

UNIVERSITY OF EDUCATION, WINNEBA

**INCLUSIVE SCHOOL BARRIERS TO CHILDREN WITH
DISABILITIES AT EARLY CHILDHOOD CENTERS IN THE
NEW JUABENG MUNICIPALITY**



MASTER OF PHILOSOPHY

2021

UNIVERSITY OF EDUCATION, WINNEBA

**INCLUSIVE SCHOOL BARRIERS TO CHILDREN WITH DISABILITIES AT
EARLY CHILDHOOD CENTERS IN THE NEW JUABENG MUNICIPALITY**



**A thesis in the Department of Early Childhood Education,
Faculty of Educational Studies, submitted to the School of
Graduate Studies, in partial fulfilment
of the requirements for the award of the degree of
Master of Philosophy
(Early Childhood Education)
in the University of Education, Winneba**

DECEMBER, 2021

DECLARATION

STUDENT'S DECLARATION

I, Kuade Georgina, declare that this thesis, with the exception of quotations and references contained in published works which have duly 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 as laid down by the University of Education, Winneba.

NAME OF SUPERVISOR: Dr. Michael Subbey

SIGNATURE:

DATE:



ACKNOWLEDGEMENTS

I would like to express my deepest thanks and appreciation to a number of people whose invaluable support, dedication, vigour and guidance have made this work possible from the beginning to the end. I would like to acknowledge a profound depth of gratitude to my supervisor Dr. Michael Subbey, whose concern, rigorous guidance, prompt feedback and dedication played a pivotal role in ensuring that this work comes to fruition. His critical mind on issues inspired me as it kept me on my toes all the time and his support for students is beyond measure. Looking back today, I can confidently say that I appreciate your work and I am glad to have been one of the recipients of your wisdom.

I am grateful to Prof. Lucy Effeh Attom (Dean – Faculty of Social Sciences) whose advice kept me going. I knew I could always count on you when I needed support. My love and gratitude goes to my family; My two beautiful princesses Michelle and Laura for being patient with me to allow me pursue my dream and their ability to persevere during my absence, I wish I could erase all the frustrations they endured. Not forgetting Patricia A K .Nyemebiou.

To all those not mentioned here but have inspired me, thank you! Finally, I thank the University of Education, Winneba for providing me with the opportunity to pursue this degree at this stage in my life

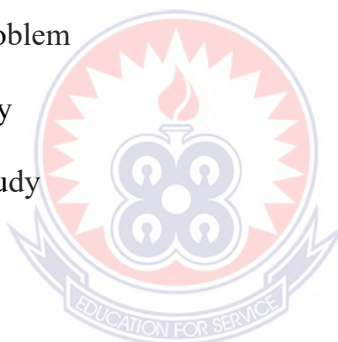
DEDICATION

To the Almighty God for His infinite mercies and sustenance, Mr. Justice Maxwell Acquah and Madam Ablewor Kuade who have had a great influence on my life and lastly Michelle Nyarko-Ampem and Laura Nyarko-Ampem.



TABLE OF CONTENTS

Content	Page
DECLARATION	iii
ACKNOWLEDGEMENTS	iv
DEDICATION	v
TABLE OF CONTENTS	vi
ABSTRACT	viii
CHAPTER ONE: INTRODUCTION	1
1.0 Overview	1
1.1 Background to the Study	1
1.2 Statement of the Problem	6
1.3 Purpose of the Study	8
1.4 Objectives of the study	8
1.5 Research questions	8
1.6 Delimitations	9
1.7 Limitations	9
1.8 Significance of the study	9
1.9 Operational Definition of Terms	10
1.10 Organization of the study	11
CHAPTER TWO: REVIEW OF RELATED LITERATURE	12
2.0 Overview	12
2.1 Theoretical Framework	12
2.2 Conceptual Framework	13
2.3 The Concept of Inclusive Education	14
2.4 Categories of Disability	21



2.5 Resources available to support the teaching and learning of children with disabilities in inclusive early childhood centers.	29
2.6 The level of training of teachers handling children with disabilities in inclusive early childhood centers in the new Juabeng Municipality.	35
2.7 Challenges Teachers face in handling Children with Disability	39
2.8 Context of Effective Teaching	57
2.9 Summary	61
CHAPTER THREE: METHODOLOGY	62
3.0 Overview	62
3.1 Philosophical Underpinning	62
3.2 Research Design	63
3.3 Instrumentation	64
3.4 Population	64
3.5 Sample and Sampling Technique	65
3.6 Data collection	66
3.7 Data Analyses	69
CHAPTER FOUR: RESULTS AND DISCUSSION	70
4.0 Overview	70
4.1 Demographic characteristics of respondents	70
4.2 Data Presentation and Analysis	71
4.3 Categories of children with disability in early childhood centers in the New Juabeng Municipality.	72
4.4 Resources available to support the teaching and learning of children with disabilities	78



4.5 Level of training for teachers handling children with disabilities in early childhood centers	82
4.6 Challenges teachers face in handling children with disabilities in inclusive classrooms.	86
4.7 Analysis of Observational checklist data	89
4.8 Documentary Analysis	92
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS	
5.0 Overview	93
5.1 Summary	93
5.2 Conclusion	96
5.3 Recommendations	96
REFERENCES	97
APPENDICES	108
APPENDIX A: Interview Guide for Teachers	111
APPENDIX B: Checklist for Categories of Disability	113
APPENDIX C: Checklist for Teaching and Learning Resources Available	114
APPENDIX D: Level of Training of Teachers	115



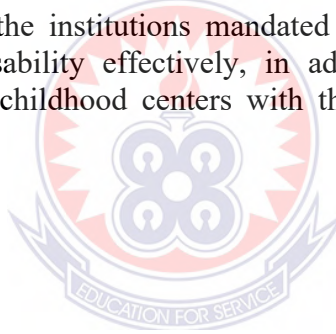
LIST OF FIGURES

Figure	Page
1: Conceptual Framework	13
2: Categories of Disability Present	72
3: How the Categories were Identified	76
4: Resources Available to Support Teaching and Learning	78
5: Sources of the Resources Available	80
6: Frequency of use of Resources Available	81
7: Level of Training of Teachers	82
8: INSET Programmes Attended	83
9: Special Education Courses Attended	85
10: Challenges Teachers Face in Handling Learners with Disability	86



ABSTRACT

The study focused on the challenges teachers face in handling children with disability in inclusive early childhood centers and the training level of teachers handling pupils with disabilities in the New Juabeng Municipality. This study used a constructivist lens to highlight the barriers faced by children in inclusive early childhood centers. The case study design was employed in the study and purposive sampling was used to select the early childhood centers. The study sample was 31 respondents because of the in-depth nature of the study; this was made of 10 teachers and 21 learners. The study used semi-structured interview and observation checklist to collect data from respondents. In total, four (4) disability types were found which included low Vision (Partially sighted), Hearing impaired (hard at hearing), Hyperactive and children with Learning Disability. Each of the early childhood centers under study recorded at least one disability. It was revealed by the study that the level of training in special education for teachers handling learners with disability are inadequate and in-service training is not regularly organized for teachers in the inclusive early childhood centers. The study also revealed that there are inadequate supply of teaching and learning resources to the early childhood centers. The study showed that the physical structure, furniture, behaviour and class management are among some of the challenge faced by teachers in handling learners with disability in inclusive early childhood centers. It was recommended that teachers should be given enough training in special education by the institutions mandated to train teachers to enable them handle learners with disability effectively, in addition Ghana Education Service should supply the early childhood centers with the needed resources for effective teaching and learning.



CHAPTER ONE

INTRODUCTION

1.0 Overview

This chapter consists of the background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, limitations, and delimitations, scope of the study and the organization of the study.

1.1 Background to the Study

In the past, children with disabilities have been seen as objects of shame and pity. According to Avoke and Avoke (2004), persons with disability in Ghana were thought to be possessed by evil spirits and to bear the curses of the gods because of disobedience of their families or parents.

Disability has become a human rights issue in recent decades (UNESCO, 2009). The Convention on the Rights of the Child (CRC, 1989) became the first treaty to strengthen the rights of children. The CRC ensures the enjoyment of all rights for all children with disability (United Nations, 1989). Article 2 of the Convention on the Rights of the Child prevents children from being discriminated against because of their disability. In Article 23, children with disability are also given concrete rights and freedoms, and the importance of promoting their full livelihood and the freedom of their self-employed persons is emphasized. The CRPD specifically references in it Article 7 the responsibility of children with or without disability to fully enjoy all human rights on an equal basis, and demands that these rights be protected. The UNESCO World Conference on Disability Education: Access and Efficiency, held in Spain in 1994, called for a change in policy demanding changes to ensure education for all children regardless of their disability (UNESCO, 1994). The conference also

agreed that inclusive education is the surest way of ending racial behaviours and maintaining an inclusive community. Hence, governments must use all means at their disposal to largely replace the current conventional education system, and develop and enforce a system of national education that is, inclusive and equal. In order to be effective the country's initiative must reach across many layers, from management, teacher training, curriculum flexibility, support services, and over all our community as a whole. Avoke (2001) explained how, amid the trend towards inclusive education, people with disabilities were being institutionalized. The state of inclusive education in Ghana is shrouded by barriers which include factors such as availability, accessibility, adaptability, and acceptability. The key factor that causes these barriers that keep inclusive education in Ghana stuck behind is the lack of education for children with disabilities (Sayed, Acheampong & Ampiah, 2000). Accordingly, the Ghana Education Service (2004:15) reported that: "Ghana's government's challenges in ensuring social and educational inclusion include the public's prejudiced perception of individuals with disability, architectural barriers, inadequate assessment facilities, inaccessible curricula, inflexibility in the curriculum and pre-/post-training of special education needs for regular tuition."

