2009) also conducted a study aimed at evaluating inclusive education practice in Ghana. The study considered how teachers were equipped academically and professionally to handle children with and without disabilities in inclusive schools. It also examined the curriculum used in these schools, the physical environment as well as how teachers perceived inclusive education. One hundred and thirty-four (134) teachers in twenty-four (24) inclusive pilot schools were selected for the study. The study revealed that 94.0% of the teachers were adequately prepared for inclusive schools and most teachers held positive perception about inclusive education. The curriculum in use for inclusive schools is flexible which allows for adaptation. However, the kind of physical environment meant for inclusive schools was not suitable. The study then made recommendations such as the need for Ghana Education Service to collaborate with the Initial Teacher Education Colleges to offer opportunities for fieldwork or practicum to enrich teacher trainees' knowledge in handling pupils with disabilities in inclusive schools.

Meijer (2015) examined the factors affecting effective classroom practices in inclusive settings for 7 European countries. Results from the study indicate that participatory teaching and learning, shared problem-solving and the grouping of both SEN and non-SEN children were seen to enhance the learning outcomes of special educational needs children and inclusive education as a whole. For instance, in the case The Netherlands, the study found peer-tutoring to be one of the effective methods of teaching which is seen to develop both the cognitive and emotional beings of learners. However, further results identify behaviour, social and/or emotional problems as most important limitations in the inclusive setting hence retarding the academic progress of children with special needs.

In a study conducted by Schoger (2006) where he put together the general and able students as well as the special educational needs children in a special education learning environment. The results of the study were positive in the sense that it led to the enhancement of the academic success of the special educational needs children. This was due to the fact that they were able to work in an environment in which they were comfortable. These also led to them developing friendships with their peers, and having a sense of respect, which increased their self-esteem, and their cognitive learning significantly (Schoger, 2006).

2.10 Summary of Chapter

This chapter reviewed theoretical and empirical literature related to the study. The theories that underpinned this study as discussed above were the Theory of Behaviourism and the Theory of Cognitivism. The literature review also touched on issues such as the identification of SEN learners in schools, factors that promoted the academic success of SEN learners looking at the various environmental issues as well as support services available, teaching pedagogies that supported SEN learners'

academic success, SEN learners' behaviour and attitudes and academic success, parents and family involvement and academic success and international policies and conventions. The next chapter looks at the methodology that was used for this study.



CHAPTER THREE

METHODOLOGY

3.0. Overview

This chapter presents the methodological considerations for the study; specifically, it discusses the research paradigm, approach and research design employed for the study. It also covers the population, study area, sample size, sampling technique, and research instrumentation. The procedure for data collection, method of data analysis, and ethical considerations were also considered in this chapter.

3.1 Research Paradigm

The selection of a research paradigm plays a pivotal role in shaping the structure, methodology, and overall approach of a study. In this context, the interpretivist paradigm stands out as a pertinent and suitable framework for examining the academic success of Special Education Needs (SEN) Learners in early childhood education settings. The interpretivist paradigm underscores the importance of comprehending and interpreting human actions and experiences within their social and cultural milieus, rendering it well-suited for exploring the intricacies of crisis communication and social media usage in specific cultural contexts like Ghana.

This study validates the adoption of the interpretivist paradigm by drawing upon relevant literature and empirical research. To grasp why the interpretivist paradigm is pertinent, it is essential to recognize the factors contributing to the academic success of special needs children. As indicated by Park et al. (2019), cultural variations significantly influence how Early Childhood Education (ECE) teachers and school authorities endeavor to accommodate special needs children, underscoring the significance of fostering inclusive educational practices within distinct cultural settings.

The interpretivist paradigm is founded on the notion that social phenomena are socially constructed and shaped by human interpretation. In the context of special needs children, comprehending how governmental entities and stakeholders address factors promoting their academic success is imperative. An interpretivist approach enables researchers to explore stakeholders' perceptions, emotions, and attitudes towards these factors, thereby offering a comprehensive understanding of the communication dynamics.

Moreover, the interpretivist paradigm is well-suited for investigating how cultural aspects impact decision-making and communication within inclusive school environments. By adopting the interpretivist paradigm, this study recognizes the importance of contextualizing crisis communication practices within the Ghanaian cultural and social landscape. Interpretivist research often employs qualitative methods like interviews, content analysis, and discourse analysis, which are highly conducive to exploring human experiences and understanding the complexities surrounding Special Needs Children.

Qualitative research facilitates an in-depth exploration of stakeholders' thoughts, perceptions, and emotions regarding the promotion of academic success among special needs children, as exemplified by Forlin's (2016) study on the full inclusion of special needs children in mainstream schools. The interpretivist paradigm is well-justified for comprehending ways to overcome the exclusion of persons with disabilities from regular schools within their social and cultural contexts.

Through qualitative methods and empirical research, this paradigm enables a comprehensive examination of the academic success of special education needs learners in early childhood education classrooms within the Wa Municipality, considering the unique cultural and organizational factors prevalent in the Ghanaian

context. By adopting the interpretivist lens, this study aims to provide valuable insights into identifying specific SEN learners or cases, determining the supportive environment and services, and evaluating teaching pedagogies that foster the academic success of SEN learners.

3.2 Research Approach

The research approach employed in this study is qualitative, as described by Creswell (2014) as a means to investigate and understand the significance attributed to a social or human issue by specific individuals or groups. The adoption of this approach was influenced by the interpretive paradigm that underlies qualitative research, asserting that "reality is socially constructed" (Mertens, 2005). Walliman (2015) noted that qualitative research typically addresses subjective issues that cannot be quantified on an interval or ratio level. Hancock, Ockleford, and Windridge (2007) emphasized that qualitative research delves into the social causes of events and seeks to understand how social phenomena have evolved over time. Qualitative research also encompasses discussions on meanings, concepts, definitions, traits, metaphors, symbols, and descriptions of phenomena (Kandel, 2020).

Denzin and Lincoln (2011) advocated for a naturalistic and interpretive approach in qualitative research, wherein researchers aim to understand phenomena in their natural context and attribute significance to them based on participants' perspectives. The decision to utilize a qualitative research approach was further supported by Tsadidey's (2018) argument that qualitative research seeks to comprehend a research problem or topic from the perspectives of the local population involved, aligning with the objectives of this study.

Given the aim of investigating the academic success of special education needs learners in Early Childhood Education classrooms within the Wa Municipality and identifying

specific SEN learners or cases, determining the environment and support services, as well as evaluating teaching pedagogies in qualitative terms, the qualitative research approach was deemed appropriate. This approach avoids relying on official figures that may not be readily available.

Tsadidey (2018) highlighted those qualitative methods often foster a less formal relationship between the researcher and participants compared to quantitative research, allowing participants to provide more elaborate and detailed responses. Moreover, qualitative research has the capability to offer complex textual descriptions of how individuals experience a particular research issue (Pandey & Pandey, 2015). Given the qualitative research's focus on providing in-depth exploration of phenomena under investigation, studies of this nature typically involve small sample sizes to facilitate manageable data collection and analysis (Silverman, 2005).

3.3 Research Design

The study utilized an illustrative case study design, which according to Yin (2012), is a form of inquiry widely applied across various domains, particularly in assessment studies, where the researcher delves deeply into a case—typically a program, event, activity, process, or one or more entities. Yin (2012) distinguishes between different types of case study approaches, including single case studies and multiple case studies. Creswell (2014) describes a case study as a qualitative design that examines events, activities, processes, or individuals.

In terms of study design, an illustrative case study is a descriptive study that presents one or more instances of an event to elucidate the situation (Epler, 2019). This type of case study is employed to "describe a situation or a phenomenon, what is happening with it, and why it is happening" (p. 8). This approach meticulously delineates every aspect of the case, including location, involved individuals, their objectives, and

actions, in a manner accessible to the target audience (Hayes, et. al., 2015). Illustrative case studies delve deeply into phenomena and provide rich contextual details, articulating every facet of the case in an understandable language.

The aim of an illustrative case study is to vividly portray the study, as Hayes et al. (2015) point out. However, if these case studies are not crafted in a manner that ensures reader comprehension, they risk losing audience interest (Hayes et al., 2015). It may be challenging to maintain audience engagement if too many cases containing extensive in-depth information are presented simultaneously (Hayes et al., 2015).

In this study, the researcher employed an illustrative case study to offer descriptive insights into how Early Childhood Education Teachers facilitate the academic success of special education needs learners in the Early Childhood Education classrooms within the Wa Municipality. Through observation, the researcher determined how the environment, support services, and teaching pedagogies contribute to the academic success of SEN learners. By utilizing this approach, the researcher aimed to make unfamiliar cases familiar and communicate the challenges faced by ECE teachers in implementing inclusive practices within the Wa Municipality in straightforward language (Epler, 2019). The researcher used clear language and avoided oversimplifying the verbiage to ensure that the rich description was not lost (Epler, 2019). Consequently, only a small number of cases, typically one or two at a time, were examined (Davey, 1991).

Yin (2003) argues that case study research is particularly valuable when the phenomenon under investigation is broad and complex, best studied within its contextual framework. Moreover, it allows for interaction with participants within their socio-cultural context to comprehend the phenomenon being studied. However, it's important to note that illustrative case studies are not designed to cover a large number

of cases or to generalize results because they are based on only one or two cases, thus limiting the accuracy of generalization (Hayes, et. al., 2015). Despite this limitation, the illustrative case study was chosen to fulfill the study's objectives.

3.4 Study Area

The Wa Municipal is one of the eleven districts in Upper West Region, Ghana. Originally created as an ordinary district assembly in 1988 when it was known as Wa District, until two parts of the district were later split off by a decree of president John Agyekum Kufuor on July 2004 to create Wa East District (from the east) and Wa West District (from the west) respectively; thus, the remaining part was later elevated to municipal district assembly status on the same year to become Wa Municipal. The municipality is located in the southern part of Upper West Region and has Wa as its capital town, which also serves as the regional capital of the Upper West Region.

According to the Ghana Statistical Service 2010 Population and Housing Census Report, about 2.6 percent out the total population of Wa Municipality (107,214) are with disability. It is observed that the number of persons with disabilities is proportionally distributed across the sexes. The population with disability is classified into sight, hearing, speech, physical, intellect, emotion and other disabilities. The Report revealed that, 22.8 percent of the population with disability are emotionally challenges and this constitutes the largest. Disability in speech is the lowest proportion (7.5%) of persons with disability. The economic activity status among the population with disability 15 years and older classified by sex is 6.4 percent. It is observed that 47.8 percent of the employed, 3.2 percent are unemployed and economically not active 49.0 percent population in the Wa Municipality are with disability. Among the male population, it is revealed that those employed (50.0%), unemployed (3.9%) and those economically not active (46.1%). With regards to the female population with

disabilities those employed accounts for (45.7%), unemployed (2.5%) and economically not active (51.8%).

The population of 3 years and older who are with disability by level of education (GSS, 2010). From the report, 1,118 of population which represents 41.9 percent aged 3 years and older with disability in Wa Municipality had never attended school, those with pre-school level accounts for 5.9 percent, basic school represents 36.1 percent and those in senior high/Higher accounts for 16.1 percent. On the basis of sex segregation reveals that male population with disability who have never attended school is 35.7 percent, those with pre-school education accounts for 6.1 percent, basic education (38.4%) and those with senior high/higher represents 19.8 percent. Female population with disability shows that persons who have never attended school is 47.9 percent, pre-school (5.7%), basic education accounts for 36.5 percent and for persons with senior high/ higher represents 12.5 percent.

3.5 Population

The target population used in this study were all the teachers and headteachers in the Wa Municipality. According to the Wa Municipal Education Directorate Report 2023, the total number of teachers in the municipality stood at Four (1,104). The accessible population was all Early Childhood Education Teachers in the Wa Municipality. Again, the total number of Early Childhood Teachers according to the Wa Municipal Education Directorate 2023 Report was One Thousand and Two (1,002).

3.6 Sample and Sampling Technique

The sample size for this study was fifteen (15). The sample population of the study comprised seven (7) teachers, seven (7) headteachers all from seven (7) different Basic

schools, and one (1) SISO. The teachers, headteacher and SISO were purposively chosen to grant interview to aid the study since they were obviously needed for the study.

According to Agyedu, Donkor and Obeng (2011), purposive sampling is a procedure in which a researcher seeks to learn or understand the central phenomenon. There were 15 participants from whom qualitative insight was sought to produce the required information. The criteria for the selection of teachers in the schools was based on longest years of teaching experience and higher academic qualification. Based on this criteria, 7 teachers who had been in service for not less than 7 years were selected from each school, hence, 7 teachers were purposively selected.

3.7 Data Collection Instruments

The researcher used a semi-structured interview schedule/guide and an observational checklist for this study. Bryman (2008) observes that interviews give the opportunity to meet the subjects of research which can provide detailed information set out to collect and some fascinating contextual or other information (though not all of which you can use).

Focusing on semi-structured interview, O'Leary, 2005 cited in Kusi, (2012), argued that semi-structured interviews are neither fully fixed nor free and are perhaps best seen as flexible. Interviews generally start with some defined questioning plan, but pursue a more conversational style of interview that may see questions answered in an order of natural to flow of the conversation. They may also start with a few defined questions but be ready to pursue any interesting tangents that may develop. The purpose of the instrument is to assess one or more variables of interest, such as attitudes, beliefs, behaviours, or cognitive abilities (Gliner, Morgan, & Harmon, 2017). For the purpose

of this study, a semi-structured interview and an Observation Checklist were employed to gather data.

3.7.1 Semi-Structured Interview Schedule

Semi-structured interviews provide a high degree of flexibility, allowing interviewees to freely express their views, emotions, and experiences, while granting interviewers the liberty to deviate from the scheduled questions to seek clarifications using probes during the interview process (Kusi, 2012). Such interviews are particularly beneficial for gaining insight into participants' backgrounds (McNamara, 2006), enabling interviewers to obtain in-depth details about the subject and facilitating human contact, when necessary, as well as opportunities to follow up on insightful comments (Mahoney & Goertz, 2006).

The questions were organized into five sections aligned with the research objectives: Section 'A' focused on gathering personal data of the respondents, such as class, educational qualifications, and teaching experience length. Section 'B' aimed to identify the types of SEN learners in Early Childhood Education classrooms in the Wa Municipality. Sections 'C' through 'E' sought information on how the school environment, support services, and ECE teachers' classroom pedagogies promote the academic success of SEN learners in the same setting.

According to Turner III and Hagstrom-Schmidt (2022), open-endedness in interviews enables participants to provide as much specific information as they desire, while also allowing researchers to pose challenging questions as follow-ups, during the data collection process. Participants were encouraged to fully express themselves before being prompted with follow-up questions to elucidate their points further.

Despite the challenge of identifying common themes or codes from open-ended interview transcripts due to the expansive nature of participants' responses, such

interviews help mitigate researcher biases, especially in studies with numerous participants, as noted by Turner III and Hagstrom-Schmidt (2022). This study's researcher biases were minimized by conducting interviews at two distinct sites.

In-depth interviews, characterized by extensive probing and open-ended questions, enable researchers to gather rich and detailed material for analysis, as highlighted by Mahoney and Goertz (2006). The researcher in this study utilized this interview style to delve deeper into responses that were unclear and to explore various perspectives on the given answers. Additionally, the instrument facilitated seeking clarification through probing and expanding on interviewees' responses to understand their feelings and experiences (Kusi, 2012).

3.7.2 Observational Checklist

According to Kawulich (2015), observation entails a methodical depiction of the occurrences, behaviors, and artifacts within a social setting, requiring carefulness and attentive listening.

In this study, an observational checklist was utilized to aid the researcher in identifying the types of SEN learners present in Early Childhood Education classrooms in the Wa Municipality. Additionally, it facilitated the observation of the characteristics of the school environment and the available support services that contribute to the academic success of SEN learners in these classrooms. Each item on the checklist featured a checkbox to document the observed data, with the option to mark either YES or NO indicating the presence or absence of a specific code. This instrument was self-designed and selected due to its ability to mitigate some of the inherent drawbacks of interviews, such as the potential for respondents to provide biased information Mugenda & Mugenda, (1999), cited in Tarimo, (2013), or to inaccurately recall events and aspects

of interest to the researcher. The information gathered through observation complemented the data collected via semi-structured interviews.

3.7.3 Trustworthiness

Ensuring trustworthiness is essential for any research endeavor, as it upholds the credibility, rigor, and reliability of the findings. When conducting a systematic investigation into human settings, it is imperative to ascertain the truthfulness of the study. Therefore, the study must be evaluated against specific criteria to ensure that the findings and interpretations accurately reflect the participants' experiences or reality and are reliable (De Vos, 2002). Guba and Lincoln (2000) elucidated that trustworthiness in qualitative studies is gauged by four indicators closely associated with validity and reliability in quantitative research. Qualitative research is considered trustworthy when it faithfully represents the study participants' experiences (Speziale & Carpenter, 2011). The four criteria proposed by Guba and Lincoln (2000) for assessing the trustworthiness of qualitative data are credibility, dependability, transferability, and confirmability, and these were ensured through the following procedures.

3.7.4 Credibility

Credibility, as defined by Lincoln and Guba (1985) and Mills and Wiebe (2010), refers to the extent to which the research accurately portrays the true meanings of the research participants, also known as "truth value." In this study, credibility was pursued through various means. The researcher committed to prolong engagement, spending six weeks in the field to collect data. During this time, the researcher conducted interviews with participants while also observing their verbal and non-verbal responses, which provided valuable insights for further probing and questioning. Additionally, an observational checklist was employed to gather supplementary data alongside the semi-structured

interviews. Following data collection, transcriptions were meticulously transferred from recording devices to a secure laptop, with access restricted to the researcher through password protection. The data was subsequently analyzed thematically using verbatim quotations from the participants, ensuring the integrity and accuracy of the findings.

3.7.5 Dependability

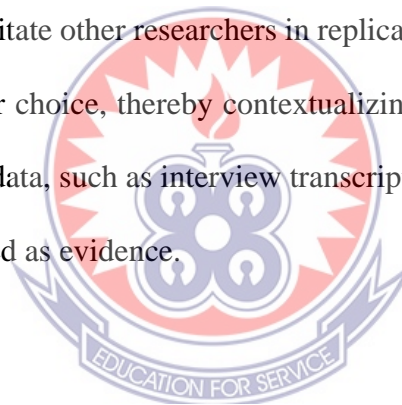
Dependability pertains to the consistency and reliability of research findings, as well as the extent to which research procedures are documented, allowing external parties to follow, review, and critique the research process (Sandelowski, 1986; Polit et al., 2006; Streubert, 2007). In this study, dependability was ensured through careful consideration was given to the decision-making process throughout the inquiry, with a focus on reviewing researcher bias to avoid premature conclusions and prevent the potential for unreliable data due to respondent boredom during extended discussion sessions. Additionally, insights from existing literature aided in formulating questions designed to elicit relevant responses addressing the research questions guiding the study. Moreover, both the interview guide and checklist facilitated the development of categories and themes used in the findings, allowing for the identification of both positive and negative responses. A systematic approach was adopted for data collection, analysis, and interpretation, primarily based on the generated data. Furthermore, meticulous documentation of data, including transcriptions of narratives, methods, and decisions, was maintained in memos. The thesis supervisors conducted assessments to ensure that the findings, interpretations, and conclusions were well-supported by the data.

3.7.6 Transferability

Transferability, a form of external validity, denotes the extent to which the phenomenon or findings described in a study can be applied or relevant to theory, practice, and future research endeavors (Lincoln & Guba, 1985).

In this study, the researcher ensured transferability by meticulously detailing and comprehensively describing the processes employed, enabling others to replicate the data. An audit trail was maintained, including audiotapes of interviews, permission letters, and all pertinent information and documents related to the study.

Furthermore, the researcher provided a thorough depiction of the study's setting, the participants involved, and demographic details about the research participants. This information could facilitate other researchers in replicating the findings of this study in similar settings of their choice, thereby contextualizing the findings within their own chosen contexts. Raw data, such as interview transcripts, along with details of the data analysis, were preserved as evidence.



3.7.7 Confirmability

Confirmability pertains to the level of confidence that the findings of a research study are grounded in the narratives and words of the participants rather than potential biases from the researcher (Korstjens & Moser, 2018). Firstly, the recorded interviews were played back to the participants immediately after each interview session, allowing them to verify and confirm their responses. Subsequently, after coding and transcribing the interview data, the researcher returned it to the participants for confirmation of the recorded information. The researcher incorporated any changes suggested by the participants and then returned the transcribed data for final authentication. The researcher considered the transcribed data validated by the participants as an accurate representation of the information they provided. Other strategies employed for ensuring

confirmability included audiotape recordings, attentive observation of non-verbal cues such as pauses, field notes, sighs, and facial expressions. However, since transcriptions and reflections were promptly conducted after each interview and observation, the overall mood and attitudes of the participants were effectively captured in the transcriptions of the narratives, contributing to the accuracy of data interpretations.

3.8 Data Collection Procedures

Initially, an introductory letter was procured from the Department Head of Early Childhood Education, University of Education, Winneba, serving as an official introduction of the researcher to the school heads where the study participants taught. Subsequently, individual discussions were held with the headteachers to articulate the study's purpose and data collection plans. Following this, participants were individually briefed on the study's objectives, and agreements were reached with each school regarding the timing and location for data collection sessions. The researcher adhered to these agreed-upon schedules, meeting participants in quiet yet accessible locations within the school premises, with prior authorization from school authorities. Before commencing each interview, participants were reminded of the study's purpose and expectations, and their consent was obtained for audio recording sessions to facilitate transcription.

Each participant underwent a single interview session lasting approximately 20 to 25 minutes, during which inquiries were made about the factors contributing to the academic success of special needs children in mainstream schools within the Wa Municipality. Mobile phone voice recorder was utilized as the primary tool for recording detailed conversations, supplemented by a notebook for capturing essential points. Subsequently, the researcher meticulously reviewed the recorded tapes against the transcribed text to ensure accuracy and data integrity.

Employing the participant-observer strategy, the researcher also observed the teaching and learning materials utilized in school environments, along with how teachers integrated these materials into play-based learning activities. Arrangements were made for the researcher to observe teaching sessions facilitated by the participants, actively participating in the teaching and learning process by engaging with both teachers and pupils. This approach aimed to mitigate potential anxieties associated with non-participant observation, enabling a natural classroom environment conducive to teacher-pupil interaction. The presence of the researcher did not disrupt the conduct of teachers or pupils.

Guided by an observation checklist, the researcher recorded information gathered before, during, and after each teaching session led by the participants, with the observed data aligning with information gleaned from interviews.

3.9 Data Analysis Procedures

Thematic analysis procedures were employed in this study, representing an approach aimed at identifying patterns and themes of significance within a dataset pertaining to a research inquiry (Braun & Clarke, 2006). The study undertook the task of identifying themes and patterns, organizing interview transcripts based on the identified themes, and subsequently evaluating the data to uncover parallels, connections, overarching patterns, theoretical constructs, or explanatory principles (Lapadat, 2017). Thematic analysis serves as a strategic tool to effectively organize and summarize extensive datasets while maintaining context, enabling focused interpretation, facilitating immersion in the data, and managing large volumes of data without sacrificing context. In conducting the thematic analysis for this study, the researcher consulted various sources, including interview transcripts, field notes, and policy documents.

The subsequent phase of data analysis involved condensing the emerging codes into manageable categories. Examples of derived codes included "Early Childhood Education Teacher Participant (ECETP)" and "Special Education Coordinator Participant (SECP)." As noted by Creswell (2007), the process of re-categorizing codes becomes essential as researchers often begin with a large number of codes. It is crucial to emphasize that the analysis process is iterative, involving a continuous cycle of reading, coding, and documenting all stages of analysis. Following the development of categories, further analysis was conducted by assigning themes, which served as primary frameworks encapsulating various aspects of the data.

3.10 Ethical Considerations

Throughout the course of this research, significant emphasis was placed on understanding and adhering to the ethical guidelines set forth by the American Psychological Association (APA). Accordingly, the research design, methodology, and overall ethical acceptability of the study were carefully considered to ensure that the benefits of conducting the research far outweighed any potential drawbacks of abstaining from it. Persuasion and strategic techniques were utilized during interviews; however, no participant was coerced into providing information against their will. Moreover, no incentives or inducements of any kind were offered to participants to elicit cooperation. It was imperative that all participants voluntarily contributed to the research. The researcher prioritized maintaining confidentiality at all times, ensuring that every piece of information shared by participants remained confidential. Consequently, a high level of anonymity was upheld, guaranteeing that information provided by any participant remained undisclosed and confidential.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.0 Overview

This chapter of the study presented the findings or results following the interviews and observations that were undertaken. It also presents the discussions of the findings in line with the objectives formulated. Thus, answers to the research questions raised were gained. The chapter also discussed the analytical method used in analysing the data.

4.1 Demographic Data

The study participants who provided valid information were selected based on long service and professional qualification. They comprised of Fourteen (14) ECE teachers and Headteachers and one (1) Special Education Coordinator. The participants selected were eight (8) trained Early Childhood Education teachers and six (6) untrained Early Childhood Education teachers who have taught for between 3 to 8 years, according to Wa Municipal Education Directorate report (2023). The Special Education Coordinator of the Municipality has Masters in Special Education.

4.2 Analysis of the Research

This study was analysed thematically. The data collected was grouped according to participants categories that is, Early Childhood Education teachers and Special Education Coordinator. By organizing the data this way, the researcher was able to compare and contrast the perspectives of the participants and build complexity into the analyses and discussion of the findings. The data gathered from the categorized respondents were then transcribed that is converted into written form. The researcher then determined analytical categories or themes after the transcription process by intensively and repeatedly reading the data. The transcribed data was then coded into thematic areas that addressed the research questions formulated at the beginning of the

study. In ascribing quotations to the participants of the interviews, the participants were represented by codes: "Early Childhood Education Teacher Participant (ECETP)" and "Special Education Coordinator Participant (SECP)". The data from the observation checklist was used to triangulate the interview data.

4.3 Research Question 1: What is the kind of SEN learners present in Early Childhood Education classrooms in the Wa Municipality?

The first research question sought to find out the ECE teachers' and Special Education Coordinator's understanding kind of SEN learners present in Early Childhood Education classrooms in the Wa Municipality. To achieve this, information was sought from the participants within the Municipality for the study. The participants were made to share their views on the following sub-themes: Early Identification of Children's Developmental and Learning Problems; Ways to identify Children with Special Education Needs; Category of SEN Learners; Characteristics of Children With SEN; Factors Inhibiting Early Identification and Assessment of Learners with Disabilities; Teachers' Resistance to Forms of Early Identification of SEN Children; and Aids and Supports for SEN Children. The most pertinent issues that were collected from the participants through an in-depth interview have been described and interpreted in the following sub-themes.

4.3.1 Early Identification of Children's Developmental and Learning Problems

The early identification of children's development is an important exercise that allows teachers to detect learners with specific learning difficulties or disabilities of children. Participants submitted that, the early identification of children's developmental and learning problems helps them to find appropriate ways of curbing these problems from further deteriorating. The following are what some participants narrated:

“You know every child is unique. At each point in their academic journey, they present problems or challenges that can affect their education in future. So, when we identify such problems and challenges early, we are doing the learners a very great service for their future. We are able to provide special support to address specific learning needs such as individualized instruction as well as specialized teaching methods” (ECETP 10).

Similarly, this ECETP 4 remarked this way:

“The future academic success of children depends on the kind of education they have received from the early stage. It is the critical stage of development. The early identification of children’s developmental and learning problems helps us to find appropriate ways of curbing these problems early so that we set the stage for a strong future academic development of the child” (ECETP 4).

In the same way, the Municipal Special Education Coordinator explained this way:

Some children have developmental and learning problems such as dyslexia, dyscalculia and attention deficit. If ECE teachers identify these and other challenges early, we will be able to tackle them on time to avoid future learning problems for the learner. More importantly, we can collaborate with parents and other professionals who are into child education and development. The parents’ involvement especially is important so that there will be consistent interventions at school and the home as well as. This will make the any planned intervention effective (SECP).

Participants supported that; Early identification of children developmental challenges help avoid future learning problems for learners. This help provide special support to address specific learning needs such as individualized instruction as well as specialized teaching methods.

4.3.2 Ways to Identify Children with Special Education Needs

Screening constitutes the first step towards identifying SEN learners in schools. In the screening process, learners are closely watched systematically and their vision, hearing, school attendance, and academic records carefully reviewed to identify the difficulties

they encounter in the classroom. In relation to ways teachers identify children with special educational needs, these participants shared their views this:

We identify those children in the course of teaching and learning. We have been trained in such matters and the coordinator from the office also helps with training and other materials about the kinds of challenges children face. We observe each child in the course of lessons. We also give them various tests; reading and writing and oral tests for example with the aim of identifying such children. We then communicate our findings to the coordinator when he comes around for him to also do his checks and confirm our findings. We also communicate with the parents to find out if they have also identified such traits in the child. We then initiate actions to help the child as per the training we have received (ECETP 3).

Again, ECETP 1 connoted that:

Some Special Education Needs children are easy to identify through observation in daily class activities, such as those with dyslexia and attention deficit. So, we observe them. All of the early childhood education teachers we work as a team, so when one of us identify such issues, they share it with all of us so that we start paying special attention to the child involved. Through the training we have received, we are able to implement processes to solve it. If it is beyond us, we talk to the parents and propose referral for specialised treatment. Our early childhood education coordinator is also very helpful in such matters (ECETP 1).

To corroborate this statement, the coordinator explained this way:

Every professional early childhood education teacher has been trained in such matters. They have to be able to identify the academic strengths and challenges of the children so that they can be properly trained. In many schools, teachers conduct tests to assess the children and identify the ones that require special educational needs. They sometimes involve me as well in this since they may lack some knowledge and skills on the type of condition of the child. Anyways, it is not easy at all to identify some of them. Others such as reading difficulties and other physical conditions are very easy to identify (SECP).

Participants shared that, they identify those children with special educational needs in the course of teaching and learning. They observe each child in the course of lessons

through various tests; reading and writing and oral tests for example with the aim of identifying such children. Also, during teacher conference, when a teacher identifies any issues concerning a child, they share it with the rest so that we start paying special attention to the child involved.

4.3.3 Category of SEN Learners

With the category of SEN learners in the schools, participants expressed their views this way:

“hmm! In this school, the challenges I have identified on the children are cases like physical impairment, visual challenges and low mental ability (ECETP 8).”

Another ECE participant remarked:

“In my classroom the most common SEN learners are those with dyslexia and dyscalculia. There are children with attention deficit hyperactivity disorder (ADHD) as well. These SEN cases are easy to determine. I don't have deaf and dumb learners or those with visual impairment” (ECETP 10).

Again, another participant responded that:

“Here, some learners have speech impairment. Others exhibit attention deficit, dyslexia and dyscalculia. We do not have any with physical or orthopedic challenges in the class” (ECETP 6).

The coordinator participant also responded that:

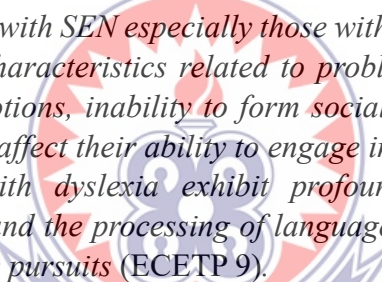
Oh, for sure, there are some children I suspected them to be autistic during my usual observations and monitoring of schools. As for ADHD, it is really common in many classrooms among children. There is also another child with cerebral palsy I have identified and then another some children with visual impairment in some schools. For cases such as dyslexia and dyscalculia, I feel children at various points will exhibit bits of that but they are not serious issues to be classified as SEN cases (SECP).

The common identifiable challenge among SEN children within Wa Municipality has to do with physical impairment, visual challenges and low mental ability. Other

conditions such as dyslexia, dyscalculia, cerebral palsy and attention deficit hyperactivity disorder (ADHD) were the major SEN cases at the study site.

4.3.4 Characteristics of Children With SEN

SEN learners present various levels and degrees of exceptionality for which a specific type of intervention is required in each case. Some children have one disability, and others have more than one; one child with a disability may need only a little extra help while another child may need more services because their learning needs are more intense; some children will need SEN services for only a short time; however, others will need help throughout their school years. On this theme, some participants noted that:



Children with SEN especially those with autism may usually exhibit characteristics related to problems with managing their emotions, inability to form social ties among others. This can affect their ability to engage in learning activities. Those with dyslexia exhibit profound difficulties with reading and the processing of language which affects their academic pursuits (ECETP 9).

Similarly, a participant commented this:

“Negatively, it makes learning slow for them and their ability to understand and undertake tasks is badly affected. For instance, the children with attention deficit, they find it difficult to concentrate for as little as even two minutes. How can they engage in meaningful learning this way? So, their learning is really negatively affected by the characteristics they possess” (ECETP 2).

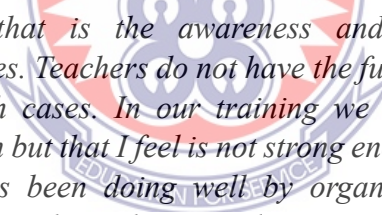
This was further corroborated by coordinator participant who added that:

“The characteristics the children possess depends on the specific disability. But I can say that all in all, it negatively affects their learning. The children with dyslexia for instance have oral reading and comprehension problems, inability to process language effectively, etc. As for those with ADHD, they cannot sit and focus on learning activities. This as you see, affects their learning badly” (SECP).

The study revealed that, every learning needs on learners portray certain unique characteristics. For example, autistic child may usually exhibit characteristics related to problems with managing their emotions, inability to form social ties among others. Also, those with dyslexia exhibit profound difficulties with reading and the processing of language and lastly, ADHD children cannot sit and focus on learning activities. However, all these challenges negatively affect children's learning and academic potentials.