In line with this, as a sign of support for the Salamanca Declaration, the Government of Ghana agreed to introduce fully comprehensive education systems by 2015 and to ensure that children with special educational needs co-exist in mainstream schools with other children without disability and are open to equal opportunities (Yekple and Avoke, 2006). In addition, Ghana, a signatory to the Education For All (EFA) principles and processes, developed a work program within the Education Strategic Plan based on the priorities of the World Education Forum in 2000 (GES,2003). Coupled with agitations from disability groups like the Ghana Society for the

Physically Disabled (GSPD) and the Ghana Society for the Blind (GSB), the government of Ghana in September, 2003 agreed with Voluntary Service Overseas (a British Nongovernmental Organization) to have ten districts within Greater Accra Region, Central Region and Eastern Region, pilot the inclusive system of education and while it yields success be extended to the remaining seven regions (Agbenyega, 2007).

To demonstrate the government's commitment to inclusion, in August 2006, the Parliament of Ghana passed the Persons with Disability Act, which creates a council for persons with disability to protect the full enjoyment of the rights of persons with disability and to honour the country's obligations (CHRI, 2007). Given these considerations, the Act captures the rights, employment, education, transportation, housing facilities, effective health care, adequate medical rehabilitation services, generation and dissemination of relevant information and participation in cultural activities of persons with disability. As a part of the Medium-Term National Development Policy Framework (Ghana shared Growth and Development Agenda (GSGDA), 2010-2013, volume 1, action plans for the development and implementation of the provisions of the said Act), government has made provisions for the provision of disability specific facilities.

Despite government support to integrate children with and without disabilities in mainstream schools, barriers still exist (UNESCO, 2009). According to Subbey (2017), these barriers prevent many children with disabilities from completing their education. UNESCO reports that 10 percent of all children under the age of 15 are children with disability, and of this 10 percent, half do so with primary education incomplete.

Education of children with disabilities has come a long way; from special education to integrated education and from integrated education to inclusive education (access to the main stream). In spite of the support by a number of policies and programs from time to time to accelerate the pace of all the efforts made in this direction, regular schools with inclusive orientation face many barriers and challenges. The whole idea of inclusive education can be defeated due to bad attitude and sensitivity on the part of teachers, parents, community and classmates. Few trained teachers, large class size, lack of child centered and relevant curriculum, limited appropriate teaching learning materials, teachers lack the competence and the will to modify methodology as per the need, inadequate infrastructure, issues of accessibility to main stream schools and low levels of participatory activities. When inclusion is in place, the child who needs the inclusion does not stand out. To be able to deal with all the challenges it is necessary to sensitize people about it and focus on providing education of three H- Head, Heart and Hand especially education of the heart which is related to feeling aspect. As the formal schooling is rigid in terms of time, curriculum, learning pace, evaluation and is unable to accommodate and retain children with disability it is necessary to look for an alternative strategy and approach.

Even today, people consider any difference in learning as learning disability, impairment or handicap and treat them as victims or patients who need special care or special schools. Many children with disability do not get access to any kind of education. Rather, they are kept at home or are institutionalized because families do not get support from community in raising them or are made to feel ashamed (Stancis, 2009). Many people still have difficulties in accepting diversity. The stigma a learner with learning differences experiences can be more detrimental and painful than the difference itself.

Persons with disabilities are socially ostracized in most societies which may be due to their attitudes of fear, ignorance, lack of awareness and traditional prejudices (Stancis, 2009). Some people in this modern era still believe that educating children with disabilities is senseless and futile; many are already marginalised by dimensions such as poverty and gender. While many educational programs have attempted to reach out to these previously excluded children, those with disability are often forgotten, emphasising their invisible status in a rigidly categorised society (Martiny, 2015). The social exclusion and negative attitudes result in social discrimination and thus leads to isolation, which produces barriers to inclusion. These barriers are caused by society, which is more serious than any particular medical impairment. Another social discrimination is environmental exclusion which takes place when public services, buildings, and transport services are designed with total disregard to the access needs for persons living with disability in mind.

Another challenge in the inclusive school is high teacher-learner ratio. For a teacher, it is not possible to deal with so many learners with diversity. It becomes difficult for children to adjust with so many children and sometimes children with disability feel alien in the normal classroom.

In any education system, the curriculum is one of the major obstacles or tools to facilitate the development of more inclusive system. In our country curriculum is unable to meet the needs of a wide range of different learners. In many contexts, the curriculum is centrally designed and rigid, leaving little flexibility for local adaptations or for teachers to experiment and try out new approaches. As a result of the knowledge based curriculum, the examinations are also too much content oriented rather than success oriented. Usually children with disability need more time to read or to write their paper. In certain cases severe problems arise for arranging Writers to

assist children with disability during examination. Jha (2002) states, “There are walls between schools age children before they get enrolled, they face walls with curriculum inside the classrooms and finally they face more walls when they have to take examinations which determine how successful they will be in life”.

Regardless of the challenges faced by children with disability, it is crucial to society, government, and schools that all children can enjoy the rights to education. Therefore, it is the responsibility of the government to ensure that children with disability fully enjoy these rights. The aim of this study is therefore to assess the barriers faced by children with disability in inclusive early childhood centers within the New Juaben Municipality.

1.2 Statement of the Problem

According to the Ghana Statistical Service (2012), 4.3% of the population in the New Juabeng Municipality have one type of disability or the other. Majority of Persons with Disability (PWDs) have visual impairment, followed by physically disability and emotional disorders (GSS, 2012). There are slightly more females with mobility impairment (physical) than males. Slightly higher percentage of females (4.7%) have disability than males (3.9%). Inclusive approach to education is the solution to the years of discrimination and marginalization experienced by children with disability but its implementation though consistent has come at an unacceptably slow rate due to the fact that children with disability have been denied rights that are freely enjoyed by their counterparts without disability (UNESCO, 2009). According to Sayed et al (2000), education for learners with disability in Ghana has been bedeviled by problems of availability, accessibility, adaptability and acceptability. Additionally, the Ghana Education Service (2004), stated that the challenges of inclusive education in Ghana is perceptual, architectural, curricula and the training of teachers.

According to Subbey (2017) these challenges compel many persons with disability unlike their counterparts without disability to drop out of school especially at the basic level. Estimations by the World Bank reveal that, of the 115 million children that drop out of school globally, children with disability constitute 30% to 40% (World Bank, 2003). UNESCO (2009) posited that 10% of all children in school are children with disability, and of this, just half complete primary education. These barriers hinder the quest of children with disability in enjoying their rights to education like their counterparts without disability.

The researcher had a personal experience during a practicum session when the researcher visited some early childhood centers in the New Juabeng Municipality on the 16 of December 2019. The researcher found out that most of the teachers were not specially trained in special education to enable them handle the learners with disability in their classrooms. The researcher realized that the learners were not given the needed attention they deserved, some of the learners with disability had challenges in maneuvering around the classroom and also accessing some facilities in the school and they tend to be isolated or neglected by their peers without disabilities. In addition during an interaction with teachers at a training workshop on the new Standard Based Curriculum on the 13 of August 2019, some of the participants (teachers) expressed dislike about the fact that they are to accept children with disability into the classroom.

The study therefore sought to explore the difficulties that confront learners with disability in inclusive early childhood centers. The study assessed the challenges face by teachers in handling learners with disability. The level of training of teachers handling learners with disability was also examined as a means of assessing the barriers it presents.

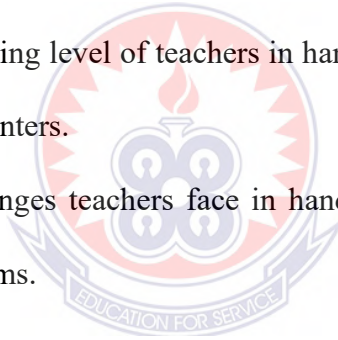
1.3 Purpose of the Study

In an attempt to underscore the plight of learners with disability, this study sought to explore the barriers confronting children with disabilities in inclusive early childhood centers in the New Juabeng Municipality.

1.4 Objectives of the study

This study sought to;

1. Explore the categories of children with disability in early childhood centers in the New Juabeng Municipality
2. Assess the resources available to support inclusive education in the early childhood centers in the New Juabeng Municipality.
3. Examine the training level of teachers in handling children with disabilities in early childhood centers.
4. Assess the challenges teachers face in handling children with disabilities in inclusive classrooms.



1.5 Research questions

Based on the objectives, the following research questions were developed to guide the study's attempt to address inclusive school barriers to children with disability.

1. What are the categories of children with disability in the early childhood centers?
2. What are the resources available to support inclusive education in the early childhood centers in the New Juabeng Municipality?
3. What is the level of training of teachers handling learners with disability in early childhood centers?

4. What are the challenges teachers face in handling learners with disability in inclusive classrooms?

1.6 Delimitations

The focus of this study was to assess the barriers confronting children with disability. Geographically, the study was conducted in the New Juabeng Municipality which is one of the districts in the Eastern Region and was established in 1988 by the Legislative Instrument (LI) 1426. Only inclusive early childhood centers were involved in the study. The following categories of exceptionality were focused on for the purpose of this study, visual impairment, hearing impairment (hard at hearing), children with learning disability and Behaviour disorder.

1.7 Limitations

Leedy and Ormrod (2001) point out that during the research process, the researcher cannot avoid having data contaminated by one form of bias or another. It is however unethical and unprofessional to fail to acknowledge the possibility of such limitations. The most significant challenge to this study was that the early childhood centers delayed to permit the researcher to conduct the study there. This upset delayed the collection of data by the researcher. Despite the challenges faced by the researcher, data were collected from the facilitators.

1.8 Significance of the study

The findings of the study would bring to light the difficulties that confront children with disability and attract the attention of relevant stakeholders to probe further into the progress of inclusive education in Ghana. This will serve as an effective means of combating discriminating attitudes, creating welcoming communities, building an

inclusive society and achieving education for all which has been the major cause of school drop out by children with disability.