4.3.5 Factors Inhibiting Early Identification and Assessment of Learners with Disabilities

Many factors inhibit the early identification of SEN learners in schools especially at the Early Childhood Education Centres which either prevent the identification totally or delays it. Below are quotations of some participants:



Simply, that is the awareness and knowledge about disabilities. Teachers do not have the full knowledge to deal with such cases. In our training we do a bit of special education but that I feel is not strong enough. The education office has been doing well by organizing workshops to educate us about these conditions. But there too, we are introduced to various materials and tools to use, but the materials are not available in the classroom. The kind of environment we have also doesn't help. The children with disability can get teased and sometimes even victimized, so we try to avoid that by not saying anything about them (ECETP 2).

This participant advocated that:

“The problem mainly is the lack of understanding about such cases and how to deal with them. The specialists like the special education coordinator who can help are also not adequate. How can we have just one or two coordinators for an entire district like ours, look at the number of schools. We also don't have the right tools to use for the identification. The parents too don't know anything about disabilities which they can report to us at the school” (ECETP 5).

The coordinator participant further substantiated that:

“I believe that the major factors that can inhibit the early identification and assessment of learners with disability is inadequate knowledge on the part of the teachers and parents as well. Some of the teachers do not have the knowledge for such matters and that affects the early identification. There is also the issue about the lack of screening tools that can be used to detect the disabilities” (SECP).

There is inadequate knowledge on the part of the teachers and parents about disabilities of children. This according to the study was attributed to limited training on special education. Also, there are limited tools or resources for the for early screening, detection and identification of children with Special educational needs.

4.3.6 Teachers’ Resistance to Forms of Early Identification of SEN Children

Early identification of SEN Children provides teachers information on children’s performance, mastery of skills, and learning progress across subject areas and reveals traits in children that pertain to some risks related to some possible learning or behavioural disorders so that they can be helped as early as possible with an intervention process. However, participants resist from this important exercise. These are what some participants remarked:

When we see that identifying the SEN children is going to create the problem where they are stigmatized, we can resist their identification. Sometimes too we the teachers are not supplied with vital information from the parents about the disabilities so we sit aloof (ECETP 5).

Another participant noted:

You see, the secret is that dealing with SEN children is very difficult. Once you identify them, the hard work of helping them to learn starts. We try to avoid such hard work by resisting or refusing to identify them and report on it (ECETP 5).

Finally, the coordinator participant stated:

Oh, teachers don't resist early identification in anyway. We want to help the children in the best possible way so why and how would we resist. Identifying disabilities will even make our work easier. The problem is the tools and the small number of specialists (SECP).

Participant revealed that, identifying the SEN children early create problem for stigmatization, so they resist it. Participants again noted that, limited supply of vital information from the parents about their wards' disabilities make teachers sit aloof. Lastly, participants reported that, in order to avoid extra work load that the child's disability will exert on them, they resist or refuse to identify them and report on. However, it worth noted that, identifying disabilities among children makes work easier for teachers.

4.3.7 Aids And supports for SEN Children

The availability of educational support services and resources in mainstream schools is seen as one of the school factors that tend to promote the academic success of special educational needs children. With aid and Aids and Supports services available for SEN Children, the following participant have this share;

In terms of support, the special education coordinator provides us with the necessary support to be able to manage the SEN children. He comes around occasionally to educate us and help us to manage the learners. At times too, the education office organizes workshops to help educate us. We have also been provided with materials such as posters, and concrete learning materials. We have also been taught to make some of the aids ourselves and that has been helpful (ECETP 12).

This participant also shared:

“The education office provides us all the necessary support we need even though it is not adequate. We get some learning aids that can generally help SEN learners. But for special learning aids such as braille, hearing aids and others such as wheel chairs such as prosthetic limbs, it is the parents of the SEN children who must get it for them at their own cost. In a all, there isn't adequate support” (ECETP 10).

Contrary to the above, this participant connected that:

“The support and aid are not adequate. We lack tools and simple aids to make teaching of SEN learners effective in this school. Look at our classrooms and school building, can we do any effective inclusive education here. The answer is a big no. no technical support comes in so we have to rely on the little knowledge we have to help the children” (SECP).

Some Participants remarked on the support they receive from the education office through workshops and some material supports. Nonetheless, supports like technical, assistive and material support not adequately provided for schools to help such children.



Table 1: Checklist Data on the kind of SEN learners at Early Childhood**Education classrooms in the Wa Municipality.**

Kind of SEN learners at Early Childhood Education classrooms	Yes		No	
	F	%	F	%
I have a child with Specific Learning Disability (e.g. Dyslexia, <u>Dyscalculia</u> , Dysgraphia) in my classroom.	12	85.7	2	14.3
I have a child with Attention-Deficit-Hyperactivity-Disorder (ADHD) in my classroom	14	100	0	0
I have a child with Autism-Spectrum-Disorder (ASD) in my classroom	5	35.7	9	64.3
I have a child with Emotional Disturbance (e.g. anxiety disorder, schizophrenia, bipolar disorder, obsessive-compulsive disorder, and <u>depression</u>) in my classroom	1	7.1	13	92.9
I have a child with Speech or Language Impairment (stuttering, trouble pronouncing words or making sounds) in my classroom	8	57.1	6	42.9
I have a child with Visual Impairment (Partial sight and blindness) in my classroom	7	50	7	50
I have a child with Deafness or Hearing Difficulty in my classroom	6	42.9	8	57.1
I have a child with Deaf-blindness in my classroom	0	0	14	100
I have a child with Orthopaedic Impairment in my classroom	1	7.1	13	92.9
I have a child with Intellectual Disability in my classroom	10	71.4	4	28.6
I have a child with Multiple Disabilities in my classroom	0	0	14	100

Discussion

First of all, Identification is an important exercise that allows teachers to detect learners with specific learning difficulties or disabilities and recommend them for assistance or treatment so that they can function successfully in and out of school (Biljana, Despina

& Jadranka, 2014). National Council for Special Education (2014) advises that early identification of children's developmental and learning problems is key to understanding the children's developmental and learning conditions to refer them to a specialist for further assessment and give them needed support in school and at home. This helps to increase the chances of preventing or minimising further deterioration of their conditions (Soma, Kissiedu & Nyame, 2023). Participants supported that, early identification of children developmental challenges help avoid future learning problems for learners. This statement aligns with the study by Biljana et al., (2014) which confirm that, delays in identification can have serious consequences on learners as it usually causes difficulties or disabilities to aggravate and even persist throughout adulthood, resulting in poor self-esteem development and motivation. This help provide special support to address specific learning needs such as individualized instruction as well as specialized teaching methods. This helps to increase the chances of preventing or minimizing further deterioration of their conditions (Soma, Kissiedu & Nyame, 2023). Also, Screening constitutes the first step towards identifying SEN learners in schools. Participants shared that, they identify those children with special educational needs in the course of teaching and learning. Participants observe each child in the course of lessons through various tests; reading and writing and oral tests for example with the aim of identifying such children. This statement corroborates findings of the Minnesota Disability Law Center (2010) which proposes the use of a test or an interview for this identifying such children with special needs. Also, during teacher conference, when a teacher identifies any issues concerning a child, they share it with the rest so that participants start paying special attention to the child involved. In relation to this, Soma Kissiedu and Nyame (2023) revealed that as part of the screening process, learners are closely watched systematically and their vision, hearing, school attendance, and

academic records carefully reviewed to identify the difficulties they encounter in the classroom.

SEN learners present various levels and degrees of exceptionality for which a specific type of intervention is required in each case. Some children have one disability, and others have more than one; one child with a disability may need only a little extra help while another child may need more services because their learning needs are more intense; some children will need SEN services for only a short time; however, others will need help throughout their school years (Soma, Kissiedu and Nyame, 2023). From the study findings, the common identifiable challenge among SEN children within Wa Municipality has to do with physical impairment, visual challenges and low mental ability. Other conditions such as dyslexia, dyscalculia, cerebral palsy and attention deficit hyperactivity disorder (ADHD) were the major SEN cases at the study site. From the Observation checklist, most children the selected have live with condition like Attention-Deficit-Hyperactivity-Disorder (ADHD), Learning Disability (e.g. Dyslexia, Dyscalculia, Dysgraphia), Intellectual Disability and Speech or Language Impairment (stuttering, trouble pronouncing words or making sounds) in my classroom. To confirm this statement, the Pennsylvania Training and Technical Assistance Network (2018) provides that a learner may be eligible for special education which has an intellectual disability, emotional disturbance, an orthopaedic impairment, a hearing impairment, deafness, a speech or language impairment, a visual impairment (including blindness), autism, traumatic brain injury, other health impairment, a specific learning disability, deaf-blindness, or multiple disabilities. However, the observation shown that, there were limited children with Multiple Disabilities, Orthopaedic Impairment, Emotional Disturbance (e.g. anxiety disorder, schizophrenia, bipolar disorder, obsessive-

compulsive disorder, and depression), and Autism-Spectrum-Disorder (ASD) in my classroom.

Additionally, the Specific Learning Disability (SLD) category covers a specific group of learning challenges which impede a child's ability to read, write, listen, speak, reason, or do mathematics. The study revealed that, every learning needs on learners portray certain unique characteristics. For example, autistic children in my classroom exhibit characteristics related to problems with managing their emotions, inability to form social ties among others. In light of this, Lee (2023) explains that ASD is a developmental disability with its symptoms consisting of a wide range of disabilities that mainly affects a child's social and communication skills and thus their general behaviour. Also, those with dyslexia exhibit profound difficulties with reading and the processing of language and lastly, ADHD children cannot sit and focus on learning activities. The statement can be likened to Lee (2023) who states that, disabilities that could fall under this category include Dyslexia which affects a learner's skill or ability to read and spell words accurately and fluently characterized by difficulties in phonological awareness, verbal memory and verbal processing speed; Dyscalculia which refers to weaknesses in learners pertaining to misunderstanding of the meaning of numbers and general inability to apply mathematical principles to solve problems, and is shown specifically when learners lack effective counting skills, number identification and ability to do simple arithmetic mentally; and dysgraphia which is a written expression disorder and is shown in the inability of the learner to translate thoughts into writing appropriate for their age in spite of exposure to lessons in age-appropriate skills. All these challenges negatively affect children's learning and academic potentials.

Again, there is inadequate knowledge on the part of the teachers and parents about disabilities of children. This according to the study was attributed to limited training on special education. Also, there are limited tools or resources for the for early screening, detection and identification of children with Special educational needs. In connection to this, Aiyaleso (2017) also found that factors such as parents' negative attitudes, inadequate logistics to screen and diagnose learners with various degrees of impairments or disabilities, as well as inadequate qualified personnel or specialists to conduct professional assessment and plan intervention programmes for the identified learners inhibit proper identification of SEN learners.

Moreso, Participant revealed that, identifying the SEN children early create problem for stigmatization, so they resist it. Studies by Grindal, Schifter, Schwartz and Hehir (2019) citing Harry and Klinger (2014) revealed that in most cases identification results in labelling and stigmatization and causes teachers and even parents to have low expectations of the identified learners' abilities to succeed in the general education classroom. Participants again noted that, limited supply of vital information from the parents about their wards' disabilities make teachers sit aloof. Lastly, participants reported that, in order to avoid extra work load that the child's disability will exert on them, they resist or refuse to identify them and report on. Study confirmed that, factors that inhibit the early identification and assessment of learners with disabilities are associated with inadequate knowledge or ignorance about various kinds of disabilities, inadequate policies, lack of proper diagnosis and timely intervention, as well as issues of acceptance, stigma, and labelling (Ahmad, 2015). It worth noted that, identifying disabilities among children makes work easier for teachers.

Lastly, some Participants remarked on the support they receive from the education office through workshops and some material supports. Nonetheless, supports like

technical, assistive and material support not adequately provided for schools to help such children. Research has shown that the continuous absence of disabled children in mainstream schools is as a result of the bad perceptions and attitudes of teachers; and the lack of teaching and learning aids and support services for the proper inclusion of children with special educational need (Agbenyega et al., 2015). Forlin, (2015) and Kibria (2016) noted that, the major challenges of inclusive education include but not limited to behaviour and attitudes of SEN children and availability of environment and support services.

4.4 Research Question 2: How does the school environment promote the academic success of SEN learners in Early Childhood Education classrooms in the Wa Municipality?

The second research question sought to establish the how the school environment promotes the academic success of SEN learners in Early Childhood Education classrooms in the Wa Municipality. In achieving this, information was sought from both ECE teachers and ECE coordinator sampled for the study. A number of issues were brought to light from the interviews in the following areas: School Environment Conditions for SEN Children; Physical Barriers to Inclusive Education; Proper Ventilation for Comfort and Well-Being of Children and Teachers; Resourceful Inclusive Classrooms. The most pertinent issues that were collected from the participants through in-depth interview have been interpreted in the following sub-themes.

4.4.1 School Environment Conditions for SEN Children

Securing favourable school and classroom environment is a very important factor that can ensure the full integration and academic success of all learners especially SEN

learners. In light of this, participants interviewed School Environment Conditions for SEN Children shared their views this way:

From the education and training I have received at school and during workshops, I know an inclusive school should have environmental conditions such as ramps for easy movement, proper ventilation, classroom arrangement, lighting, absence of heavy doors, etc. These environmental conditions help to increase access, safety and protection of SEN children. As you can see, these environmental aids are absent from the school. So, in fact we have a long way to go as far as effective inclusive education and the academic success of the SEN children is concerned (ECETP 1).

Another participant connoted that:

“For SEN children to be safe and be able to access classrooms and other school facilities, there should be conditions such as ramps for easy movement, no long staircase or even steps, classrooms shouldn’t be congested, it should be well ventilated and there should enough lighting. There should also be support from the teachers for the SEN children so that they wouldn’t be bullied by their friends or even teased” (ECETP 6).

The coordinator participant shared this way:

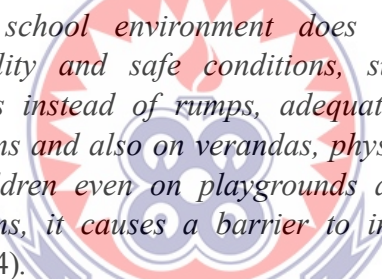
A school that is safe for SEN children should have classrooms without many staircases, the school buildings should also be well organized for easy access. There shouldn’t be obstacles as well. The playground should also be safe and accessible to all the children including the SEN children. My major issue is that the SEN children should also be safe emotionally and psychologically. They shouldn’t suffer any stigmatization and emotional abuse whatsoever. In this school, a safe environment is a problem even though we do well to ensure emotional safety but the physical environment you know has to be provided by the government. We improvise anyway in terms of class arrangement, etc., (SECP).

The participants revealed that, environmental obstacles such as absence of ramps for easy movement, proper ventilation, classroom arrangement, good lighting amidst

congested classrooms, stigmatization and other emotional abuse affect the access, safety and protection of SEN children.

4.4.2 Physical Barriers to Inclusive Education

All participants substantiated that, effective inclusive schools are schools that are easily accessible and have a conducive school environment to cater for the needs of special educational needs children. In this way, the accessibility and environment of inclusive schools plays a significant role in the promotion of the academic success of these children. It is for this reason that school buildings and classroom layout should be structured to accommodate students with disabilities. This is what some participants have to shared:



“If the school environment does not have physical accessibility and safe conditions, such as, steps and staircases instead of rumps, adequate safe passages in classrooms and also on verandas, physical support for the SEN children even on playgrounds and not just in the classrooms, it causes a barrier to inclusive education” (ECETP 4).

Another participant also responded this way:

A school environment like what we have here, with congested classrooms, no physical assistive devices, no protective rails on the veranda, no white canes and floors with potholes serve as a barrier to inclusive education. All of these things should be taken care of if inclusive education is to be effective here (ECETP 11).

The coordinator participant also supported that:

You know, a school environment that is not disability friendly such as the presence of big steps or staircases, overcrowded classrooms with poor ventilation and lighting and also the lack of assistive and adaptive devices can physically prevent the ability of SEN children accessing education (SECP).

The study gleaned that, there were no physical assistive devices, no protective rails on the veranda, no white canes for visually challenged student, floors with potholes and

the presence of overcrowded classrooms with poor ventilation and lighting serve as a physical barrier to inclusive education.

4.4.3 Proper Ventilation for Comfort and Well-Being of Children and Teachers

As part of the suitable school building and class arrangement, it is also important for inclusive education schools to also consider class ventilation. In the face of proper ventilation for comfort and well-Being of children and teachers, the following are what some participants shared:

“Proper ventilation is important to prevent stuffiness in classrooms. This can be ensured by providing adequate windows and fans where applicable. A congested classroom is a bad idea for proper inclusive education. The children should be properly spaced out as well to allow for comfortability” (ECETP 13).

Similarly, this ECETP 7 participant also shared her view this way:

“There should be just windows but the buildings should be arranged in such a way that the windows face the direction of the wind. In our environment here when the sun can be extremely hot, fans should be considered to reduce the stuffiness in the classrooms” (ECETP 7).

Lastly the coordinator participant explained this way:

“Proper ventilation is one of the accommodations that must be made for effective inclusive education. It would help the children very well and make them comfortable. A hot and stuffy classroom can irritate some SEN children such as those with autism. The teachers can also be affected in a hot and study classroom situation” (SECP).

Participants through interviews posited proper ventilation as one of the accommodative measures for effective inclusive education. School buildings should be carefully constructed to directed wind through the windows for air circulation in the classroom. This can be ensured by providing adequate ventilation and fans where applicable.

4.4.4 Resourceful Inclusive Classrooms

All participants believe that, effective furnishings, pictures, posters and displays of education materials and equipment can enhance the visual appeal of inclusive classrooms and the engagement of all children. In line with this quotation, this is what these participants have to say:

“Pictures and posters are a very important part of early childhood education. Children see these posters consistently and form their learning from it. It is also therefore important for inclusive education as it adds to the visual appeal of inclusive classrooms” (ECETP 5).

Also, this participant commented that:

“We have been educated on the provision of pictures, posters and other educational materials and generally to decorate the class with such materials. They make the class appealing to all students. Children are generally perceptive, they learn from the things they see around them, so class furnishings can help very well in this regard” (ECETP 9).

Lastly, the coordinator participant shared that:

“Of course, one cannot teach in the early childhood education setting without furnishings, pictures and posters. They very much enhance the visual appeal of inclusive classrooms by beautifying the class and also contributing to effective teaching and learning” (SECP).

The study found that, the provision of pictures, posters and other educational material are very important part of early childhood education since these children see these resources consistently and construct their learning from them. These items aside it educational benefits to the children, generally to decorate the classroom space which enhances the visual appeals of inclusive classrooms by beautifying the class and also contributing to effective teaching and learning for children at ECE settings.

Table 2: Checklist Data on Existing the Nature of School Environment Promote the Academic Success of SEN Learners In Early Childhood Education Classrooms in The Wa Municipality

Nature of School Environment Promote the Academic Success of SEN Learners	Yes		No	
	F	%	F	%
Adapted school buildings accessibly for all children	1	7.1	13	92.9
Accessible ramps for all children	0	0	14	100
Accessible elevators for all children	0	0	14	100
Wide doorways for children	8	57.1	6	42.9
There is flight of stairs to rooms	0	0	14	100
There are slippery outdoor surfaces	0	0	14	100
The doors are heavy for children	5	35.7	9	64.3
Proper room spacing and layout for children	6	42.9	8	57.1
Good classroom sitting arrangement	3	21.4	11	78.6
Children have access to learning materials	8	57.1	6	42.9
There are well-maintained and furnished classrooms	2	14.3	12	85.7
There is proper classroom ventilation	8	57.1	6	42.9
There is adequate lighting in the classroom (natural and artificial illumination)	8	57.1	6	42.9
The classrooms are well decorated and attractive with pictures, posters and displays of education materials and equipment.	3	21.4	11	78.6

Discussion

A favorable school and classroom environment is a very important factor that can ensure the full integration and academic success of all learners especially SEN learners.

The participants interviewed revealed that, environmental obstacles such as absence of ramps for easy movement, proper ventilation, classroom arrangement, good lighting amidst congested classrooms, stigmatization and other emotional abuse were prevalent in schools which affects the access, safety and protection of SEN children. Lewis and

Doorlag (2006) in support of this assertion stated that eliminating architectural barriers such as small doorways and poor room spacing and layout, will ensure that children with disability are safe and can move freely in the school, which in turn, allows for more effective use of facilities. It is for this reason that school buildings and classroom layout should be structured to accommodate students with disabilities. The observation checklist indicated that, schools visited had wide doorways for children, Children have access to learning materials, proper classroom ventilation, adequate lighting in the classroom (natural and artificial illumination) and proper room spacing and layout for children. In congruent to this, the environment must be accessible to all children, including those with physical disabilities, especially with the availability of suitable infrastructural conditions, such as adapted buildings, accessible ramps, elevators, wide doorways, among others, which allow children with special education needs (SEN) to move freely within educational institutions as posited by Turlubekova et al. (2023).

Also, the study gleaned that, there were no physical assistive devices, no protective rails on the veranda, no white canes for visually challenged student, floors with potholes and the presence of overcrowded classrooms with poor ventilation and lighting serve as a physical barrier to inclusive education. Also, the study observation identified that, most classrooms were not decorated with pictures, posters and displays of education materials and equipment; there were no well-maintained and furnished classrooms; some of the doors were heavy for children; there were no flight of stairs to rooms; no accessible elevators for all children; no adapted school buildings accessibly for all children; and no accessible ramps for all children. In relation to this, Dilnesaw (2017) stated that the physical environment in a classroom can promote active-learning. The physical environment (classroom layout and appearance which entails how posters and picture materials are displayed; the sitting positioning of children in class; and

children's access to learning materials) contribute a lot to promote the active-learning method. To allow for students with physical and mobility disability and other sensory disability especially to access school and their classrooms as well as other facilities, schools should avoid architectural elements such as flight of stairs to rooms and slippery outdoor surfaces, as well as heavy doors and narrow doorways (Winter and O'Raw 2010).

Participants through interviews posited proper ventilation as one of the accommodative measures for effective inclusive education. School buildings should be carefully constructed to directed wind through the windows for air circulation in the classroom. This can be ensured by providing adequate ventilation and fans where applicable. To corroborate this, as part of the suitable school building and class arrangement, it is also important for inclusive education schools to also consider class ventilation (Higgins et al. 2005, Lewis and Doorlag 2006) and lighting (Cheryan et al. 2014). Proper ventilation prevents stuffiness in classrooms, enhancing the general comfort and well-being of children and teachers (Higgins et al. 2005, Lewis and Doorlag 2006).

Lastly, the study found that, the provision of pictures, posters and other educational material are very important part of early childhood education since these children see these resources consistently and construct their learning from them. These items aside it educational benefits to the children, generally to decorate the classroom space which enhances the visual appeals of inclusive classrooms by beautifying the class and also contributing to effective teaching and learning for children at ECE settings. To connect to this statement, Tanner (2008) confirmed that room decoration is important because it can affect the attractiveness of classrooms. Also, effective furnishings, pictures, posters and displays of education materials and equipment therefore can enhance the

visual appeal of inclusive classrooms and the engagement of all children (Ackah-Jnr & Danso, 2018).

4.5 Research Question 3: How do support services promote the academic success of SEN learners in Early Childhood Education classrooms in the Wa Municipality?

The third research question sought to assess the support services that promote the academic success of SEN learners in Early Childhood Education classrooms in the Wa Municipality. The availability of educational support services and resources in mainstream schools is seen as one of the school factors that tend to promote the academic success of special educational needs children. A variety of resources such as teaching materials, special equipment (such as braille, hearing aids, mobility devices like wheelchairs and white canes, magnifying screens), additional personnel, new teaching approaches, curriculum, or other learners and other resources, especially those that go beyond what the teacher can give are important support services that are needed to support SEN learners in schools. During the interview, participants were made to share their views on the Availability of Special Equipment for SEN Learners; Special Support Services for Children with Special Educational Needs; Teaching Resources for Teaching and Learning; Visual Aids and Devices for Teaching Special Educational Needs Children; Effect of Absence of Teaching and Learning Aids and Support Services on Children with Special Educational Needs. From the interview, a number of issues were brought to light from the responses of the participants and have been interpreted in the sub-themes below.

4.5.1 Availability of Special Equipment for SEN Learners

Concerning the availability of special equipment for SEN learners, some participants have these to say:

“Special equipment? We have nothing. It makes me wonder how the government is promoting inclusive education. I have no idea how We can make improvisations such as the case of white canes for the visually impaired. We have been discussing about these with the Special Education coordinator but no show” (ECETP 3).

Another participant supported the earlier submission by ECETP 3 that:

“We are really in need of these materials you are talking about. I have never seen something like a wheel chair in any school for students with movement disabilities. We try to make improvisations though. Our headmaster has been supportive by purchasing magnifying glass for us and also the braille materials. The rest fall on parents who are committed to educating their special children to get whatever they need for them” (ECETP 8).

Lastly, the coordinator participant confirmed this way:

“As far as special equipment is concerned, in this school there is nothing like the braille materials such as braille books and braille writers. Some schools with visually challenged learners have their own white canes for movement. The only thing I have help through office is the handheld magnifying glasses for reading. We don't have any hearing or listening assistive devices and mobility devices such as wheel chairs. So, the very core special equipment is woefully inadequate in this school” (SECP).

The study found that, special equipment such as braille, hearing aids, mobility devices like wheelchairs and white canes, magnifying screens were scarce in the schools. There have been the efforts of the head teacher and the Special Education Coordinator in providing some of these devices for teaching.

4.5.2 Special Support Services for Children with Special Educational Needs

Stakeholder support services such as teachers, parents, communities, school districts, curriculum developers, training institutions, and education entrepreneurs as just a few of the stakeholders that are essential to the success of the inclusion process in all areas.

In light of the special support services for children with special educational needs, quotations of some participants indicated that:

“...we also go for in-service trainings where we are introduced to many techniques for teaching SEN children and supporting them in school. Some NGOs also come around” (ECETP 11).

This participant was of the view that:

“The special education coordinator occasionally comes around to visit us. At times too, workshops are organized by the district education directorate for us to attend. At the workshops, we are guided with ways to improvise some materials to support our practice” (ECETP 4).

Similarly, this participant elaborated that:

“We receive occasional support service from the district education office through the special education coordinator and district counsellor. But as you know one or two officers like that cannot take care of the needs of schools effectively. The parents in the community are mostly ignorant about how they can support the school in educating SEN learners” (SECP).

Support services received were through in-service trainings or workshops where we are introduced to many techniques for teaching SEN children and supporting them in school. At the workshops, we are guided with ways to improvise some materials to support our school practice. Nonetheless, the parents in the community are mostly ignorant about how they can support the school in educating SEN learners.

4.5.3 Teaching Resources for Teaching and Learning

The resources in education are those facilities or equipment that aid effective teaching and learning. These teaching resources can be anything a teacher prepares or uses to make learning easier than it would have been without it. Participants expressed their views concerning how the teaching resources are very paramount in our schools this way:

“Teaching resources make the lesson very practical and without it learning is incomplete. The children learn through play. So, if there are these resources they can manipulate, it helps a lot” (ECETP 7).

Again, this participant added that:

“Teaching resources make teaching very effective. You know at the ECE classroom, the children cannot sit through lessons that doesn’t involve practical and actions. So, for whatever lesson, they have to have materials to feel and touch” (ECETP 2).

The coordinator participant advised that:

“Eii!, can there be teaching and learning without teaching and learning resources? Children especially find it difficult understanding abstract things, do teachers have to use the resources to make the lesson more understandable. It is very important” (SECP).

The study confirmed that, the teaching resources make teaching very effective because it makes teaching and learning very practical and active. Very importantly, the use these resources make lessons more understandable.

4.5.4 Visual Aids and Devices for Teaching Special Educational Needs Children

Visual materials such as three-dimensional materials like objects; printed materials like textbooks; and graphics in the form of posters, maps and diagrams help make teaching and learning more efficient and beneficial for children with special educational needs.

On the kind of visual aids and devices for teaching special educational needs children, participants expressed their views this way:

“Visual aids and devices such as videos, posters and pictures make the lesson appealing and also removes the boredom. All SEN children such as those with hearing impairments and other kinds of impairments except those with visual impairments stand to benefit so much from the use of visual aids and device” (ECETP 9).

This participant also shared that:

“Children with disabilities especially need to see aspects of the lesson to understand it. So visual aids such as pictures and videos are very important. In fact, visual aids are important for all aspects and levels of teaching and learning” (ECETP 10).

These quotations by the teacher participants were confirmed by the coordinator participants that:

“You know the Chinese proverb, “I hear I forget; I see I remember, I do I understand,” the visual aid makes the lesson more understandable for the SEN children. Especially those with hearing difficulties can benefit from the lesson that uses visual aids and devices” (SECP).

The study disclosed that, visual aids and devices such as videos, posters and pictures are important for all aspects and levels of teaching and learning as it makes lessons more appealing and also removes boredom among learners.

4.5.5 Effect of Absence of Teaching and Learning Aids and Support Services on Children with Special Educational Need

The importance of teacher support, and provision and availability of resources for successful inclusion cannot be overemphasized. On the effects of the absence of teaching and learning aids and support services on children with special educational need, some participants have this to say:

“The continuous absence of teaching and learning aids and support services will render the effort to ensure the inclusion of children with special educational needs ineffective. Teachers on their own cannot do so much, they need the aids and the resources to make their work effective” (ECETP 7).

Similarly, this participant commented this way:

“There cannot be inclusive education without the teaching and learning aids and the support services. Without the right aids and assistive devices SEN children cannot be effectively educated. The materials complement the efforts of the teachers so their absence render the teachers ineffective” (ECETP 6).

Finally, the coordinator participant explained this way:

“Then there will be no inclusion of the children with disabilities. Life in school without the aids will be very difficult for them. They cannot learn. Imagine a paralyzed child without a wheel chair. How can such a child learn? The

whole inclusive education hinges on the aids and the support services required by the schools and teachers” (SECP).

The whole inclusive education hinges on the aids and the support services required by the schools and teachers. Hence, there cannot be proper inclusive education without the teaching and learning aids, the support services and assistive devices for SEN children.

Table 3: Checklist Data on The Support Services that Promote Academic Success of SEN Learners In Early Childhood Education Classrooms in The Wa Municipality

The Support Services that Promote Academic Success of SEN Learners	Yes		No	
	F	%	F	%
There are enough printed materials like textbooks for learning	4	28.6	10	71.4
There are enough graphics in the form of posters for learning	5	35.7	9	64.3
There are maps and diagrams in the classroom for learning	2	14.3	12	85.7
There brailles for visually challenged learners	0	0	14	100
There are accessible mobility devices like wheelchairs and white canes	2	14.3	12	85.7
There are accessible magnifying screens for learners	5	35.7	9	64.3
There are accessible hearing aids for learning	1	7.1	13	92.9
There are Counselling services for learners with emotional disorders	5	35.7	9	64.3

Discussion

The importance of resources in teaching and learning can therefore not be overemphasized. These resources, together with support, play a crucial role in effective teaching and learning. The study found that, special equipment such as braille, hearing aids, mobility devices like wheelchairs and white canes, magnifying screens were scarce in the schools. Cele (2023) posits that a variety of resources such as teaching materials, special equipment (such as braille, hearing aids, mobility devices like wheelchairs and white canes, magnifying screens), additional personnel, new teaching

approaches, curriculum, or other learners and other resources, especially those that go beyond what the teacher can give are important support services that are needed to support SEN learners in schools. There have been the efforts of the head teacher and the Special Education Coordinator in providing some of these devices for teaching. Stakeholder support services such as teachers, parents, communities, school districts, curriculum developers, training institutions, and education entrepreneurs as just a few of the stakeholders that are essential to the success of the inclusion process in all areas (Cele, 2023). This observation data confirms the interview data that, there were no brailles for visually challenged learners in the schools observed; there were limited accessible magnifying screens for learners; limited accessible hearing aids for learning; limited accessible mobility devices like wheelchairs and white canes; limited maps and diagrams in the classroom for learning; limited graphics in the form of posters for learning; and limited printed materials like textbooks for learning.

Again, the literature suggests that pedagogy is a critical factor in the academic success of children with special educational needs (Porter et al., 2011; Schoeman, 2013; Lundeen and Lundeen 2015); and that teachers who receive training in innovative teaching techniques are more accommodating and tolerant towards special educational needs children in inclusive classrooms (Porter et al., 2016). In this regard, the study found that, the support services received were through in-service trainings or workshops where we are introduced to many techniques for teaching SEN children and supporting them in school. At the workshops, participants were guided with ways to improvise some materials to support our school practice. Nonetheless, the parents in the community are mostly ignorant about how they can support the school in educating SEN learners. Other roles of the division included the acquisition of teaching and learning aides as well as equipment for the training of persons with disabilities; and to

support universities to train special educational needs teachers to be placed in almost every basic school to see to the welfare of special needs children (GES, 1995). The study revealed that, the teaching resources make teaching very effective because it makes teaching and learning very practical and active. Research has shown that there is a call for teachers to be equipped with the needed subject knowledge, attitudes and teaching methods skills to facilitate the learning process of young people to achieve educational development through the application of different teaching methods. It further argues that, in order to promote the learning outcomes of children, it is prudent to incorporate best classroom practices in teacher education training (European Commission Communication Improving the Quality of Teacher Education, 2007, as cited in Farid, 2014).

Finally, the study disclosed that, visual aids and devices such as videos, posters and pictures are important for all aspects and levels of teaching and learning as it makes lessons more appealing and also removes boredom among learners. The whole inclusive education hinges on the aids and the support services required by the schools and teachers. Hence, there cannot be proper inclusive education without the teaching and learning aids, the support services and assistive devices for SEN children. This study findings is linked to the earlier findings of Tanner (2008) who suggested that, room decoration is important because it can affect the attractiveness of classrooms. Effective furnishings, pictures, posters and displays of education materials and equipment therefore can enhance the visual appeal of inclusive classrooms and the engagement of all children (Ackah-Jnr & Danso, 2018). Again, according to Nacino-Brown, Oke and Brown (2016), these aids and devices make learning clearer and more interesting and include: visual materials such as three-dimensional materials like objects; printed materials like textbooks; and graphics in the form of posters, maps and

diagrams. All these, in diverse ways, help make teaching and learning more efficient and beneficial for children with special educational needs.