The study would inform the appropriate authorities about the unavailability of resources for the teaching of learners with disability. The study would also inform authorities about the categories of children with disabilities in inclusive early childhood centers, the resources available to support inclusive education and the challenges teachers face in handling learners with disability.

Finally, the study would also serve as a guide in knowing the level of training of teachers handling children with disability. This will be a guide to future policy and practice adjustment with the view of appropriately training teachers.

1.9 Operational Definition of Terms

In light of the current study the following words have been operationalised and their meanings are;

Inclusive Education (IE); is a situation where children with and without disability, HIV status, age and children of diverse backgrounds and abilities learn together in the same classroom, interact socially with each other within the regular school setting for the whole day.

Disability; It is an inability to perform a task or function as a result of loss of body part or organ

Early childhood centers; is an environment where children between the ages of zero to eight years are trained to prepare them for further education. It comprises children in the nursery, Kindergarten and children in basic one to three but for the purpose of this study, it will be delimited to only Kindergarten.

Barriers; A circumstance or obstacle that keeps people or things apart or prevents progress.

Visual impairment; is ones inability to see clearly or not.

Hearing impairment; is partial or total inability to hear.

Physical impairment; is ones inability to move, coordinate actions or perform physical activities partially or totally.

1.10 Organization of the study

The study is organized into five chapters. Chapter one deals with the background to the study which involves the introduction, statement of problem, objectives of the study, research question, scope, the significance of the study, limitations and delimitations and ends with organization of the study. Chapter two focuses on the review of related literature. This will include the overview, the categories of children with disability, level of teacher training, the resources available for the teaching and learning for learners with disability and the challenges teachers face in handling learners with disabilities.

Chapter three deals with the research methodology which consists of the research design, population, sample and sampling technique, research instrument, data collection and data analysis while chapter four presents an analysis and discussion of the results. Chapter five states the summary of key findings and conclusions made in the discussion of results and then makes recommendations on the steps to be taken to remedy the situation.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Overview

This chapter reviews relevant literature with regard to inclusive education. This chapter reviewed related articles, books, and journals in relation to the research objectives. The literature is divided into the following subtopics;

1. Theoretical framework
2. Conceptual framework
3. The concept of inclusive education
4. Categories of disability
5. Inclusive education in Ghana
6. Resources available to support inclusive education
7. The training level of teachers
8. Challenges teachers faced in handling children with disabilities

Disability derives from a normal human condition that happens among all individuals during any stage during their existence. According to Subbey (2017), disability can also have incapacitating consequences whether it is viewed as a limitation or failure to conduct an action or as a lack of success of the activity in the manner or range deemed natural for human beings. This section of the study reviews relevant literature on the topic.

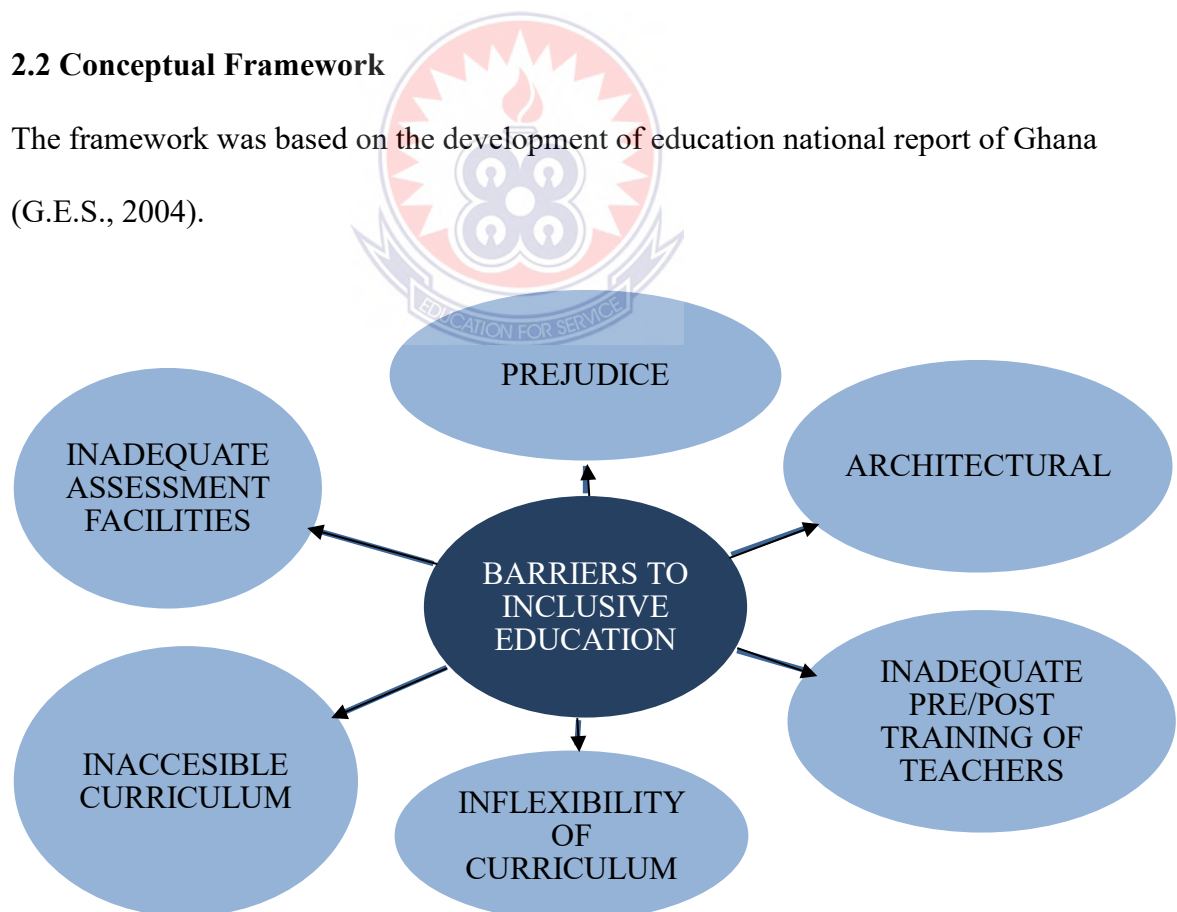
2.1 Theoretical Framework

The researcher used the social model of disability to highlight the barrier faced by children with disability “The Social Model frames disability as something that is socially constructed. Disability is created by physical, organizational and attitudinal

barriers and these can be changed and eliminated. This gives us a dynamic and positive model that tells us what the problem is and how to fix it. It takes us away from the position of “blaming” the individual for their shortcoming. It states that impairment is, and always will be, present in every society, and therefore the only logical position to take, is to plan and organize society in a way that includes, rather than excludes, disabled people. (Martiny, 2015). The learning environment should be organised to provide equity for all children rather than the environment favouring only a few of the children. The social model of disability best fits what is expected of society and early childhood centers to do in order to serve both children with special need and their friends without disability.

2.2 Conceptual Framework

The framework was based on the development of education national report of Ghana (G.E.S., 2004).



Source: *The development of education national report of Ghana* (G.E.S., 2004)

2.3 The Concept of Inclusive Education

The concept of inclusion is far from new and has its origins in the field of special education and disability. During the 19th century, pioneers of special education argued for and helped develop provision for children and young people who were excluded from education (Reynolds & Ainscow, 1994). Much later, governments assumed responsibility for such provision. The twentieth century saw the emergence and development of the field of special education and special schools became very much the norm for learners with disability. The segregated education of children according to their difficulties was seen as essential because they were deemed to be incapable of benefiting from ordinary methods of instruction (Thomas, Walker & Webb, 1998).

Historically, segregated special education was supported by the medical model of disability which views the barriers to learning as being within the child. It was also bolstered by advances in psychometrics. Both of these models facilitated categorisation and separate educational provision according to the learner's disability. This segregated approach largely went unchallenged for many years. As the field of special education expanded, it became the received and unquestioned wisdom that separate provision was the appropriate and most effective option for meeting the needs of a minority of children while safeguarding the efficient education of the majority (Pijl, Meijer and Hegarthy, 1997).

It was only with the rise of the world-wide civil rights movement in the 1960s that the system of parallel provision began to be questioned. As people with disability challenged the stigmatising and limiting nature of segregated education, and gave voice to their anger and dissatisfaction, issues of equality of access and educational

opportunity gained impetus and integration became center stage. Political pressure from disability and parental advocacy groups began to change society's values and would ultimately bring legislative changes to reform education. Educators were increasingly exploring ways of supporting previously segregated groups so that they could find a place in mainstream schools. At the same time, the efficacy and outcomes of segregated education came under scrutiny. Specifically, evidence about the lack of success of segregated provision began to accumulate with such consistency that it could no longer be ignored (Thomas et al., 1998). Researchers also began to highlight the fact that the special school system selected children disproportionately from racial minorities and socially disadvantaged groups (see Dunn, 1968; Tomlinson, 1985). By the end of the twentieth century there was a growing consensus, resulting from moral imperatives and empirical evidence, that inclusion was 'an appropriate philosophy and a relevant framework for restructuring education' (Thomas et al., 1998).

The current emphasis on inclusive education can be seen as another step along this historical road. It is, however, a radical step, in that it aims to transform the mainstream in ways that will increase its capacity for responding to all learners (Ainscow, 1999). The shift towards inclusion is not simply a technical or organisational change but also a movement with a clear philosophy which is rooted in the ideology of human rights:

This view implies that progress is more likely if we recognise that difficulties experienced by learners result from the ways in which schools are currently organised and from rigid teaching methods. It has been argued that schools need to be reformed and pedagogy needs to be improved in ways that will lead them to respond positively to learner diversity-seeing individual differences not as a problem to be fixed, but as opportunities for enriching learning' (UNESCO, 2009, p. 9).