4.6 In what ways do ECE teachers' classroom pedagogies promote the academic success of SEN learners in Early Childhood Education classrooms in the Wa Municipality?

The fourth research question established the ways ECE teachers' classroom pedagogies promote the academic success of SEN learners in Early Childhood Education classrooms in the Wa Municipality. Teaching strategy has appeared to improve the academic success across the levels of education for students both with and without special educational needs. Participants' role was to identify techniques that have boosted educational attainments of SEN children are the usage of adapted teaching and learning materials to complement the usage of textbooks in teaching and learning processes in classrooms. Participants on ECE teachers' classroom pedagogies that promote the academic success of SEN learners in Early Childhood Education classrooms revealed that, participants receive training in the form of workshops organized by the district education office in collaboration with some NGOs on teaching pedagogies, the use of teaching and learning resources as well as how to identify and accommodate the SEN learners. Also, some participants noted that, teachers must exhibit different pedagogic skills such as acting, demonstrating, experimenting, and other innovative methods in providing equal education opportunities for all students, including those with SEN. The most relevant issues collected from the participants were based on the views from an in-depth interview have been described and interpreted in the following sub-themes outlined.

4.6.1 Special Training to Accommodate the Special Educational Needs Children in Inclusive Classrooms

Regular training in innovative teaching techniques is more accommodating and tolerant towards special educational needs children in inclusive classrooms. Participants interviewed on special training they receive to accommodate SEN children in Inclusive classroom has these to say:

“We receive training on teaching pedagogies, the use of teaching and learning resources as well as how to identify and accommodate the SEN learners. Even though the training is not regular, it helps a lot. When we go for workshops, we are made to share our ideas and knowledge and it is always helpful” (ECETP 6).

Again, this participant elaborated that:

“We receive special education training at school on how to accommodate the children with disabilities. We also attend workshops that train us on the teaching techniques to use in teaching so that the children with disabilities can also benefit from the lesson” (ECETP 1).

To corroborate this, coordinator participant explained that:

“The innovative training comes in the form of workshops organized by the district education office in collaboration with some NGOs. We usually attend these workshops sometimes twice in a year. We train them on the various characteristics of the SEN children and how teachers can accommodate and teach them effectively” (SECP).

The study gathered from the participants' quotations that, participants receive training in the form of workshops organized by the district education office in collaboration with some NGOs on teaching pedagogies, the use of teaching and learning resources as well as how to identify and accommodate the SEN learners. However, such training has not regular.

4.6.2 ECE Teachers' Inclusive Pedagogy

The Education for All initiative influenced classroom teachers to adopt a more inclusive education pedagogic suitable for both SEN and non-SEN children. Participants noted that, teachers must exhibit different pedagogic skills such as acting, demonstrating, experimenting, and other innovative methods in providing equal education opportunities for all students, including those with SEN. With regards to this, these participants have these to say:

“The teaching strategy in an inclusive school should be varied. The idea is that every aspect of the lesson should be done in such a way that every child is made to fully participate. It is not easy especially when you have a large class. We usually make them work in groups and also do some acting and roleplaying” (ECETP 4).

Again, this participant emphasized that:

“When ECE teachers participate in special education trainings, we are taught many things such as how to very well accommodate the SEN learners, the right teaching strategies to adopt among others. This makes us very competent” (ECETP 5).

Also, the participant substantiated this way:

“Teaching in inclusive classes can be tough without the right competence and training. So, we give some platform for teachers to build their capacity and become more efficient in delivering in their inclusive classrooms” (SECP).

The study revealed that, teaching in inclusive classes begins with the right competence and training. Also, teaching strategy in an inclusive school must be varied in order to accommodate the wide uniqueness of learners in the class.

4.6.3 Achievements of Special Educational Needs Children in Inclusive Schools

The quality of the teacher contributes more to learner achievement than any other factor such as class size, class composition, or background. The study participants related this way:

“The basis of inclusive education is to ensure that all children are able to achieve high academic standards irrespective of all kinds of differences. The aim is not just to make SEN children learn something in school. So, all the teaching methods that teachers use now which is mostly practical and focused on identifying and solving the weaknesses of all learners including SEN learners, help to enhance the academic achievement of the SEN learners” (ECETP 9).

Another participant remarked that:

“Oh of course, without the proper methods, learners in general cannot achieve high academic laurels. The teaching methods is linked to the individual needs of the learners. One would say learner-centred teaching methods are adopted in inclusive classrooms. This helps to tackle each difficulties the children have and also polish their strengths into high achievements” (ECETP 8).

Lastly, the coordinator participants related that:

“The learning methods such as role playing makes the lesson interesting and whenever SEN learners and even all children are interested in a lesson, learning is very effective. I also encourage peer teaching or peer learning so the SEN learners are always supported by their peers. All of these enhance their academic achievements”. (SECP).

All study participants agreed that, teaching methods for inclusive classroom must be practical and be focused on identifying and solving the weaknesses of all learners including SEN learners, hence the enhancement of the academic achievement of the SEN learners.

4.6.4 Effective Teaching Pedagogies on Learning Outcomes of Special Educational Needs Children

With the right teaching pedagogies on learning outcomes of special educational needs children, some study participants were of the view that:

“SEN children benefit so much from participatory learning, shared problem-solving and the mixed grouping approach to teaching. This makes the lesson more practical and improves their understanding. For instance, those with sight problems can benefit from mixed groupings and also participatory teaching” (ECETP 4).

Similarly, to the quotation of (ECETP 4), this participant clarified

that:

“These teaching and learning approaches you have mentioned are what inclusive education is all about. When you group the children according to different ability levels, they support each other and especially those without disabilities grow to accept and accommodate those with disabilities. The SEN children also feel loved and accepted and are therefore eager to learn” (ECETP 11).

To corroborate, the coordinator participant remarked this way:

“Generally, learners like to be involved and participate actively in the lesson. That is how they understand lessons. So participatory teaching and learning helps the SEN learners a lot. And when learners are put into mixed ability groupings, they are able to support each other especially the ‘normal children’ helping the SEN children. This in all helps to improve their learning outcome” (SECP).

The participants advocated through the interview data that, the regular effective teaching approaches they employ to improve their learning outcomes of SEN children are participatory learning, shared problem-solving and the mixed grouping approach to teaching.

4.6.5 Infusion of Special Education into the Regular Mainstream School

Curriculum

Participants employ collaborative teaching, which infuses special education into the regular syllabus to enhance the academic performance of special educational needs children. Below are some of the excerpts from the interview that participants revealed:

I modify lesson plans, assignments, and all other forms of assessments to accommodate the diverse learning needs of students with SEN. Specifically I do things such as providing alternative formats for reading materials, giving more time for completing lesson tasks as well as simplifying instructions. (ECETP 9).

Similarly to the quotation by (ECETP 9), this participant commented that:

I mainly adopt peer support for learning coupled with the use of SEN biased tools and resources. Sometimes too, I modify portions of the syllabus to make room for the SEN children, you know the syllabus even promotes creativity and improvisations. I also incorporate social and emotional skills training for all the children so that they can all live together happily in the class. (ECETP 6).

The modification of lesson plans, assignments, and all other forms of assessments were very effective ways to accommodate the diverse learning needs of students with SEN to promote creativity and improvisations. The incorporation of social and emotional skills training and other support for learning coupled with the use of SEN biased tools and resources were vital for simplifying instructions.

Table 4: Checklist Data on ECE Teachers' Classroom Pedagogies Promote the Academic Success of SEN Learners

in Early Childhood Education Classrooms in The Wa Municipality

Kind of SEN learners at Early Childhood Education classrooms	Yes		No	
	F	%	F	%
I have received training in innovative teaching techniques	12	85.7	2	14.3
I put in place varying teaching techniques to create an enabling environment for all learners in lesson delivery	11	78.6	3	21.4
I use collaborative teaching which infuses special education into the regular syllabus to enhanced the academic performance of my Special Educational Needs Children	12	85.7	2	14.3
I use adapted teaching and learning materials to complement the usage of textbooks in my teaching and learning processes in classrooms	11	78.6	3	21.4
I rely on the collaboration of both special and general teachers to develop both the cognitive and emotional needs of learners	12	85.7	2	14.3
My attitude as an ECE teacher towards SEN children has a major impact on the success of all learners	14	100	0	0
I incorporate best classroom practices in teacher education training to handle inclusive classes	13	92.9	1	7.1

Discussion

Ahmad (2015) identifies that factors that inhibit the early identification and assessment of learners with disabilities are associated with inadequate knowledge or ignorance about various kinds of disabilities, inadequate policies, lack of proper diagnosis and timely intervention, as well as issues of acceptance, stigma, and labelling. The study gathered from the participants' quotations that, participants receive training in the form of workshops organized by the district education office in collaboration with some

NGOs on teaching pedagogies, the use of teaching and learning resources as well as how to identify and accommodate the SEN learners. However, such training has not regular. Also, it was revealed that, teaching in inclusive classes begins with the right competence and training. So, such teaching strategy in an inclusive school must be varied in order to accommodate the wide uniqueness of learners in the class. This interview data triangulates with the observation that highlighted that; majority of participants interacted within the study received training in innovative teaching techniques and also incorporate best classroom practices in teacher education training to handle inclusive classes. In agreement to this study findings, studies conducted on how teacher participation in special education trainings indicates that teachers who participated in trainings of high quality are seen to be more competent in teaching inclusive classes (Avramidis *et al.*, 2019).

Also, all study participants agreed that, teaching methods for inclusive classroom must be practical and be focused on identifying and solving the weaknesses of all learners including SEN learners, hence the enhancement of the academic achievement of the SEN learners. Observation data also shown that, put in place varying teaching techniques to create an enabling environment for all learners in lesson delivery. Also, they use collaborative teaching which infuses special education into the regular syllabus to enhanced the academic performance of my Special Educational Needs Children. Relating this finding to earlier studies, Meijer (2015) examines the factors affecting effective classroom practices in inclusive settings for 7 European countries. Results from the study indicate that participatory teaching and learning, shared problem-solving and the grouping of both SEN and non-SEN children were seen to enhance the learning outcomes of special educational needs children and inclusive education as a whole. For instance, in the case The Netherlands, Meijer (2015) found peer-tutoring to

be one of the effective methods of teaching which is seen to develop both the cognitive and emotional beings of learners.

Again, the participants advocated through the interview data that, the regular effective teaching approaches they employ to improve their learning outcomes of SEN children are participatory learning, shared problem-solving and the mixed grouping approach to teaching. Study observation indicated that, participants use adapted teaching and learning materials to complement the usage of textbooks in my teaching and learning processes in classrooms. They further adopted appropriate teaching methods which included class-wide peer tutoring and multi-component curriculum. Results of the study indicated an improvement in the academic performance of special educational needs students. Study by Slavin (2018) confirms that, the cooperative learning approach in an inclusive classroom involves social interaction amongst the children. Also, peer tutoring and learning was seen as one of the best approaches to inculcating effective listening and communication skills in children with special educational needs (Harding, 2017).

Additionally, Gutman and Vorhaus (2012) examined the impact of pupil behaviour and wellbeing on educational outcomes of children. Results from their study show that children with relatively higher levels of emotional, behavioural, social and school wellbeing, on average, perform better in schools and are more engaged in school activities. The study found that, the modification of lesson plans, assignments, and all other forms of assessments were very effective ways to accommodate the diverse learning needs of students with SEN to promote creativity and improvisations. The incorporation of social and emotional skills training and other support for learning coupled with the use of SEN biased tools and resources were vital for simplifying instructions. Linking this interview data to the study observation, teachers' attitude as

an ECE teacher towards SEN children has a major impact on the success of all learners. The Education for All initiative influenced classroom teachers to adopt a more inclusive education pedagogic suitable for both SEN and non-SEN children. Counselling service is a very important support service under this kind of support service. According to UNESCO (2012) counselling includes assisting pupils to overcome their emotional problems and change their maladjusted behaviours. It also helps pupils fulfil their potentials and facilitates their overall adjustment, both in school and society (Ocansey & Gyimah, 2016).



CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Overview

This chapter presents the summary, conclusion and recommendations based on the findings of this study.

5.2 Findings of the Study

The following were the key findings of the study:

The study underscores the importance of early identification of children's developmental challenges to prevent future learning difficulties, advocating for tailored support such as individualized instruction and specialized teaching methods. The study found that, teachers identify SEN children through observation, noting common challenges like physical impairments, visual issues, and low mental ability, as well as conditions such as dyslexia, dyscalculia, cerebral palsy, and ADHD, each with unique characteristics. However, limited training on special education for teachers and parents results in insufficient knowledge about disabilities, compounded by a lack of tools for early screening. Also, early identification sometimes faces resistance due to potential stigmatization and the extra workload it entails. Additionally, inadequate support from education offices, particularly in technical, assistive, and material resources, hampers schools' ability to effectively assist SEN children.

Also, the study uncovered environmental barriers affecting access, safety, and protection for SEN children, including insufficient infrastructure such as lack of ramps and poor ventilation, along with issues like classroom congestion and stigmatization. Again, physical obstacles like the absence of assistive devices and protective rails compound these challenges, hindering inclusive education. Participants stressed the

importance of proper ventilation, advocating for careful construction of school buildings and provision of fans.

Again, the study revealed a scarcity of special equipment like braille, hearing aids, and mobility devices in schools, although efforts by school leaders have been made to provide some of these devices. Support services primarily come through in-service training and workshops, which introduce techniques for teaching SEN children and improvising materials. However, community parents lack awareness of how to support schools in educating SEN learners. It was found that, teaching resources and Visual aids such as videos, posters, and pictures enhance teaching and learning by making lessons more appealing and reducing boredom among learners. Inclusive education heavily relies on the provision of teaching and learning aids, support services, and assistive devices for SEN children, without which proper inclusion is compromised.

Furthermore, it was emerged from the study that participants receive irregular training through workshops organized by the district education office and NGOs on teaching pedagogies, use of resources, and accommodating SEN learners. The study revealed that, practical teaching methods focused on identifying and addressing weaknesses, such as participatory learning and mixed grouping, enhance academic achievement for SEN learners. Modifying lesson plans, assignments, and assessments promotes creativity and improvisation to accommodate diverse learning needs, along with incorporating social and emotional skills training and SEN-biased resources to simplify instructions.

5.3 Conclusions

Based on the findings and results of this study, the following conclusions were made; That addressing the barriers to early identification and support for SEN children requires a multifaceted approach. This includes enhancing training programs for

educators and parents, developing robust screening tools, fostering a supportive and inclusive school environment, and ensuring adequate provision of resources by education authorities. By prioritizing early intervention and tailored support, we can create an educational system that nurtures the potential of every child, regardless of their individual challenges or disabilities.

Also, it was concluded that, addressing issues on environmental barriers is paramount to fostering an inclusive learning environment where SEN children can thrive. By prioritizing infrastructure improvements, promoting positive attitudes, and ensuring the availability of appropriate educational resources, we can create environments that support the diverse needs of all learners, thereby advancing the cause of inclusive education.

Again, the study also concluded that, enhancing the scarcity of essential equipment and support services in schools is paramount for ensuring the successful inclusion of SEN children. This requires collaborative efforts among educators, school leaders, parents, and community stakeholders to prioritize the provision of necessary resources and support networks. By investing in inclusive practices and resources, we can create learning environments that cater to the diverse needs of all learners, fostering their academic success and overall well-being.

Finally, the study underscores the importance of ongoing and comprehensive teacher training to equip educators with the knowledge and skills necessary for effective inclusive education practices. By employing practical teaching methods, modifying instructional materials, and prioritizing social and emotional development, educators can create inclusive learning environments that support the academic success and holistic development of all learners, including those with special educational needs.

5.4 Recommendations

The following recommendations were made from the study.

1. To tackle the obstacles hindering early identification and support for children with special educational needs (SEN), it's crucial to adopt a comprehensive strategy prioritizes the early intervention and tailored support that can build an educational system that nurtures the potential of every child, irrespective of their individual challenges or disabilities. As a result, it is recommended that, Ghana Education Service in collaboration with the Wa Municipal Education Directorate strengthens training initiatives for both educators and parents, equipping them with the knowledge and skills necessary to support SEN children effectively. Also, they should offer specialized training modules focusing on early identification methods, effective teaching approaches, and inclusive practices. Again, they must ensure equitable distribution of resources, including assistive technology, specialized instructional materials, and support personnel. Lastly, the GES must collaborate with educational institutions and organizations to develop comprehensive and accessible training materials. These multifaceted approaches aims to create an inclusive learning environment where all students can thrive and reach their full academic and personal potential.
2. It is imperative to address environmental barriers to foster an inclusive learning environment where children with special educational needs (SEN) can flourish. In this regard, it is recommended that the Government of Ghana through the Ministry of Education, allocate resources and funds to improve school infrastructure, including installing ramps, enhancing ventilation systems, and ensuring accessibility for all students. MoE must also collaborate with relevant stakeholders, such as local authorities and construction companies, to

implement necessary infrastructure upgrades. Also, regular assessments of school facilities must be conducted to identify and address any deficiencies that hinder inclusivity. Additionally, the GES must collaborate with educational stakeholders to develop inclusive educational materials that cater to a wide range of learning abilities and styles. Through this would create an environment that support the diverse needs of all learners, thereby advancing the cause of inclusive education.