Inclusive Education (IE) is an approach or a process which occurs when children with and without disability, HIV status, age and children of diverse backgrounds and abilities learn together in the same classroom, interact socially with each other within the regular school setting for the whole day. It aims at social inclusion and implements the child's right as pronounced in the universal declaration in human rights of 1949 (UNESCO, 2009). Inclusive learning is the result of effective teaching practice, an adapted learning environment and teaching approaches which ensure that all children are included, engaged and supported. Inclusion is seen as the wider reform of the education system to create a more effective education system and society. The inclusive education approach is to create an education system that is responsive to learner diversity and to ensure that all learners have the best possible opportunities to learn. In addition inclusive education focuses on those who were formally excluded but are being given the equal opportunity, such children include and are not limited to persons with hearing impairment, visual impairment, children with intellectual disability, children with physical disability, children with deaf-blindness, person with multiple disability, children with speech and communication disorder, children with attention deficit hyperactivity disorder children, autistic children, children that have been displays by natural disasters and social conflicts, shepherd boys, fisher folks and domestic child workers. There has been a new approach to inclusive education in recent years. In contributing to the complex field of inclusion, Sandkull (2005) described inclusive education as acknowledging the exceptions of any child and thus providing education within their group regardless of their distinction (cultural, religious, social etc.). Allison (2001) further elaborates that inclusive education is when the needs of people with disability and their peers are met through acceptance and belonging. This shifts the discourse to one of transformation

for the improvement of society. This intent to improve social interaction has increased the opportunities of social interaction in education in general.

The principle of an inclusive education system in which tolerance, diversity and equity is striven for may be uncontested; however, the way in which we achieve this is much more challenging. Inclusion is an elusive concept (Ainscow, 1999; Ballard, 1997, Slee, 2000). Furthermore, in 1998, Florian suggested that while there were many definitions of inclusion put forward in multiple contexts, no single definition had been universally accepted. Ten years on from this assertion, a single definition is still elusive, which may reflect the complex nature of inclusion locally, nationally, and internationally. While the ideological concepts of inclusion are important, the needs of children and young adults in the education system and how these are met in high quality and effective settings must be paramount.

There are multiple perspectives in the field of inclusion and many complex challenges and tensions involved. The complexities and contradictions, however, make oversimplification an inherent danger in the process of reviewing and interpreting the literature (Sebba and Sachdev, 1997). In addition, Slee's review of the literature notes that authors place their own lens on what they describe or justify as practices of inclusion thereby underlining 'the dilemmas of generating a vocabulary for and theory of inclusive educational practice' (Slee, 2001a). Slee also notes,

There is no such thing as innocent reading. Words are received and put through our own interpretative sieve as we construct meanings from the page. This process is shaped by our theoretical or ideological disposition, experience and, of course, our attendant limitations. Consequently there is a need to think carefully about the language that we use' (2001a, citing Ainscow, 1999).

2.3.1 Inclusive Philosophy of Education

Inclusive schools must recognize and respond to the diverse needs of their learners, accommodate different learning styles and rates, and ensure quality education for all through appropriate curricula, organizational arrangements, teaching strategies, resource use and partnerships with their communities. There should be a spectrum of support and services to facilitate different needs of different learners in educational institutions (UNESCO, 1994). Addressing the diverse learning needs of all learners and learners is essential for strengthening the goal of this document.

Ghana has fully backed and supported the Education for All initiative through national and international commitments and committed itself through signing the UN Convention on the Rights of Persons with Disability and the Salamanca Accord among others. The emphasis on educating all children in the conventional school system was firmly supported at the UNESCO World Conference on Disability Education: Access and Efficiency, held in Spain in 1994. (UNESCO, 1994). At the meeting called the Salamanca Conference, the Disability Education and Plan for Intervention was officially adopted. The Salamanca Declaration proposed a change in policy that would force regular schools to become inclusive and accommodate all children, including those with disability. This method was important for the development of education for all, considering the academic, physical, social and emotional circumstances. Article 2 acknowledges that multicultural schools are the most successful in countering racial behaviours and building a supportive and inclusive community. The statement called on governments to take policy, legislative and implementing steps to improve national education and to establish a system of comprehensive schools. Specific recommendations were given for action taken to

ensure improvements at the level of school administration, apposite recruitment of teachers, program flexibility and the advancement of support resources.

The Dakar forum presented the opportunity for over 180 countries to submit their Education For All (EFA) evaluations (UNESCO, 2000). The key finding was that unless movement in education for everyone continues to increase more people will continue to be left behind. Regarding challenges and prospects, inclusive strategy was stressed for ensuring quality education for all, taking into account early childhood education, primary education and adult literacy preparation.

Governments were dedicated to at least meeting the priorities and objectives decided upon in the process for Action by 2015. While it is undeniable that the Dakar system revived the global commitment to achieving education for all as a right for all children, it did not specifically address minority groups by name. Furthermore, effective measures for inclusion have not been adequately articulated. The Right to education is the key justification for the social trend towards equal education for children with disability.

2.3.2 Inclusive Education in Ghana

Ghana was among the first countries to ratify the United Nations Convention on the Rights of the Child (CRC) in February, 1990 (Subbey, 2017). This implies that, Ghana has pledged its commitment to ensure that all children are given equal opportunity to access education. The Government of Ghana through the Ministry of Education and the Ghana Education Service (GES) has adopted and implemented policies geared towards the achievement of universal primary education for all, over the years. These policies are also intended to enable the country achieve the Millennium Development Goals. In this regard different initiatives such as the Free

Compulsory Universal Basic Education, Girl-Child Education, and capitation grant, the school feeding program, free school uniforms, were designed to encourage school enrolment, retention and completion rates (GES, 2004).

Inclusive education in Ghana, begun as an integration into schools since 1951 – Accelerated Educational Development Plan and the 1961 Educational Act for free education which resulted in increases in basic school enrolment (Gyimah et al, 2010). UNESCO alongside other UN Agencies and NGOs worked towards the achievement of this goal together with the efforts made at the country level. For example, the 1992 Constitution had emphasized the Free Compulsory Universal Basic Education (FCUBE) which also increased access to basic schools. However, all these educational measures did not provide what it takes to run an effective inclusive education program. Rather, access to special schools was possible for some and those integrated had no equal opportunity. Society or educational systems remained the same while the child was rather expected to adapt to the old system. For example to have hearing aid; the teacher or peer are not expected to learn to sign but the child has to pass the standardized test in class to be promoted and if he or she fails, the child repeats or drops out (Gyimah et al, 2010).

Ministry of Education/GES adopts Inclusive Education in the light of these global developments since Ghana was a participant at the Salamanca and Dakar Conferences, the Ministry of Education pursued those rights hence the Ghana Education Service in its Education Strategic Plan of 2003 – 2015 adapted Inclusive Education (GES, 2004).

In 2013, the Ministry of education headed by Nana Jane Opoku Agyemang released a draft policy document on inclusive education. The draft policy document became

possible as a result of series of meetings and discussion held with stakeholders such as Ghana Education service, Girls education unit, Early childhood education unit in collaboration with other state agencies such as Ministry of Health, National Council for persons with disability and the Ministry of Gender and Social protection (Slee, 2013).

The involvement of non-state agencies such as the Ghana Blind Union, the Ghana Federation of the Disabled, the Ghana National Education Coalition Campaign, the World Education and the International Council for Education of people with Visual Impairment in the various stages of the development of this policy cannot be over emphasized. This policy will respond to changing priorities and national aspirations as well as international development trends in provisions for inclusive education (Gyimah et al, 2010).

2.4 Categories of Disability

This section review literature on categories of disabilities in schools and early childhood centers.

2.4.1 Hearing Impairment

Hearing impairment is where one finds it difficult to hear or does not hear at all. It is also referred to as hearing loss. It occurs when there is a loss of part or all one's ability to hear Subbey (2017), this means that as a result of a damaged inner ear or part of an individual's ear, he or she can't hear.

Hearing impairment refers to one whose auditory system is partially or fully dysfunctional which puts such an individual in a situation where the acquisition and use of speech is possible with a hearing aid (Charles & Malian, 1980). Winzer (2005) asserted that hearing impairment is generic and may range in severity from mild to

profound. According to Winzer (2005), Hearing impairment is painless, unrecognizable and often misunderstood. This leads to impairment in communication skills and eventually resulting in isolation (Kuyini, 2014).

It is very vital for learners with hearing impairment to be identified so that the required interventional procedures can be undertaken. To do this, educational workers should be familiar with the signs of hearing loss. The National Network for Child Care (1998) indicated that learners with hearing impairment often fail to pay attention in class therefore resulting in the provision of wrong answers to simple questions. To look out for such children, educators should create a quiet environment and watch out for children who often turn their heads towards the source of sound.

According to National Network for Child Care (1998), children with hearing loss function below their potential due to regular sickness which leads to absenteeism. Children whose speeches are unclear or show language problems usually as a result of the difficulty in distinguishing between similar vowels and different consonants are likely to be hearing impaired.

2.4.2 Educational Intervention

Teaching children with hearing loss or impairment pose a difficult problem to teachers and educators as a whole. According to Avoke and Avoke (2004), students with hearing impairment can be managed within the regular classroom in different ways such as;

1. Inform the other members and peers about the learning difficulty that some of their classmates may be facing as a result of hearing impairment
2. Teachers should be patient when the child does not respond when you call him or her from behind or beside, the teacher can tap the child gently on the

shoulder if that is possible, to draw the child's attention. Make sure that you have the child's attention before you speak.

3. Talk clearly, avoid shouting, whispering and mouthing since these destroy the natural rhythm and intonation.
4. Involve the child during group activities the way you would involve other hearing peers. Do not leave them out during games and other recreational activities.