3. It is again recommended in relation to the scarcity of essential equipment and support services in schools that, MoE and GES collaborate with educators, school leaders, parents, and community stakeholders to collectively address the needs of SEN children. Through this initiative, they must establish interdisciplinary teams or committees dedicated to identifying and prioritizing resource gaps and developing action plans for improvement. Also, there must be open communication and partnership between schools, local authorities, NGOs, and other relevant organizations to leverage resources and expertise. Through the Collaborative efforts among stakeholders by investing in inclusive practices and resources, can help create learning environments that cater for the diverse needs of all learners, thereby fostering their academic success and overall well-being.
4. Lastly, it is recommended for the final finding that the Wa Municipal Educational Directorate organize regular and ongoing professional development opportunities for educators focused on inclusive education practices, differentiated instruction, and understanding the diverse needs of students, including those with special educational needs (SEN). Also, there must be regular training sessions, workshops, and seminars led by experts in the field

of special education to enhance educators' understanding and implementation of inclusive teaching strategies. Lastly, the Municipal Education Directorate must lobby to acquire assistive technology and adaptive tools to enhance accessibility and accommodate the diverse needs of learners with disabilities. Through these can create an inclusive learning environment that support the academic success and holistic development of all learners, including those with special educational needs.

5.5 Suggestion for Further Study

The study's scope was confined to ECE teachers solely from the Wa Municipality, thereby limiting its breadth. Therefore, it is recommended that a study of broader reach, spanning across regions and nationwide, be undertaken to explore the challenges encountered in implementing inclusive education programs. Such an extensive study would enable the educational community and other stakeholders to gain insights into the perspectives of ECE teachers and the obstacles they encounter while implementing inclusive education programs. This, in turn, would facilitate the development of practical solutions aimed at mitigating or resolving these challenges.

Also, conducting a longitudinal study would help track changes in the implementation of inclusive education programs over time and assess the long-term impact on student outcomes, teacher practices, and school environments. It would examine the sustainability of inclusive education efforts and factors influencing their continuity or discontinuation over time.

1.5 Limitations of the Study

Due to the fact that the research was undertaken by an individual, financial constraints limited the study, and the restricted time frame for the completion was also a problem

for the study. The study is also limited by the fact that it was conducted in the Wa Municipality and that the findings cannot be applied to other municipalities or areas outside the study area.



REFERENCE

- Abosi, O. (2007). Educating Children with Learning Disabilities in Africa. *Learning Disabilities Research & Practice*, 22(3), 196-201. <https://doi.org/10.1177/1080136007301116>.
- Ackah-Jnr, F. & Danso, J. (2018). Examining the physical environment of Ghanaian inclusive schools: how accessible, suitable and appropriate is such environment for inclusive education? *International Journal of Inclusive Education*. 23. 1-21. 10.1080/13603116.2018.1427808.
- Agbenyega J.S. (2015). Strengthening literacy and numeracy in early childhood. In Deppeler Joanne M., Loreman Tim, Smith Ron, Florian Lani (Ed.), *International Perspectives on Inclusive Education*, 7, 25–43. Bradford, UK: Emerald Group Publishing.
- Agbenyega, J.S., Deppeler J. and Harvey D. (2005). Developing an instrument to measure teachers' attitudes toward inclusive education for students with disabilities. *Journal of Research and Development in Education*. 5, 1-10
- Ahmad, F. K. (2015). *Exploring the invisible: Issues in identification and assessment of students with learning disabilities in India*. *Transcience*, 6(1), 91–107.
- Ainscow, M. (2005). Looking to the future: Towards a common sense of purpose. *Australasian Journal of Special Education*, 29(2), 182- 186.
- Ainscow, M. (2016) Collaboration as a strategy for promoting equity in education: possibilities and barriers. *Journal of Professional Capital and Community*, 1 (2), 159 – 172
- Aiyaleso, M. M. (2017). The importance of early identification and intervention programme for children with hearing impairment in Nigeria. *Asia Pacific Journal of Education, Arts and Sciences*, 4(3), 1–7.
- Alhassan, A. M., & Abosi, O. (2014). Teacher effectiveness in special needs education in Ghana. *International Journal of Inclusive Education*, 18(6), 603-619.
- Allen, K., and Cowdery, G. (2015). *The exceptional child: Inclusion in early childhood education*. 8th ed. Australia: Cengage Learning.
- Al-Shammari, Z. (2019B). Using evidence-based cognitive teaching strategies with effect size in inclusion classrooms in Kuwait. *Saudi Journal of Special Education*, 10.
- Al-Shammari, Z., Al-Sharoufi, H., & Yawkey, T. D. (2008). Effectiveness of teaching methods with students with special needs in general education classrooms. *International Journal of Special Education*, 23(1), 11-16.
- Al-Shammari, Z., Faulkner, P. E., & Forlin, C. (2019), *Theories based Inclusive Education Practices*. In: *Education Quarterly Reviews*, Vol.2, No.2, 408-414.

- Ametepee, L. K., & Anastasiou, D. (2015). Special and inclusive education in Ghana: Status and progress, challenges and implications. *International Journal of Educational Development*, 41, 143-152.
- Anabi, D., Lowe, M., Koster, W., Bedell, G., Hetani, M, Avery, L., and Teplicki, R. (2018). *The mediating role of the environment in explaining the participation of children and youth with and without disabilities at home, in school, and in the community*. Arch. Phys.Med.Rehabil 95
- Anson Y. V. (2015). *A Case Study on Special Education in Ghana*. Retrieved on 10th January, 2015, from United Nations Educational, Scientific and Cultural Organisation: <http://unesdoc.unesco.org/images/0014/001459/145940e.pdf>
- Anson Yevu, V. (1988). *A Case Study on Special Education in Ghana*. Retrieved on 10th January, 2015, from United Nations Educational, Scientific and Cultural Organisation: <http://unesdoc.unesco.org/images/0014/001459/145940e.pdf>
- Armstrong, M. and Taylor, S. (2017) *Armstrong's Handbook of Human Resource Management Practice: Building Sustainable Organisational Performance Improvement*. Kogan Page, New York, 375-380.
- Atkinson, R. K. (2012). *Learning from examples: Instructional principles from the worked examples research*. Mississippi State University.
- Avoke, M. (2004). *Introduction to special education for universities and colleges*. University of Education, Winneba; Department of Special Education.
- Avoke, M. K. and Avoke S. K. (2004). *Inclusion, Rehabilitation and Transition Services in Special Education*. Department of Special Education. Winneba.
- Avoke, M., & Avoke, S. K. (2004). Inclusion, rehabilitation, and transition services in special education. *Journal of Inclusive Education*, 8(4), 387-396.
- Avramidis, E., Toulia, A., Tsihouridis, C., & Strogilos, V. (2019). Teachers' attitudes towards inclusion and their self-efficacy for inclusive practices as predictors of willingness to implement peer tutoring. *Journal of Research in Special Educational Needs* 19. 10.1111/1471-3802.12477.
- Biljana, P., Despina, S., & Jadranka, R. (2014). Early intervention and prevention of students with specific learning disabilities. *Procedia— Social and Behavioral Sciences*, 9(49), 701– 708.
- Black, K. (2010). "Business Statistics: Contemporary Decision Making" 6th edition, John Wiley & sons Blucher, M.E. (2017). *Stakeholders Perspectives of Play-based Learning in the First Year of Primary School*.
- Bornstein, M. H., Leventhal, T., & Lerner, R. M. (Eds.). (2015). *Handbook of child psychology and developmental science: Ecological settings and processes* (7th ed.)

- Boyle, J. R. & Rivera, T. Z. (2012). Note-taking techniques for students with disabilities: A systematic review of the research. *Learning Disability Quarterly*, 35(3), 131–143. doi:10.1177/0731948711435794.
- Braun, A. M. B., and Naami, A. (2021). Access to higher education in Ghana: examining experiences through the lens of students with mobility disabilities. *Int. J. Disabil. Dev. Educ.* 68, 95–115. doi: 10.1080/1034912X.2019.1651833
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101. Retrieved from www.QualResearch.com.
- Bureau of Exceptional Education and Student Services (2012). *A Parents' Introduction to Exceptional Student Education in Florida*. Florida: Florida Department of Education.
- Cele, N. (2023). *Lack of Supportive Resources for Inclusive Education in South African Schools*. 10.13140/RG.2.2.31858.48324.
- Center for Universal Design (1998). *The Universal Design File: Designing for People of All Ages and Abilities*. North Carolina State University, USA.
- Cheryan, S., Ziegler, S., Plaut, V. & Meltzoff, A. (2014). "Designing classrooms to maximize student achievement." *Policy Insights from the Behavioural and Brain Sciences*. 1 (1):4-12.
- Colleen, W. (2013). *Determining the Attitudes of Elementary School Teachers towards the Inclusion of Children with Disabilities, A Case Study of Three Elementary Schools in Goroka, Eastern Highlands Province, Papua New Guinea*, University of Waikato, New Zealand. Unpublished Master's Thesis
- Council for Exceptional Children (1996), *Inclusion-where are we today?* Today, 3, 1, 5-15.
- Council for Exceptional Children (2014). Standards for Evidence-Based Practices in Special Education. *Teaching exceptional children*, v46 n6 p206-212 Jul-Aug
- Creswell, J. W. (2005). *Educational Research: planning, conducting and evaluating quantitative and qualitative Research*, New Jersey, Pearson Education
- Creswell, J. W. (2007). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches* (2nd ed.). California: Sage.
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4th ed.). CA: Sage: Thousand Oaks.
- Crouch, M., & McKenzie, H. (2006). The Logic of Small Samples in Interview-Based Qualitative Research. *Social Science Information*, 45, 18. <https://doi.org/10.1177/0539018406069584>.
- Davey, L. (1991). The Application of Case Study Evaluations. *Practical Assessment, Research & Evaluation*.

- Davis, R. S., Williams, D. D., & Yanchar, S. (2008). The uses of randomization in educational research and evaluation: A critical analysis of underlying assumptions. *Evaluation & Research in Education*, 21(4),303-317.
- De Vos, A. S. (2002). *Qualitative Data Analysis and Interpretation*. In A. De Vos, H. Strydom, & F. C. L. Research at grassroots: For the social sciences and human service professions (2nd ed., pp. 363-372). Pretoria: Van Schaik.
- Dembo, M.H. (1994) *Applying Educational Psychology*. (5th ed.) New York: Longman Publishing Group.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The Sage handbook of qualitative research*. sage.
- Desforges, M., & Lindsay, G. (2010). *Procedures Used to Diagnose a Disability and to Assess Special Educational Needs: An International Review*. Warwick: National Council for Special Education
- Diamond, J. B. and Gomez, K. (2014). African American parents' educational orientations: The importance of social class and parents' perceptions of schools. *Education and Urban Society*, 36, 383-427.
- Dilnesaw, S. (2017). The effect of the physical learning environment on students' health, enjoyment and learning. *Journal Pendidikan Saints & Mathematic Malaysia vol.7 no.1 june 2017 / issn 2232-039*.
- Drake, D. D. (2019). Parents and families as partners in the education process: Collaboration for the success of students in public schools. *ERS Spectrum*, 34-35.
- Epstein, J. L. (2010). *School, family, and community partnerships: Preparing educators and improving schools (2nd ed.)*. Boulder, CO: Westview Press.
- Ertmer, P. A. & Newby, T. J. (2013). Behaviourism, cognitivism, constructivism: Comparing critical features from an instructional design perspective. *Performance Improvement Quarterly*, 26(2), 43–71. doi:10.1002/piq.21143.
- European Agency for Development in Special Needs Education. (2010). *Teacher Education for Inclusion – International Literature Review*, Odense, Denmark: European Agency for Development in Special Needs Education.
- European Commission Communication Improving the Quality of Teacher Education, (2007). *Communication (COM (2007) 392 final) — Improving the quality of the education and training of teachers*.
- Evgeniou, E. & Loizou, P. (2012). The theoretical base of e-learning and its role in surgical education. *Journal of Surgical Education*, 69(5), 665–669. doi:10.1016/j.jsurg.2012.06.005.
- Family Network on Disabilities, Inc (2011). *Understanding the Evaluation Process in Special Education*. Dunedin: FND.

- Farid, S. (2014). *Academic achievements of students with special needs in inclusive education, A case study of one primary school in Azerbaijan*, Department of Special Needs Education, Faculty of Educational Sciences, University of Oslo, Norway. Unpublished Master of Philosophy Thesis
- Fisher, J. B., Shumaker, J. B., and Deshler, D. D. (1995). Searching for validated inclusive practices: A review of literature. *Focus on Exceptional Children*, 28(4), 1-20.
- Fisher, R., Avis, J., & Thompson, R. (2015). *Teaching in Lifelong Learning: A guide to theory and practice*. (1-4 ed.) Open University Press. <https://www.mheducation.co.uk/9780335263332-emea-teaching-in-lifelong-learning>
- Forlin, C. (2015). *Challenges of implementing inclusive education in less resourced countries*. In W. E. Beykont (Ed.), *Special education in international perspectives: Practices across countries* (pp. 91-108). Springer.
- Forlin, C. (2015). *Inclusive education in low-income countries: Challenges and opportunities*. Routledge.
- Forlin, Chris. (2016). *Teacher Education for Inclusion: Changing Paradigms and Innovative Approaches*.
- Friend, M., & Bursuck, W. D. (2002). *Including Students with Special Needs: A Practical Guide for Classroom Teachers*. Third Edition.
- Gallagher, C., Elliott, A. D., Wong, C. X., Geetanjali, R., Melissa, E. M., Mahajan, R., Lau, D. H, & Sanders, P. (2017). Integrated care in atrial fibrillation: a systematic review and meta-analysis. *Heart*, 103:1947–1953.
- Gaurdino, C., & Fullerton, E. (2013). Changing behaviors by changing the classroom environment. *Teaching Exceptional Children*, 42(6), 8-13.
- Gersten, R., Baker, S. K., Shanahan, T., Linan-Thompson, S., Collins, P., and Scarcella, R. (2007). *Effective literacy and English language instruction for English learners in the elementary grades: A practice guide (NCEE 2007-4011)*. Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://ies.ed.gov/ncee/wwc/pdf/practiceguides/>
- Gersten, R., Haymond, K., Newman-Gonchar, R. & Dimino, J., & Jayanthi, M. (2020). Meta-Analysis of the Impact of Reading Interventions for Students in the Primary Grades. *Journal of Research on Educational Effectiveness*. 13. 1-27. 10.1080/19345747.2019.1689591.
- Ghana Education Service. (1995). *Special Education Division Document* (Unpublished Report). Accra, Ghana: Ministry of Education.
- Ghana Statistical Service (2010). 2010 population and housing census. Summary report of final results. Accra: Sakoa Press Ltd.
- Ghana Statistical Service. (2014). *2010 Population and Housing Census Report: Disability in Ghana*. Ghana Statistical Service: Accra, Ghana, pp. 29–30.

- Gliner, Jeffrey & Morgan, George & Leech, Nancy. (2017). *Research Methods in Applied Settings: An Integrated Approach to Design and Analysis*. 10.4324/9781410605337.
- GOG (Government of Ghana). (2013). *Inclusive Education Policy*. Ministry of Education.
- Gomda A., Sulemana, N. and Zakaria, H. (2022). Access to Education for Persons with Disabilities in Ghana: A Review. *Journals Environmental Sciences Proceedings Volume 15 Issue 1* 10.3390/Environsciproc2022015050
- Government of Ghana (2013), *Ghana's Draft Inclusive Education Policy*. Ministry of Education, Ghana.
- Government of Ghana (GOG). (2013). *Inclusive Education Policy*. Ministry of Education.
- Government of Ghana. (2003). *Policies, targets, and strategies*. Education Strategic Plan 2003–2015 May. Vol. 1. Ghana: Ministry of Education. Available at: <http://planipolis.iiep.unesco.org/upload/Ghana%20lan.pdf> (Accessed January 22, 2024).
- Grindal, T., Schifter, L. A., Schwartz, G., & Hehir, T. (2019). Racial differences in special education identification and placement: Evidence across three states. *Harvard Educational Review*, 89(4), 525–553. <https://doi.org/10.1177/004005991004200601>
- GSS (2010). *Revised 2010 Annual Gross Domestic Product*. WMA.pdf (statsghana.gov.gh)
- Guardino, C. A., & Fullerton, E. (2010). Changing Behaviors by Changing the Classroom Environment. *Teaching Exceptional Children*, 42(6), 8-13. <https://doi.org/10.1177/004005991004200601>
- Guardino, C., & Fullerton, E. (2013). Changing behaviors by changing the classroom environment. *Teaching Exceptional Children*, 45(2), 39-47.
- Gutman, L. M., and Vorhaus, J. (2012). The impact of pupil behaviour and wellbeing on educational outcomes. *Childhood Wellbeing Research Centre, Department for Education, Research Report DFE-RR253*
- Gyimah, E. K. and Vanderpuye, I. (2018). *Inclusive Education in Ghana: What Are The Levers For Change?* University of Cape Coast, Cape Coast.
- Gyimah, E. K., and Vanderpuye, I. (2009). Inclusive Education in Ghana: What are the levers for change? *Paper presented at Distance Education and Teacher Education in Africa DETA Conference 2009*.
- Hancock, B., Ockleford, E. and Windridge, K. (2007). *An Introduction to Qualitative Research*, Trent RDSU.
- Harding, M. (2017). Peer tutoring as a strategy to enhance communication skills for children with special needs. *Journal of Educational Research and Practice*, 7(4), 32-45.