The National Network for Child Care (1998) also recommended the following:

1. Teachers should speak without any exaggerated lip movements or voice volume. Measures should be taken to seat children with hearing impairment between five and ten feet from the teacher. Children with hearing loss should be encouraged to seek clarification from teacher for any unclear statement while teachers should constantly ask questions to be sure that children can hear clearly.
2. Teachers should observe any moments of fatigue amongst learners with hearing impairments since they need to have full concentration which can be exhausting.
3. Teachers should effectively use visual aids to augment the understanding of children with hearing impairment. This is essential because visual aids effectively communicate to children with hearing impairments than auditory channels

2.4.3 Visual Impairment

Visual impairment is where one is not able to see clearly or completely with eyes as a result of damage to the eye or part of the eye. Life without vision is difficult for those who suffer visual impairment. Subbey (2017) stated that there are two major types of

visual impairment which are low vision, or partially sighted and total blindness. The low vision can read if modifications are made for them. The totally blind however has no or minimal vision and they can only read or write using the braille. Generally, children with low vision can be educated alongside their counterparts who are not having problem with vision. Visual impairment is the consequence of a functional loss of vision, rather than the eye disorder itself. Eye disorders which can lead to visual impairments can include retinal degeneration, albinism, cataracts, and glaucoma, muscular problems that result in visual disturbances, corneal disorders, diabetic retinopathy, congenital disorders, and infection. It is important for educators to be knowledgeable about signs of visual impairment. According to Winzer (2005), children who hold books close or far from the eye when readings as well as children who blink frequently or rub eyes regularly are likely to be visually impaired. Winzer reiterates that, children with vision impairment fear walking down stairs and are constantly falling or bumping into things. Further, children with visual impairments often show poor alignment in written work or frequent loss of place when reading.

2.4.4 Instructional Intervention

Educating children with visual impairment in some classroom and to have their full participation, teachers need to make changes in their class management and the materials to be provided for use by the children. Some of these adaptation stated by Avoke and Avoke (2004) are as follows; children with visual impairment should be given front rows to sit, the environment should be well-lit. Large print reading materials or teaching and learning resources should be used when teaching them. Teachers should use readers or they should read aloud for children to enable them benefit from the learning process.

Children with low vision should have reduced work load so as to prevent them from being frustrated during lessons. Computers with large screen enlargers can also be used in the classroom. Teachers should try to avoid the use of shining materials or reflectors in the classroom. Further, children with visual impairments should be encouraged to share problems with teachers for remedial measures to be taken.

2.4.5 Speech and Language Disorder

Speech is one of the most important aspects of human living without which life becomes complicated. Imagine going to the hospital where the nurse or doctor cannot interpret sign language, it will be difficult for effective treatment to be administered. Of all the achievements of the stages of childhood, the acquisition of speech and language is classified as the most significant (Winzer, 2005). Speech is very important in the educational life of every child therefore when a child is not able to acquire speech before a specific age, it becomes difficult and embarrassing for the child and the parents. The child's performance is affected as a result of speech disorder. According to National Institute on deafness and other Communication Disorder (2014), there appear to be critical periods for speech and language development in infants and young children when the brain is best able to absorb language. If these critical periods are allowed to pass without exposure to speech and language, it will be more difficult to learn.

According to Prizant (1983), communication disorder is the deviant development of understanding or the effective use of any written or spoken system. Poor communication skills among children affect their functioning as well as academic performance (Winzer, 2005). Winzer posited that communication disorders results in problems of cognitive development, academic achievement as well as social and emotional development.

2.4.6 Educational Intervention

There are a lot of educational interventions teachers and educators can put in place to help children with speech and language disorders to enable them benefit from teaching and learning. Subbey (2017), stated some of the interventions that can be put in place to aid children with speech and language disorder. Teacher should encourage communication and lessening anxiety about speaking. There should be formation of small groups that are less intimidating to the child. Teachers should help the child communicate with peers in groups by first using non-verbal method and gradually adding goals that lead to speech. Teachers should also work with the child's family to generalize learned communication behaviours into other speaking situation. Also the National Network for Child Care (1998), stated that interventions for children speech and language disorder should include both parents and educators. Teachers should do well to communicate at the level of the child using simple words and avoid the use of vocabularies that will be difficult for the child to understand. Teachers can create a friendly atmosphere in the classroom to enable the child communicate freely with peers, it can be achieved when the teacher respects and listen to the views of children and responds to their questions promptly.

There should be motivation for children to enable them put in more effort during the learning process. This can be in a form of smile or a nod and sometimes using star badges to encourage children with speech and language disorder. Teachers should always say the right word for the child when he or she communicate wrongly to enable the child learn to communicate.

Parents should cooperate with teachers of the child to enable them learn more about the child's problem and the progress the child is making in school in order for them to also provide the needed help at home. In addition parents should try to correct and

expand the child's speech whenever the child uses one word instead of a sentence. Parents should encourage the development of good listening skills by posing questions to show whether the child understands. This requires that parents frame their questions very well to be able to get the best out of their child.

2.4.7 Attention Deficit and Hyperactive Disorders (ADHD)

ADHD is a condition that affects a child's ability to pay attention, it is most common among school going children Subbey, (2017). ADHD is among the most popular disability in the last decade (Winzer, 2005). This situation affects an individual throughout life. With this situation the child is not able to sit and pay attention for a period of time which is one of the symptoms of ADHD. These symptoms occur in multiple settings, rather than just once. According to Subbey (2017), current research supports the idea of two distinct characteristics of ADHA, inattention and or hyperactivity. Some of the characteristics of inattention is difficulty in concentrating and the child having problem focusing and concentrating (Subbey, 2017). Also children with ADHD (hyperactivity) shows some of these characteristics; finding it difficult to sit still in his or her chair, fidgeting and appearing restless in the classroom. Children with hyperactivity always bounce from one activity to another and often try to do more than one thing. The impulsive child shows difficulty in thinking before acting and have problem waiting patiently for their turn during games which usually end up in fight. Children with ADHD find it difficult to concentrate on activities in and outside the classroom because they are easily distracted.

Hyperactive children are full of energy and are very aggressive always trying to be everywhere (Winzer, 2005). They find it difficult to control their activity to pay attention or concentrate. Due to the exhibition of excessive energy they tend to disturb the teacher and other children a lot in the classroom. They tend to redirect their energy

into tapping their finger or biting their finger nails when they are forced to behave well. They always act on impulse without thinking about it. Children with ADHD require a lot of supervision since they can't stay organized. ADHD learners ignore detail, fail to plan and mistakes.

2.4.8 Educational Intervention

No one intervention is universally effective for all learners with ADHD. A combination of research-based and promising practices is recommended. Bean, Townsend & Tung (1963). Several of these practices are described as follows; teachers should give minimal number of directions or step at a time to children with ADHD since they have trouble following directions. If possible have children repeat the direction given by the teacher and their peers. Children should be part of establishing classroom routines. Teachers should also ensure that the learning environment is well-organized with simple and clear rule for children to follow.

For effective teaching of learners with ADHD, teachers should break tasks into smaller unit to avoid children getting bored and reduce the length of written tasks. The teacher should be friendly and connect to children and appreciate their learning, skills and interest, it will help children strive for positive achievement and learn to obey rules. Teachers or educators should give prompt and meaningful feedback to children and give them opportunity to interact with peers. Teachers should also carefully structure cooperative learning groups in which each learner is assigned a role and has clear expectations for desired outcomes will be very helpful for children with ADHD. The more structured the cooperative activity, the more likely it is that these children will succeed. In addition using think pair share approach, children with ADHD will work with peer partners to discuss the lessons, check each other's work, and share strategies. Teachers need to have adequate knowledge about ADHD and the

appropriate behaviour modifications to apply, educational intervention should be evaluated on regular basis to find out the effectiveness or otherwise of the interventions. Teachers should initiate an alternative intervention if it found out that the current interventions has failed to achieve the desired outcome.

2.5 Resources available to support the teaching and learning of children with disabilities in inclusive early childhood centers.

2.5.1 Concept of Teaching and Learning Resources (TLR)

Adequacy of TLR refers to satisfactory or acceptable quality and quantities of material resources, physical facilities and human resources. According to DFID (2007), adequacy of instructional materials such as textbooks which is the main instructional material, is the most cost effective input affecting learner performance. In this context adequate supply is usually assumed to be a minimum of one textbook per two students, and at primary level enough reading books so that every child has the opportunity to read at least one new book every week (Sandkull, 2005).

Adequacy of TLR determines an educational system's efficiency, according to Owoko (2009). For effective teaching and learning, textbook and resource materials are basic tools, their absence or inadequacy makes teachers handle subjects in an abstract manner, portraying it as dry and non-exciting. It is also important to have appropriate personnel plan for adequate instructional materials and physical facilities to support educational effort. Therefore scarcity of textbooks, libraries and physical facilities according to Crawford and Tindal (2006), will constraint educational system from responding more fully to new demands. In order to raise the quality of education, its efficiency and productivity, better learning materials (TLM), physical facilities and human resources are needed.

2.5.2 Teaching and Learning Resources and Performance

TLR comprises basically three components: material resources, physical facilities and human resources (DFID, 2007). Studies done in the past with regard to availability of TLR in education reveal that TLR are not always available in schools. This inadequacy of TLR has been of serious concern to educators.

According to Stubbs (2008) learning is a complex activity that involves interplay of students' motivation, physical facilities, teaching resources, and skills of teaching and curriculum demands. Availability of TLR therefore enhances the effectiveness of schools as they are the basic resources that bring about good academic performance in the students. The necessary resources that should be available for teaching and learning include material resources, human resource such as teachers and support staff and, physical facilities such as laboratories, libraries and classrooms.

TLR help improve access and educational outcomes since learners are less likely to be absent from schools that provide interesting, meaningful and relevant experiences to them. These resources should be provided in quality and quantity in schools for effective teaching-learning process. Several studies have been conducted on the impact of instructional materials on education (OECD, 2005; Mitchell, 2010). Momoh (2010) conducted a research on the effects of instructional resources on students' performance in West Africa School Certificate Examinations (WASCE). The achievements of students in WASCE were related to the resources available for teaching. He concluded that material resources have a significant effect on student's achievement since they facilitate the learning of abstract concepts and ideas and discourage rote-learning. When TLR are inadequate education is compromised and this inevitably is reflected in low academic achievement, high dropout rates, problem behaviours, poor teacher motivation and unmet educational goals.

2.5.3 Influence of availability of Teaching and Learning Materials on Learners' Performance

Material resources include textbooks, charts, maps, audio-visual and electronic instructional materials such as radio, tape recorder, television and video tape recorder. Other category of material resources consist of paper supplies and writing materials such as pens, eraser, exercise books, crayon, chalk, drawing books, notebooks, pencil, ruler, slate, workbooks and so on (Momoh, 2010).

Perner (2004) discovered a very strong positive significant relationship between instructional resources and academic performance. According to Perner, schools endowed with more materials performed better than schools that are less endowed. This corroborated the study by Momoh (2010) that private schools performed better than public schools because of the availability and adequacy of teaching and learning materials in Ghana. Mendis (2006) also supports that students performance is affected by the quality and quantity of teaching and learning materials. The author noted that institutions with adequate facilities such as textbooks stand a better chance of performing well in examination than poorly equipped ones. Therefore, poor performance could be attributed to inadequate teaching and learning materials and equipment.

2.5.4 Influence of adequacy of Physical Facilities on Learners' Performance

The development and maintenance of physical facilities in educational institutions by communities, parents, and sponsors should continue to be encouraged. This is because lack of such facilities interferes with learning process. DFID (2007) indicated the importance of school facilities in relation to quality education. Difference in school facilities would be seen to account for difference in achievement. Physical facilities include classrooms, lecture theatres, auditoriums, administrative block, libraries,

laboratories, workshops, play grounds, assembly halls, and special rooms like clinics, staff quarters, students' hostels, kitchen, cafeteria, and toilet amongst others.

DFID, (2007) further added that learning experiences are fruitful when there are adequate quantity and quality of physical resources; and that unattractive school buildings, crowded classrooms, non-availability of playing ground and surroundings that have no aesthetic beauty can contribute to poor academic performance. Mendis (2006) posits that the physical conditions and organization of schools facilitate or inhibit construction of a culture of success.

2.5.5 Influence of adequacy of Human Resources on Learners' Performance

The adequacy of TLR determines the success or failure of an educational system. A method of determining the extent of teacher's adequacy is through Students - Teacher Ratio (STR) which is the number of students assigned to teachers for teaching. STR is used to determine the number of students that are to be allocated to a teacher in a given educational level. The STR shows a teacher's workload at a particular level of education. It also helps in determining the number of teaching manpower needed for a projected student's enrolment. Thus, it could be used to determine either teachers are over-utilized or underutilized (Momoh, 2010).

An educational institution's human resources consist of teachers and other support staff who engage in the process of teaching and learning. They include, laboratory assistants, cooks amongst others. There should be optimum use of the available human resource especially teachers if good performance is to be achieved.

2.5.6 Availability of Teaching and Learning Resources for the Implementation of Inclusive Education

Puri and Abraham (2004) emphasized that classroom need to be colourful, interesting, for learners to feel enthusiastic about coming to early childhood centers. For easy access, ramps (for children with physical disabilities), hand-rail (for children with visual impairment), Braille for reading and writing and wheelchairs are needed. A mug and a bucket of water too may be kept outside the classroom to ensure that learners maintain basic hygiene by washing their hands after playing outside. Eleweke and Rodda (2002) noted that social facilities to accommodate learners with special needs are often non-existent or inadequate in many institutions. Rodda further asserts that few facilities may be found within the urban centers but none in rural areas.

Many colleges and universities provide training for regular and special needs teachers but there is concern regarding the adequacies of the programs, teaching and learning resources. These programs tend to concentrate on the pathology of disabilities, rather than instructing on modifications to suit the needs of the child (Elweke and Rodda, 2002; Perner, 2004). The curriculum should be adapted to enable learners with special needs to learn at their own pace train the learners to make use of their functional parts of their bodies and to provide extra work for exceptionally talented and intellectually gifted learners (Ngugi, 2007).

Lack of, or inappropriate, resources are often cited as a major barrier to making inclusion happen in practice. Those in favour of inclusion tend to stress that it is much more about planning and attitudes, than about resources (e.g. it doesn't cost more to plan and build an accessible building than an inaccessible one). Disabled activists, however, stress that inclusion should not be seen as a 'cheap option' that results in particular student's not receiving sufficient support to enable them to learn on an

equal basis with others. The following examples address the issue of resources in different yet informative ways.

Including the students with disabilities and having the knowledge of how to treat them are important characteristics of an effective school, and in this regard, Ainscow (1991) indicated that an effective school has effective leadership and staff who are able to deal with all students and their needs, is optimistic that all the students can progress and develop their abilities toward successful achievement, has a willingness to support its staff by meeting their needs taking into account the curriculum, and ensuring that the curriculum meets all the students' needs by effectively reviewing its programs (teachers, curriculum, students' progress), frequently making sure there is progress in terms of the effective teacher. Successful teachers challenge the students' abilities by setting good quality tasks, providing students with opportunities to choose their tasks, varying learning strategies and providing facilities that contribute to student learning (Ainscow, 1991 akt, Sakarneh, 2004).

Use of materials has been the basis for equality of opportunities in the process of education. In other words, it provides the opportunity to present the educational environment which is improved and enriched by the help of every kind of educational technology to all people in every part of the country and the world. As a result, everybody will have the chance to have high quality education. By the help of educational technology, equality of opportunity problems in our country can be prevented (Perner, 2004). Educational materials are the tools that enrich the learning process and make the learning concrete. Educational materials are elements that teachers can not overlook such as: facilitating the process of learning and providing permanence of what is learned.

The materials that the classroom teachers use differ. These materials include student's book, worksheets, models, posters, etc. In recent years there have been some positive improvements regarding the use of educational materials as a result of the ministry of education and publication companies' support in our country. However, these improvements are not enough for the students who need special support and the teachers working with them. Inclusive education is used in the same meaning with placing the students who need special education with other students at the same age in the same classes (McConkey, 2001).

2.6 The level of training of teachers handling children with disabilities in inclusive early childhood centers in the new Juabeng Municipality.

Globally, comprehensive education has been recognized as a significant path for education with a view to include children with disability in conventional schools. Teachers in this policy guidance are to be tolerant for multiple conditions children may have in one classroom. It is, however, extremely surprising to notice that teachers have expressed their views and expectations of inclusive education, which is important to the progress of inclusion (Keister & Moller, 2000). It is normal practice for teachers to welcome policies and then to change it, or conform to a new policy, without understanding the values and personal motives of each teacher (Forlin, Hathe & Douglas cited in Pottas, 2005). Subban and Sharma (2006) found out that teachers have not been paying much attention to inclusive education. According to Meijer (2001), teachers whose attitude towards inclusive teaching is positive have more positive results than teachers whose attitude is negative. For Obeng (2007), insufficient training of teachers is the greatest hurdle to accepting students with disability in regular classrooms. The literature supports the contention that inclusive teaching can be effective if teachers are not aware of the required strategies. Inclusive

curriculum has achieved universal recognition internationally as the strongest path to integration in all school environments. The challenge is on both administrators and educators (Eileen, 1999). Likewise, Hardman, Drew and Egan (2002) noted that it is important that special education teachers be given the expertise and the resources required to cope with the disability of children with disability. This is why the focus on teacher growth has turned to be a matter of interest (Whitworth, 2001). As a consequence, however, there has been a need for a reassessment, coordination and communication of the importance of teachers in the inclusive educational set up.

There is a wealth of information which indicates that, in order for inclusive education to be successfully enforced, positive teacher attitudes and awareness of inclusive education are necessary (Avramidis, Bayliss & Burden, 2000). Successful education requires adapting the teaching techniques and tactics that are more applicable to children with disability (Mastropieri & Scruggs, 2000). Forlin (2001) contended that, the obstacles to integration are further compounded by the inadequacy of teachers' training. In the U.K., a growing question emerges about teachers' readiness on instruction for inclusive education (Forlin, 2001). In the U.S, seeking to make inclusive schooling possible has been a vast undertaking (Blanton & Pugach, 2007).

The road to schooling for everyone has been a daunting one due to the fact that most teachers were qualified for only general or special education classrooms. Research by Pugash and Johnson (2002) shows that teachers in the different universities or colleges of education do not undergo enough instruction to be able to successfully teach in inclusive classrooms. Whitworth (2001) made the recommendation that in order to be able to prepare teachers with the ability and experience required for teaching in inclusive environments, a new approach to teacher training is needed.

Whitworth believes that if curriculum systems are to train learners for the future, then models of teacher training need to be altered and re-formulated.

2.6.1 Initial Teacher Professional Development

Current teacher education programs have been influenced by a number of pedagogical traditions in past decades, for example academic, practical, technological, personal and critical -social re-constructionist traditions (Schepens, Aelterman & Vlerick, 2009). Britzman (2003) described practices in institutions holding onto the positivist or academic tradition as providing knowledge through various, often fragmented courses while schools provide the setting where student teachers are expected to apply those theories and integrate knowledge and practice by themselves.

A number of research studies discuss the effectiveness of different approaches to the preparation of pre-service teachers for inclusion (Pearson, 2007; Wang & Fitch, 2010). Stayton and McCollum (2002) identified three models that exist in programs that train for inclusion: the Infusion model, the Collaborative Training model and the Unification model. In the Infusion model students take 1 or 2 courses that cover inclusive education. In the Collaborative Training model, many more courses deal with teaching inclusive classes, and mainstream teaching students and special education students do all, or part of their practical experiences together. In the Unification model, all students study the same curriculum that trains them for teaching mainstream education with a focus on learners with disability.