- Harold, V., & Corcoran, T.J. (2013). Discourses on Behaviour: A Role for Restorative Justice? *International Journal on School Disaffection*, 10, 45-61.
- Hattie, J. (2008). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. London: Routledge.
- Hattie, John & Donoghue, Greg. (2016). Learning strategies: a synthesis and conceptual model. *NPJ Science of Learning*. 1. 16013. 10.1038/npjscilearn.2016.13.
- Hayes, A., Petrie, P., & Visscher, L. (2015). Early childhood education for children with special needs. *Journal of Childhood Research*, 24(3), 215-226.
- Hayes, N., Hartley, P., & Harris, J. (2015). Case studies in inclusive education: Best practices and applications. *Journal of Special Education Studies*, 12(2), 24-37.
- Henderson, A.T., & Mapp, K.L. (2002). A New Wave of Evidence: The Impact of School, Family, and Community Connections on Student Achievement. Annual Synthesis, 2002.
- Heward, W. L. (2013). *Exceptional Children: An Introduction to Special Education* (10th ed.). New Jersey: Pearson.
- Heyam Lutfi El Zein. (2018). *Parental involvement and advocacy in special education inclusion*. *International Journal of Inclusive Education*, 22(1), 49-63.
- Higginbottom, G. M. A. (2004). Sampling issues in qualitative research. *Nurse Researcher (through 2013)*, 12(1), 7.
- Higgins, S., Hall, E., Wall, K., Woolner, P. & McCaughey, C. (2005). *The impact of school environments: A literature review*. London: Design Council.
- Ho, L. Y. (2007). Child development programme in Singapore 1988 to 2007. *Annals of the Academy of Medicine*. Singapore, 36(2), 898-910.
- Hoover, J., & Stenhjem, P. (2003). Examining current challenges in secondary education and transition: Bullying and teasing of youth with disabilities, creating positive school environments for effective inclusion. *Issue Brief*, 2(3), pages 1 – 6.
- Hornby, G. (2015). Inclusive special education: Development of a new theory for the education of children with special educational needs and disabilities. *British Journal of Special Education*. 42. 10.1111/1467-8578.12101
- Hornby, G. (2015). Inclusive special education: Development of a new theory for the education of children with special needs. *British Journal of Special Education*, 42(3), 234-256.
- Jeynes, W. H. (2015). A meta-analysis: The relationship between father involvement and student academic achievement. *Urban Education*, 50(4), 387-423. <https://doi.org/10.1177/0042085914525789>
- Kandel, B. (2020). Qualitative Versus Quantitative Research. *Journal of Product Innovation Management*, 32(5), 658.

- Kawulich, B. B. (2015). Collecting Data Through Observation. Forum: Qualitative Sozialforschung/Forum: *Qualitative Social Research [on-line Journal]*, 6(2), Art. 43. Available at: <http://www.qualitative-research.net/fgs-texte/>
- Kingston M, Huber A, Onslow M, Jones M, Packman A. (2003). Predicting treatment time with the Lidcombe Program: replication and meta-analysis. *International Journal of Language Communication Disorder*, 38(2):165-77. doi: 10.1080/1368282031000062882. PMID: 12745935.
- Korstjens, I. & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing, *European Journal of General Practice*, 24:1, 120-124, DOI:10.1080/13814788.2017.1375092
- Krätzig, O., Franzkowiak, V., & Sick, N. (2019). Multi-level perspective to facilitate sustainable transitions — a pathway for german oems towards electric vehicles. *International Journal of Innovation Management*, 23 (6),1
- Kusi, H. (2012). *Doing qualitative research: A guide for researchers*. Accra Newtown, Ghana: Emimpong Press.
- Kuyini, A. B., & Desai, I. (2016). Inclusive education in Ghana: Implementation challenges and strategies for improvement. *Educational Research International*, 5(1), 22-32.
- Lapadat, J. C. (2017). Ethics in autoethnography and collaborative autoethnography. *Qualitative inquiry*, 23(8), 589-603.
- Lareau, A. (2002). *Invisible Inequality: Social Class and Childrearing in Black Families and White Families*. American Sociological Review, 67, 747 - 776.
- Lee, A. (2023). The Individuals with Disabilities Education Act (IDEA) in America and its impact on special education. *Journal of Educational Legislation*, 15(1), 98-106.
- Lewis M. (2017). *Addiction and the Brain: Development, Not Disease*. Neurotics, 10(1):7-18. doi: 10.1007/s12152-016-9293-4. PMID: 28725282; PMCID: PMC5486526.
- Lewis, R., & Doorlag, D. (2006). *Teaching special students in general education classrooms*. 7 ed. Upper Saddle River, NJ: Pearson/Merrill-Prentice Hall.
- Leyser, Y., & Kirk, R. (2014). Evaluating Inclusion: an examination of parent views and factors influencing their perspectives. *International Journal of Disability, Development and Education*, 51, 271 - 285.
- Leyser, Y., and Kirk, R. (2014). Evaluating inclusion: An examination of parent views and factors influencing their perspectives. *International Journal of Disability Development and Education*, 51, 271–85
- Lincoln, Y. S., & Guba, E. G. (2000). *Handbook of qualitative research. Paradigmatic controversies, contradictions, and emerging confluences*. In N. Denzin, & Y. Lincoln (Eds.). London: Sage Publication Inc.
- Lincoln, Y. S., & Guba, E. G. 1985. *Naturalistic inquiry*. SAGE, Newbury Park, California, USA.

- Lunenburg, F. C. (2010). *Communication: The Process, Barriers, and Improving Effectiveness*. Schooling, V.1,1
- Mahoney, J., & Goertz, G. (2006). *A tale of two cultures: Contrasting quantitative and qualitative research*. *Political Analysis*, 14(3), 227-249.
- Manoharan, A., & Singal, M. (2017). A systematic literature review of research on diversity and diversity management in the hospitality literature. *International Journal of Hospitality Management*, 66, 77–91.
- Marshall, B., Cardon, P.W., Poddar, A., & Fontenot, R. (2013). Does Sample Size Matter in Qualitative Research? A Review of Qualitative Interviews in is Research. *Journal of Computer Information Systems*, 54, 11 - 22.
- McDonnell, A., Collings, D. G., Mellahi, K. and Schuler, R. (2017) ‘Talent management: a systematic review and future prospects’. *European J. International Management*, Vol. 11, No. 1, pp.86–128.
- McLachlan, C., Flerer, M., & Edwards, S. (2013). Early childhood curriculum: Planning, assessment, and implementation. *Cambridge University Press*.
- McMillan, J., & Schumacher, S. (2014). *Research in education: Evidence-based inquiry (7th ed.)*. Edinburgh Gate: Harlow: Pearson Education Limited.
- McNamara, C. (2006). General guidelines for conducting research interviews. Retrieved June 13, 2017.
- Meijer, J. W. C. (2015). *Inclusive Education and Classroom Practice: Summary Report*, European Agency for Development in Special Needs Education, Odense: Denmark.
- Mertens, D. M., (2005). *Research methods in education and psychology: Integrating diversity with quantitative and qualitative approaches*. (2nd ed.) Thousand Oaks: Sage.
- Mills, A. J., Durepos, G. & Wiebe, E. (2010). *Case study research*. DOI: <https://dx.doi.org/10.4135/9781412957397.n91>
- Minnesota Disability Law Center (2010). *Identifying and Evaluating Students for Special Education Services*. Minneapolis: MDLC.
- Mugenda, O. & Mugenda, A. (1999). *Research methods, Quantitative and qualitative approaches*. Nairobi: Acts Press.
- Mujere, N. (2016). Sampling in research. In *Mixed methods research for improved scientific study* (pp. 107-121). IGI Global.
- Naami, A. and Mort, K S-T. (2023). Inclusive education in Ghana: How prepared are the teachers? *Front. Educ.* 8:1056630. doi: 10.3389/educ.2023.1056630
- Nacino-Brown, R., Brown, M., and Oke Festus E. (2016) *Curriculum and Instruction an Introduction to Methods of Teaching*. Macmillan International College Edition.

- Nakua, E., Yarfi, C., and Ashigbi, E. (2017). *Wheelchair accessibility to public buildings in the Kumasi metropolis, Ghana*. *Afr. J. Disabil.* 6, 1–8. doi: 10.4102/ajod.v6i0.341
- Nalliah, S., & Idris, N. (2014). Applying the learning theories to medical education: A commentary. *International e-Journal of Science, Medicine & Education*.
- National Center for Learning Disabilities (2020). *The Importance of Early Screening*. Washington: NCLD.
- Ocansey, S., & Gyimah, E.K. (2016). Counselling Needs of Pupils with Special Educational Needs and Disabilities in the Greater Accra Region of Ghana: Implications for Inclusive Education in Ghana. *Journal of Education and Practice*, 7, 99-109.
- Okyere, C., & Adams, M. (2018). Inclusive education in Ghana: Policy and practice. *Journal of Educational Change*, 19(1), 85-99.
- Oweini, A. & Zein, H. (2014). *Inclusive Education for Children with Special Needs: The Case of Lebanon*. 10.1007/978-94-007-6555-9_44.
- Owusu, G., Boakye, J. K., & Adusei, P. A. (2019). Challenges of inclusive education in Ghana. *International Journal of Special Education*, 34(1), 45-56.
- Pandey, P., & Pandey, M. M. (2015). *Research methodology: tools and techniques*. Retrieved from <http://euacademic.org/BookUpload/9.pdf>
- Parham, K. (2016). *Exceptional Circumstances: Issues in Early Childhood Special Education*. New Orleans: Creative Commons Attribution.
- Park, D., Kim, W. G., & Choi, S. (2019). *Application of social media analytics in tourism crisis communication*. *Current Issues in Tourism*, 22(15), 1810-1824.
- Petersen, D. (2014). *The cognitive theory of learning and its application to special education*. *Educational Psychology Review*, 26(3), 277-293.
- Polit, D., Beck, F. C. T., & Hungler, B. P. (2006). *Essentials of nursing research: methods, appraisal, and utilization*. Lippincott, New York, New York, USA.
- Pomerantz, E. M., Moorman, E. A., and Litwack, S. D., (2017). The how, whom, and why of parents' involvement in children's academic lives. *Review of Educational Research*, 77 (3), 373– 410.
- Porter, G. L., Smith, D., Timmons, V., Kelly, B., and Richler, D. (2011). *Exploring Inclusive Education Practices through professional Inquiry*. Sense Publishers, Rotterdam, The Netherlands.
- Porter, W. W., Graham, C. R., Bodily, R. G., & Sandberg, D. S. (2016). A qualitative analysis of institutional drivers and barriers to blended learning adoption in higher education. *The Internet and Higher Education*, 28, 17–27.

- Rogers, J. (2018). The inclusion revolution [Electronic version]. *Phi Delta Kappa - The Research Bulletin*, 11, 1-6.
- Sandelowski, M. (1986). *The problem of rigor in qualitative research*. *Advances in Nursing Science* 8:27-37. <http://dx.doi.org/10.1097/00012272-198604000-00005>
- Schoeman, M. (2013). *The implications of the South African Inclusive Education policy for parents and children with Down syndrome: A paper presented at the 12th World Down- Syndrome Congress*.
- Schoger, K. (2006). Reverse inclusion: Providing peer social interaction opportunities to students placed in self-contained special education classrooms. *Teaching Exceptional Children Plus*, 2(6), 1.
- Shammari, Z. A., Sharoufi, H. A., & Yawkey, T. D. (2008). The Effectiveness of Direct Instruction in Teaching English in Elementary Public Education Schools in Kuwait: A Research Case Study. *Education 3-13*, 129, 80-90.
- Silverman, D. (2005). *Instances or sequences? Improving the state of the art of qualitative research*. *Forum: Qualitative Social Research*, 6(3). Retrieved from <http://www.qualitative-research.net/index.php/fqs/rt>
- Simkus, J. (2022). *Snowball Sampling: Definition, Method and Examples*. Simply Psychology. www.simplypsychology.org/snowball-sampling.html
- Slavin, R. (2009). *Educational psychology: Theory and practice* (9th ed.). Upper Saddle River, New Jersey: Pearson Education, Inc.
- Smith, R., Kuchah, H. & Lamb, M. (2018). *Learner Autonomy in Developing Countries*. [10.1057/978-1-137-52998-5_2](https://doi.org/10.1057/978-1-137-52998-5_2).
- Soma, A., Kissiedu, K., & Nyame, I. (2023). Barriers to Early Identification and Intervention for Children with Special Education Needs (SEN) in Public Kindergartens (KGs) in the Sagnarigu District of the Northern Region, Ghana. *European Journal of Education and Pedagogy*, 4(6), 30-40. <https://doi.org/10.24018/ejedu.2023.4.6.519>
- Speziale, H. J., & Carpenter, D. R. (2011). *Qualitative research in nursing: Advancing the humanistic imperative*. Lipponcott: Willams & Wilkins.
- Streubert, H. J. (2007). *Designing data generation and management strategies*. Pages 33-56 in H. J. Streubert and D. R. Carpenter, editors. *Qualitative research in nursing: advancing the humanistic imperative*. Third edition. Lippincott Williams & Wilkins, Philadelphia, Pennsylvania, USA.
- Subbey, M. (2017). *Introduction to Special Education for the Early Childhood Educator*, Edsam Printing and Publishing Ltd, Cape Coast, Ghana.
- Swanson, H. L., Orosco, M. J., & Lussier, C. M. (2014). The effects of mathematics strategy instruction for children with serious problem-solving difficulties. *Exceptional Children*, 80(2), 149-168. [doi:10.1177/001440291408000202](https://doi.org/10.1177/001440291408000202).
- Tamakloe, E.K., Amedahe, F. K. and Atta, E.T. (2005). *Principles and Methods of Teaching*. Ghana Universities Press, Accra.