Pugach and Johnson (2002) refer to discrete, integrated and merged models and point out that these form a continuum from least to most collaborative. Wang and Fitch (2010) concluded that all ITE programs should embrace the key elements of successful co-teaching to train better collaborative teachers for 21st century inclusive education.

An approach that incorporates specific activities for inclusive education training in a general education subject is described by Golder, Norwich and Bayliss (2005) and Pearson (2007). This is also referred to as the ‘permeation’ or ‘embedded’ model and requires careful planning and monitoring if it is not to appear unplanned and incoherent (Avramidis et al., 2000). This ‘content infused approach’ is under-researched (Loreman, 2010) but is supported by many studies including Woloshyn, Bennett and Berrill (2003) and Loreman and Earle (2007).

In order to ensure the standard of teacher training and the establishment, as well as the provision of a support structure, the Government of Ghana, along with related stakeholders, has developed a Pre-Tertiary Teacher Professional Development and Management Policy Mechanism to contribute to the quality of education in Ghana in order to respond to the changing demands of education. The policy structure which hinged on the 2008 Education Act calls for the creation of a national Teaching Council with the mandate to hire teachers, provide in-serve education and training as well as the periodic review of the professional standards for teachers teaching in basic and second cycle schools in Ghana.

The policy structure requires the National Teaching Council to develop qualifications and competencies for teachers in the field of technical qualities, teaching and learning preparation, visible classroom skills and management, along with the Ghana education service and other teacher education universities. The Council is again expected to create competency-based curricula for teachers in order to ensure quality assurance, arrange resource preparation for teachers, and organize tests as well as evidence-based curriculum analysis when recommended. The system lays out a process to be implemented to ensure the professional growth and supervision of teachers. This course addresses the following broad subjects or areas: the teacher

preparation curriculum, inductions, in-services, a general in-service or information improvement program for technical skills development, and eventually an up-grading program.

2.7 Challenges Teachers face in handling Children with Disability

2.7.1 The Physical Environment

With the increasing trend towards educational reform, policy making and change practice, education systems and governments worldwide have identified Inclusive Education (IE) as the principal vehicle for educating all learners regardless of disability and/or Special Educational Needs (SEN). The educo-socio-political and economic basis for IE is to address the challenges of access, quality and equity in education practice, policy and provision. Philosophically, IE articulates that all learners are capable of learning and participating in educational and social experiences in a safe and scaffolding environment (Ackah-Jnr, 2016).

Thus, when children with disability especially, are provided with appropriate attention, support, and resources in high-quality, age-appropriate, general education classrooms and environments, they are more likely to succeed (Allen & Cowdery, 2015, Cologon, 2014, Foreman, 2011, Foreman & Arthur-Kelly 2008, Mitchell, 2010). Inclusive education, as an evolving and transformative practice ensures that, the hitherto excluded, marginalised, discriminated and disadvantaged learners exercise their educational right. Overall, it rationalises the need for educating all, regardless of disability and SEN.

For Slee (2013), IE challenges the notion of business as usual for schools globally. Consequently, the move towards enhanced IE practice implementation will inadvertently bring aboard the inclusion-ship many diverse learners, liberating,

empowering and enabling them to rise and realise their potential, and to make meaningful contributions to self and society generally.

Internationally, many countries including Australia, Canada, USA and South Africa have progressively acceded to the clarion call for the recognition, adoption and implementation of IE as a change and best practice. This is mainly based on its empirical benefits such as academic and social outcomes and the rationale such as human rights and social equity (Foreman 2011, Smith, Polloway, Patton & Dowdy 2012, Cologon, 2014, Mitchell, 2010, Slee, 2013, Ackah-Jnr, 2016, 2017), as well as the supporting conventions and declarations, including the Salamanca Statement (1994), the Dakar Framework for Action (2000) and UN Convention on the Rights of Persons with Disability. Therefore, IE practice has become a wind of change and positive pressure exerting influence and driving education systems in the global North and South or in both developed and developing countries.

As a middle-income developing country, Ghana has similarly recognised IE and has made several commitments to its practice. Influenced by the aforesaid drives, as well as national legislative framework and policies including the Education Act 1961, Education Act 2008 and more recently, IE Policy 2015, Ghana has also established inclusive pilot schools, to complement regular schools to educate children with disability and SEN (Ackah-Jnr, 2016). The inclusive schools support the operationalisation of Ghana Government's policy objective to implement IE, which aims to provide accessible and equitable educational opportunities for all children with mild SEN in mainstream schools and full enrolments of hard-to-reach and out of school children (Ministry of Education, 2015a). While teacher preparedness and effective curriculum have been identified particularly as key factors that enhance student learning and performance and IE practice in Ghana (Kuyini 2014, Ackah-Jnr,

2010), the quality of the physical environment of inclusive schools, where students learn, interact and socialise with other peers, or they are taught, is often overlooked. Nonetheless this is not peculiar to the Ghanaian context, as Kuyini (2014) acknowledges succinctly that, there is too often the ignoring of the physical environment in favour of issues which are perhaps more intellectually exciting to researchers. As such, the physical environment is crucial to IE implementation.

Whilst the barriers to IE may take many forms and are multi-faceted, but are cross-culturally and cross-contextually similar to a larger extent, the physical environment of schools is considered a critical implementation factor influencing IE (Pivik, McComas, & Laflamme 2002, Smith et al. 2012, Lewis & Doorlag, 2006). There is much research reinforcing that the quality of the physical environment significantly affects student learning and achievement (Cheryan, Sianna, Victoria & Andrew, 2014, McCreey & Hill, 2005, Tanner 2008, Weinstein, 1979) and student attitudes (Sapon-Shevin, 2007, Weinstein, 1979). The physical environment comprises the classroom and its furnishings, but more broadly, it denotes the school building and all its contents including physical structures, infrastructure, furniture and the site on which a school is located and the surrounding environment with which all children may come into contact (Yekple & Avoke, 2006). On the one hand and from an inclusive orientation, the physical environment connotes flexible and safe school buildings and facilities, adjusted to students' aesthetics as well as to participatory teaching and learning, and the feeling' of the school, the extent of social connectedness and respect for differences, styles of communication and conflict management at school, and care for the well-being of students as well as school staff (Simovska, 2004). It is thus intertwined with elements of the social environment, and it impacts the affective, behavioural and cognitive functions of children and teachers in inclusive schools.

The physical environment of schools thus defines whether all children are physically, pedagogically and functionally included or excluded from school programs. To promote IE, new schools are being designed to be accessible, barrier-free, welcoming, and generally more supportive of children with disability, especially those with physical disability. In Ghana, however, the physical environment of most schools implementing IE appears to be user-friendly mostly for children without disability. The architectural design and physical layout of most school buildings are still tailored to fit and fix students without disability (Kuyini, 2014). Elsewhere in Australia, Elkins (2005) noted similarly that little account is taken of individual differences in students, and not much attention is given to school design as a factor for successful IE. Often children with disability in Ghana, especially those with physical and neuromotor disability struggle to fit in or face daily challenges using school facilities and navigating school settings and other public buildings. A critical analysis of the policy guidelines on the planning and design of school environment and infrastructure shows that they have not been fully actioned to support the effective use of facilities and other aspects of the physical environment by children with disability, which potentially affects IE. The Ghana Disability Act 2006, recognises that for persons with disability to effectively use school facilities, equipment and other aspects of the physical environment, and hence promote the IE agenda,

the Minister of Education shall by Legislative Instrument designate schools or institutions in each region which *shall provide the necessary facilities and equipment (and barrier-free physical environment)* that will enable persons with disabilities to fully benefit from the school (s.715.17).

The Ghana Education Act 2008 further mandates that,

District Assemblies and heads of institutions shall ensure that designs for schools are user-friendly for children with disability and without disability, and institutions, including regular schools that deliver

education to children with disability shall improve upon existing infrastructure and provide for additional facilities where necessary (Education Act 778, p.5).

Inherent in the Standards and Guidelines for the Practice of Inclusive Education in Ghana 2015, Standard 1, are the provisions for enabling access to schools for children with disability, deemed also to benefit children without disability. Critically, the recommended

inclusive education standards shall satisfy anyone who is hindered from participating successfully in learning (environment) as a result of obstacles put in their way by the siting of the school, design of buildings, materials, arrangement of out- or inside space, attitude of staff, equipment and materials...and pedagogy (MoE 2015a, 6).

In addition to these legal provisions, the IE policy (MoE 2015a) has the objective to redefine and augment education and support services that are responsive to the needs of all children, within the context of universal design and child-friendly schools, and overall, to increase participation and educational access for children with SEN. To achieve this policy goal, the physical architectural designs and environments of existing schools need to be modified or adapted, while ensuring also that all new school physical designs and constructions enhance opportunities for persons with SEN.

However, while nationally the legal directives and policies supporting the restructuring and transformation of schools to make them more inclusive are well-intentioned, it is generally evident that most schools practicing IE operates in unchanged physical environment and educational facilities'. Thus, a further look at inclusive schools indicates a seemingly lack of adaptation and modification of the physical environments, including architectural designs and facilities to meet the needs of children with disability and SEN. There are problems of stairs, narrow doorways, inappropriate seating, rigid classroom designs and school compounds, which

generally affect access, student learning, participation and achievements or engagement. Further, whilst extensive research is available in the Ghanaian context on teacher attitudes towards IE (Gyimah, Ackah-Jnr, and Yarquah, 2010; Ackah-Jnr, 2010; Obeng, 2007; Ackah-Jnr, 2017), research on the physical environment of regular schools practicing IE has particularly attracted little attention.