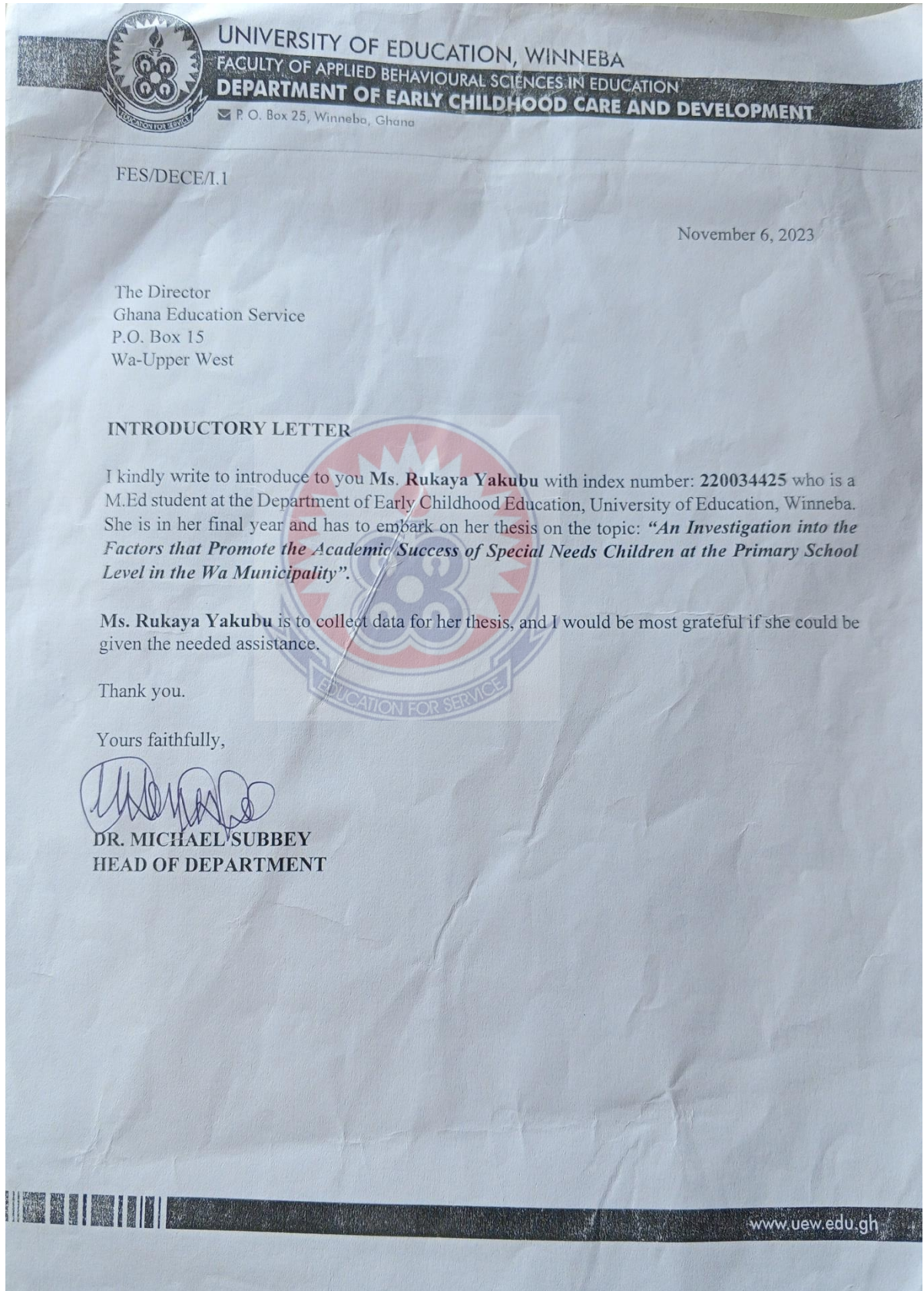
- Tamakloe, E.K., Amedahe, F.K., & Atta, E.T. (2015). *Principles and methods of teaching*. Accra: Ghana University press.
- Tanner, C. K. (2008). Explaining relationships among student outcomes and the school's physical environment. *Journal of Advanced Academics*, 19, 444–471
- Tarimo, J. J. (2013). *Teacher's use of play as a teaching strategy in pre-primary schools in Mwanga district, Kilimanjaro, Tanzania*.
- The Pennsylvania Training and Technical Assistance Network (2018). Ensuring quality education for all students.
- Torto, E. O. (2013). *Inclusive education in Ghana: An overview*. Paper presented at the international special education conference, University of Manchester, UK.
- Totusek, P.; Staton-Spicer, A. (2013). Classroom seating preference as a function of student personality. *Journal of Exp. Educ.*, 50, 159–163
- Tsadidey, I. (2018). *The effect of conflict on the livelihood of the people of Tsito – Awudome in the Ho West District of the Volta Region*. MPhil Dissertation, University of Education, Winneba: Ghana.
- Tsadidey, I. (2018). *The effect of conflict on the livelihood of the people of Tsito – Awudome in the Ho West District of the Volta Region*. MPhil Dissertation, University of Education, Winneba: Ghana.
- Tunmer, W., Chapman, J., Greatney, K., & Prochnow, J. (2002). The contribution of educational psychology to intervention research and practice. *International Journal of Disability, Development and Education*, 49(1), 11–29
- Turlubekova, M., Biryukov, V., Magrupova, Z., Kishibekova, G., & Bugubayeva, R. (2023). Analysis of the Environment Impact on the Inclusion of Children with Special Educational Needs. *Journal of Environmental Management and Tourism*, Volume XIV, Issue 5(69), Pg. 2354 - 2366.
- Turner III, D. W., & Hagstrom-Schmidt, N. (2022). *Qualitative interview design. Howdy or Hello?* Technical and professional communication.
- UN. (2014). *Convention on the Rights of Persons with Disabilities and Optional Protocol*. Retrieved on 14th January, 2023 from <http://www.un.org/disabilities/documents/convention/convoptprot-e.pdf>
- UNESCO (2016). “*Strong Foundation*”. Education for All Global Monitoring Report.
- UNESCO. (2010). “*Reaching the Marginalised*”. Education for All, Global Monitoring Report.
- UNESCO (2018). *Guidance and counselling for school-aged girls in Africa (Module 2)*. Retrieved April 24, 2023, from www.nzd.org/gsd/mo
- UNESCO. (2020). Global education monitoring report: Inclusion and education – all means all. *UNESCO*.
- UNICEF. (2018). Early childhood development and disability: A discussion paper. *UNICEF*.

- Vanderpuye, I. (2013). *Piloting inclusive education in Ghana: Parental Perceptions, Expectations and Involvement*.
- Walliman, N. (2015). *Social research methods: The essentials*. Social Research Methods, 1-264.
- WHO. (2011). *World Report on Disability*. WHO Press, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland.
- WHO. (2012). *Early Childhood Development and Disability: A Discussion Paper*. Geneva: WHO.
- Winter, E. & O'Raw, P. (2010). *Literature review of the principles and practices relating to inclusive education for children with special educational needs*. Trim, Northern Ireland: National Council for Special Education.
- Wirz, M., Zemon, D. H., Rupp, R., Scheel, A., Colombo, G., Dietz, V., Hornby, T.G. (2005). Effectiveness of automated locomotor training in patients with chronic incomplete spinal cord injury: a multicenter trial. *Arch Phys Med Rehabil*; 86:672–80.
- World Bank (2007). *People with Disabilities in India: From Commitments to Outcomes*. World Bank.
- World Health Organization (WHO). (2015). *International Classification of Functioning, Disability, and Health (ICF)*. WHO Press.
- Yin, R. K. (2003). *Case study research: Design and methods* (2nd ed.). Sage Publication Inc.
- Yin, R. K. (2012). *Case study methods: Research designs*. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology*, Vol. 2.
- Zedan R. F. (2018). Parent involvement according to education level, socioeconomic situation, and number of family members. *Journal of Educational Enquiry*, Vol. 11, No. 1, 2011, 13-28.
- Zhang, C., Bengio, S., Hardt, M., Recht, B., & Vinyals, O. (2016). *Understanding deep learning requires rethinking generalization*. *ArXiv*. /abs/1611.03530

APPENDICES

APPENDIX A

INTRODUCTORY LETTER





UNIVERSITY OF EDUCATION, WINNEBA
FACULTY OF EDUCATION STUDIES
DEPARTMENT OF EARLY CHILDHOOD EDUCATION
P.O. Box 23, Winneba, Ghana
+233 (020) 2041072

INTRODUCTORY LETTER REQUEST FOR DATA COLLECTION

Section A

Name of Student: RUKAYA YAKUBU
Index Number: 220034425
Contact No.: 0547266467 Year of Entry (Admission) 2022
Thesis Topic: AN INVESTIGATION INTO THE FACTORS THAT PROMOTE THE ACADEMIC SUCCESS OF SPECIAL NEEDS CHILDREN AT THE PRIMARY SCHOOL LEVEL IN THE WA MUNICIPALITY
GES Address of Research Area: GHANA EDUCATIONAL SERVICE MUNICIPAL EDUCATION DIRECTORATE, POST OFFICE BOX 15, WA - UPPER WEST REG. THE DIRECTOR
Signature: [Signature] Date: 2nd NOVEMBER 2023

(PLEASE ATTACH YOUR INSTRUMENTS)

Section B

Name of Supervisor: Justice Adu
Contact No.: 0244587555

Confirmation of;

1. Readiness of Chapter 1-3: The students is done with chapter 1 to 3 and is ready to go to the field.
2. Inspection and Validation of data collection instruments: The instrument for data collection has been validated for data collection.

Signature: Date:

APPENDIX B

Interview Guide for ECE Teachers

The purpose of this study is to **investigate into the academic success of Special Education Needs Learners in the early childhood education classrooms within the Wa Municipality of the Upper West Region of Ghana.** The semi-structured interview guide employed for this study had open-ended items which seek to identify the kind of SEN learners in Early Childhood Education classrooms; investigate how school environment promotes the academic success of SEN learners in Early Childhood Education classrooms; ascertain how support services promote the academic success of SEN learners in Early Childhood Education Classrooms; and to determine how teachers' classroom pedagogies promote the academic success of SEN learners in Early Childhood Education classrooms in the Wa Municipality. Your contribution toward providing information will be used for academic purposes **only** and shall be treated with the utmost confidentiality it deserves. Thank you.

SECTION A

Personal data:

Name (pseudonym):.....
Interview date:...../...../.....
Time:.....
Duration:.....
Class:.....
Educational qualification:.....
Length of teaching experience as ECE teacher:.....

SECTION B

1. Identification is an important exercise that allows teachers to detect learners with specific learning difficulties or disabilities and recommend them for assistance or treatment so that they can function successfully in and out of school. What is the kind of SEN learners present in Early Childhood Education classrooms in the Wa Municipality?

.....

Prompt

- a. In what ways do the early identification of children's developmental and learning problems help promote their academic success?
- b. In which ways do you use to identify Children with Special Education Needs?
- c. What category of SEN learners have you identified in your ECE classroom?
- d. How does the characteristics possess by children with SEN affects their learning?

- e. What factors might inhibit the early identification and assessment of learners with disabilities?
 - f. In what ways do teachers resist all forms of early identification of SEN Children?
 - g. Which aids and supports are provided so that SEN children stay in a regular classroom after identification?
2. A favourable school and classroom environment is a very important factor that can ensure the full integration and academic success of all learners especially SEN learners. How does the school environment promote the academic success of SEN learners in Early Childhood Education classrooms in the Wa Municipality?
-

Prompt

- a. How would the school environment conditions ensure access, safety and protection for SEN children?
 - b. In what ways do the presence of the school environment conditions cause physical barriers to inclusive education?
 - c. In what ways would proper ventilation prevent stuffiness in classrooms to enhance the general comfort and well-being of children and teachers?
 - d. How does effective furnishings, pictures, posters and displays of education materials and equipment can enhance the visual appeal of inclusive classrooms?
3. The availability of educational support services and resources in mainstream schools is seen as one of the school factors that tend to promote the academic success of special educational needs children. How do support services promote the academic success of SEN learners in Early Childhood Education classrooms in the Wa Municipality?
-

Prompts

- a. What special equipment (such as braille, hearing aids, mobility devices like wheelchairs and white canes, magnifying screens), are available to support SEN learners in schools.
- b. What special support services are available to support children with Special Educational Needs?
- c. How does teaching resources make teaching and learning easier at the ECE classroom?

- d. In what ways does visual aids and devices help make teaching and learning more efficient and beneficial for children with special educational needs?
 - e. In what ways would continuous absence of teaching and learning aids and support services hinder the proper inclusion of children with special educational need?
4. The classroom pedagogy is a critical factor in the academic success of children with special educational needs Please, in what ways do ECE teachers' classroom pedagogies promote the academic success of SEN learners in Early Childhood Education classrooms in the Wa Municipality?

.....

Prompt

- a. What kind of innovative training teachers receives prepares them to accommodate the special educational needs children in inclusive classrooms?
- b. How does ECE teachers' participation in special education trainings become more competent in teaching inclusive classes?
- c. What teaching techniques do ECE teachers implement to create an enabling classroom environment for all learners in their lesson delivery?
- d. In which way does the achievements of special educational needs children in inclusive schools be hinged on the teaching and learning methods adopted by the ECE teacher?
- e. How does participatory teaching and learning, shared problem-solving and the grouping of both SEN and non-SEN children enhances the learning outcomes of special educational needs children?
- f. In what ways do you infuse special education into the regular syllabus to enhanced the academic performance of special educational needs children?

APPENDIX C

OBSERVATIONAL CHECKLIST

This checklist sought to obtain data on the factors that promote the academic success of Special Education Needs Learners in the early childhood education classrooms within the Wa Municipality of the Upper West Region of Ghana. Specifically, it gathers data on the kind of SEN learners in Early Childhood Education classrooms; how the school environment promotes the academic success of SEN learners in Early Childhood Education classrooms; the kind of support services that promote the academic success of SEN learners in Early Childhood Education Classrooms; and how teachers' classroom pedagogies promote the academic success of SEN learners in Early Childhood Education classrooms in the Wa Municipality. Apart from this checklist, the researcher shall pay attention to emerging information in the process of observation.

ITEMS			
The kind of SEN learners at Early Childhood Education classrooms in the Wa Municipality		Yes	No
1.	I have a child with Specific Learning Disability (e.g. Dyslexia, Dyscalculia, Dysgraphia) in my classroom.	<input type="checkbox"/>	<input type="checkbox"/>
2.	I have a child with Attention Deficit Hyperactivity Disorder (ADHD) in my classroom	<input type="checkbox"/>	<input type="checkbox"/>
3.	I have a child with Autism Spectrum Disorder (ASD) in my classroom	<input type="checkbox"/>	<input type="checkbox"/>
4.	I have a child with Emotional Disturbance (e.g. anxiety disorder, schizophrenia, bipolar disorder, obsessive-compulsive disorder, and depression) in my classroom	<input type="checkbox"/>	<input type="checkbox"/>
5.	I have a child with Speech or Language Impairment (stuttering, trouble pronouncing words or making sounds) in my classroom	<input type="checkbox"/>	<input type="checkbox"/>
6.	I have a child with Visual Impairment (Partial sight and blindness) in my classroom	<input type="checkbox"/>	<input type="checkbox"/>
7.	I have a child with Deafness or Hearing Difficulty in my classroom	<input type="checkbox"/>	<input type="checkbox"/>
8.	I have a child with Deaf-blindness in my classroom	<input type="checkbox"/>	<input type="checkbox"/>
9.	I have a child with Orthopaedic Impairment in my classroom	<input type="checkbox"/>	<input type="checkbox"/>
10.	I have a child with Intellectual Disability in my classroom	<input type="checkbox"/>	<input type="checkbox"/>
11.	I have a child with Multiple Disabilities in my classroom	<input type="checkbox"/>	<input type="checkbox"/>
The Nature of School Environment Promote the Academic Success of SEN Learners In Early Childhood Education Classrooms in The Wa Municipality			
12.	Adapted school buildings accessibly for all children	<input type="checkbox"/>	<input type="checkbox"/>
13.	Accessible ramps for all children	<input type="checkbox"/>	<input type="checkbox"/>
14.	Accessible elevators for all children	<input type="checkbox"/>	<input type="checkbox"/>

15.	Wide doorways for children	<input type="checkbox"/>	<input type="checkbox"/>
16.	There is flight of stairs to rooms	<input type="checkbox"/>	<input type="checkbox"/>
17.	There are slippery outdoor surfaces	<input type="checkbox"/>	<input type="checkbox"/>
18.	The doors are heavy for children	<input type="checkbox"/>	<input type="checkbox"/>
19.	Proper room spacing and layout for children	<input type="checkbox"/>	<input type="checkbox"/>
20.	Good classroom sitting arrangement	<input type="checkbox"/>	<input type="checkbox"/>
21.	Children have access to learning materials	<input type="checkbox"/>	<input type="checkbox"/>
22.	There are well-maintained and furnished classrooms	<input type="checkbox"/>	<input type="checkbox"/>
23.	There is proper classroom ventilation	<input type="checkbox"/>	<input type="checkbox"/>
24.	There is adequate lighting in the classroom (natural and artificial illumination)	<input type="checkbox"/>	<input type="checkbox"/>
25.	The classrooms are well decorated and attractive with pictures, posters and displays of education materials and equipment.		
The Support Services that Promote Academic Success of SEN Learners In Early Childhood Education Classrooms in The Wa Municipality			
26.	There are enough printed materials like textbooks for learning	<input type="checkbox"/>	<input type="checkbox"/>
27.	There are enough graphics in the form of posters for learning	<input type="checkbox"/>	<input type="checkbox"/>
28.	There are maps and diagrams in the classroom for learning	<input type="checkbox"/>	<input type="checkbox"/>
29.	There brailles for visually challenged learners	<input type="checkbox"/>	<input type="checkbox"/>
30.	There are accessible mobility devices like wheelchairs and white canes	<input type="checkbox"/>	<input type="checkbox"/>
31.	There are accessible magnifying screens for learners	<input type="checkbox"/>	<input type="checkbox"/>
32.	There are accessible hearing aids for learning	<input type="checkbox"/>	<input type="checkbox"/>
33.	There are Counselling services for learners with emotional disorders	<input type="checkbox"/>	<input type="checkbox"/>

ECE Teachers' Classroom Pedagogies Promote the Academic Success of SEN Learners In Early Childhood Education Classrooms in The Wa Municipality			
34.	I have received training in innovative teaching techniques	<input type="checkbox"/>	<input type="checkbox"/>
35.	I put in place varying teaching techniques to create an enabling environment for all learners in lesson delivery	<input type="checkbox"/>	<input type="checkbox"/>
36.	I use collaborative teaching which infuses special education into the regular syllabus to enhanced the academic performance of my Special Educational Needs Children	<input type="checkbox"/>	<input type="checkbox"/>
37.	I use adapted teaching and learning materials to complement the usage of textbooks in my teaching and learning processes in classrooms	<input type="checkbox"/>	<input type="checkbox"/>
38.	I rely on the collaboration of both special and general teachers to develop both the cognitive and emotional needs of learners	<input type="checkbox"/>	<input type="checkbox"/>
39.	My attitude as an ECE teacher towards SEN children has a major impact on the success of all learners	<input type="checkbox"/>	<input type="checkbox"/>
40.	I incorporate best classroom practices in teacher education training to handle inclusive classes	<input type="checkbox"/>	<input type="checkbox"/>