2.7.2 Physical Environment of Inclusive Schools

Since the extensive review of the research on the importance of the physical environment of schools (Weinstein, 1979), other researchers have also increasingly explored the impact of various dimensions of the physical environment on the education of all children generally, and more specifically children with disability (Cheryan et al. 2014; Engelbrecht, 2003; Higgins et al. 2005; Jin, Yun, & Agiovlasis, 2017; Pivik, McComas, & Laflamme, 2002; Tanner, 2008; Lewis & Doorlag, 2006). Research shows that the nature of the physical environment of IE schools influences teacher and student behaviour, student learning and achievement (Cheryan et al. 2014; Guardino & Fullerton, 2010; Tanner, 2008; Weinstein, 1979), physical access (Pivik, McComas, & Laflamme, 2002; Winter & O'Raw, 2010), physical activity participation (Jin, Yun, & Agiovlasis, 2017; Pivik, McComas, & Laflamme, 2002) and feelings of belonging and acceptance in IE schools (Okyerere & Adams, 2003; Sapon-Shevin, 2007). School environments that support IE: reduce unnecessary exclusionary barriers, and also increase presence, participation and achievement of all learners (e.g., Booth, Ainscow, & Kingston, 2006).

In the light of this and for students with physical and mobility disability especially, IE 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 & O'Raw 2010; Lewis & Doorlag, 2006), which may induce fatigue and exclusion or

minimise use of facilities. The presence of these elements constitutes physical barriers to IE. Hence, the physical environment needs to be architecturally accessible and suitable /usable so that no learner is denied equitable education and social experiences.

Previous research indicates that classroom management is an integral part of a carefully planned physical environment (Okyere & Adams, 2003; Smith et al. 2012; Allen & Cowdery, 2015), influencing how teachers and students feel, think and behave in IE schools (Guardino and Fullerton, 2010; Weinstein, 1979; Weinstein, Mignano, and Romano, 2011). Classrooms that are barrier-free and arranged effectively may foster free movement of children with disability between desks or tables, and to the general areas of the school. For Elkins (2005), the classroom physical access needs to be the first consideration for effective IE. In well-planned IE classrooms, there is effective seating arrangement and spacing (Lewis & Doorlag, 2006; Smith et al. 2012), and instructional materials are placed within the reach of all children, and adequate storage spaces are also created for special equipment such as magnifying devices, crutches and adapted keyboards for computers (Lewis & Doorlag, 2006). Bookshelves and bulletin boards are also conveniently located to facilitate their use by students with disability, and there are adequate spaces in the general areas of the school to accommodate all students (e.g., classrooms, hallways, exits and washrooms). Following the need to create inclusive environments, Okyere & Adams (2003) articulated that effective classrooms must have sufficient spaces for all children to move around or functionally participate in activities, especially if there are children with physical disability.

Additionally, the safety and comfort of the inhabitants of schools is identified as another key dimension of an appropriate physical environment that affect the feelings

of belonging in IE settings (Sapon-Shevin, 2007; Okyere & Adams, 2003; Lewis & Doorlag, 2006). For Sapon-Shevin (2007), IE schools are particularly comfortable when children with disability feel psychologically and emotionally safe, which engenders acceptance, participation and the recognition of all children as individuals. Such schools are devoid of characterisation such as name-calling, ridicule and teasing or negative attitude projections. A carefully planned physical environment also enhances the psychological comfort of children and eliminates detrimental sensory reactions (Okyere & Adams, 2003; Tanner, 2008; Lewis & Doorlag, 2006). Once all children get to school, their safety and comfort, and access to buildings and teaching and recreational areas should be guaranteed, if really schools are inclusive. When everyone feels safe and comfortable, learning may also be enhanced for all. Indeed, for Lewis & Doorlag (2006), eliminating architectural barriers e.g. 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. Consequently, schools that have elevators and ramps; wide doorways that allow wheelchairs to pass through, and; bathroom facilities (e.g., toilets and urinals) that are adapted or specially designed, are important for IE. Equally, in keeping with the philosophy of IE, schools should protect all children, and make them feel welcome and accepted, as they participate in the learning and social activities. Similarly, external and internal (chronic) noise impact classroom climate and comfort of children (Higgins et al. 2005). Because noise distracts students from their work or interfere with their ability to hear others speak, it is essential to reduce unwanted environmental sounds or acoustics (Allen & Cowdery, 2015; Higgins et al. 2005; Elkins, 2005).

Further research evidence shows that an appropriate physical environment means that the conditions of classrooms are pleasant and appealing to all learners (Engelbrecht, 2003; Tanner, 2008; Weinstein, 1979). When the classroom is comfortable and attractive, learning is likely to be enhanced. Many researchers (Cheryan et al. 2014; Engelbrecht, 2003; Higgins et al. 2005; Lewis & Doorlag, 2006) agree that classroom conditions such as temperature, ventilation, and lighting, are key factors that influence the learning and comfort of students and teachers in schools. In this light, Okyere & Adams (2003) noted that effective IE requires a nurturing environment, if all children are to feel belong and part of the classroom. Aesthetically pleasing classrooms may enhance the learning, comfort levels and health of all learners.

Two other critical components of the physical environment of schools, identified to impact IE practice are ventilation (Higgins et al. 2005; Lewis & Doorlag, 2006) and lighting (Cheryan et al. 2014; McCreey & Hill, 2005; Tanner, 2008). Research shows that adequate ventilation prevents stuffiness in classrooms, enhancing the general comfort and well-being of children and teachers (Higgins et al. 2005; Lewis & Doorlag, 2006). Ventilation or air-quality is considered a basic survival need. Adequate natural and artificial illumination has been identified as an important element of IE schools and classrooms, which makes teachers and students to feel comfortable during teaching and learning (Cheryan et al. 2014; McCreey & Hill, 2005), while poorly lit classrooms causes students to feel a jet lag (Tanner, 2008). A study that investigated the effects of school design on student outcomes (Tanner, 2008) 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. As a critical

characteristic of effective classrooms, good lighting (McCreey & Hill, 2005; Lewis & Doorlag, 2006) also fosters the general well-being of students and teachers who are usually confined to the classrooms for several hours per day.

Inadequate lighting controls can produce negative results, including eye strain, fatigue, decreased attention span, increased body temperature and, consequently, poor student/teacher performance (McCreey & Hill, 2005). Light and colour are seen to affect learning and blood pressure of students in IE classrooms (Tanner, 2008; Gaines & Curry, 2011).

Colour signifies another essential aspect of the physical environment and aesthetic appeal identified to influence student learning and behaviour in inclusive settings (Engelbrecht, 2003; Gaines & Curry, 2011; Higgins et al. 2005; McCreey & Hill, 2005). As a powerful design element, colour produces psychological and physiological reactions, and impacts student behaviour within the physical learning environment, hence functional colour applications are critical to the inclusion of students with disability (Gaines & Curry, 2011). As light colours enhance illumination systems in inclusive classrooms (McCreey & Hill, 2005), researchers (e.g., Smith, Neisworth, & Green, 1978) have previously argued against the use of dark or bright colours for classroom walls. For Smith, Neisworth, and Green (1978) wall surfaces that have light tone colours, and not drab, function better as pleasant background for whatever is placed on them in classrooms. Different colours are considered stimulating. This varies across the age groups. While younger children prefer bright colours and patterns, adolescents prefer more subdued colours (Engelbrecht, 2003). Maxwell and Ninnes (2000) also found out that children thought colour was important and that they thought the colour of the walls in their school was uninviting and boring. Further, room decoration is important because it can affect the

attractiveness of classrooms (Tanner, 2008). Therefore, 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.

2.7.3 Effective Teaching Practices

Teaching students with disability in an inclusive classroom may be regarded, as a challenge for teachers accustomed to teaching in the regular classroom; therefore teachers should acquire the basic characteristics of effective teaching. To be a successful teacher in an inclusive classrooms is not easy as the teacher is dealing with different abilities. Most of the effective teaching evidence comes from the research which involves the classrooms directly using several different techniques (Westwood, 1995). Westwood (1995) in his review of the literature on the effective teacher, found out that the effective teacher should be a good classroom manager, focusing on academic skills, with good expectation, enthusiasm, using effective strategies to keep students on task and using variety of teaching and resources styles, covering the material content.

Also the effective teacher uses easy presentation of material, is direct in teaching, explains and outlines instruction clearly, frequently observes what students are doing taking into account differences between the students and re-teaching when necessarily, give frequent feedback for all students and checks for understanding by using probing questions (Westwood, 1995). Stanovich and Jordan (1998) indicated that effective teachers who are able to monitor the classroom and the students' behaviour in their class also demonstrate the ability to use body language. Furthermore they are able to manage the instruction time for the students and themselves and have good expectations for the lesson and ensuring students'

understanding by using questions and monitoring students' progress frequently (Stanovich & Jordan, 1998).

Teachers' behaviour also has a significant link to students' achievement. Englert (1983) in a study on teacher effectiveness found out that effective teachers had a high level of presentation and corrected student responses in a short time, also following the students error responses and informing the students of the correct response by giving the suitable feedback (Englert, 1983). Shanoski and Hranitz (1992) indicated that effective teachers are enthusiasm in their work, take care of the students and work cooperatively with parents. According to Shanoski and Hranitz; effective teachers are interest in participating on most committees in the school and in the community around the school, able to know the students' needs and supporting the individual differences, possessing high expectation, encourages the students to be optimistic about their ability, able to increase students' motivation, use different teaching strategies, have good communication skills, love their students and have knowledge about their subject and subject matter (Shanoski & Hranitz, 1992).

Hattie (2002) claimed that expert teachers have sophisticated representation about what they teach, are able to solve problems without effecting the student's personality and take time to understand the problem, and further can also make a decision in the suitable time and identify the important decisions. Expert teachers can prepare the optimal classroom climate by following the error and giving feedback, scanning the classroom behaviour effectively and monitoring learning. Expert teachers are more able to monitor students' problems and assess their understanding whilst providing feedback at the same time, they can see the difficulties facing the students and build strategies and hypotheses and examine or test these strategies and the extent to which they are working by measuring students' outcomes, they respect their students, they

have responsibility over their students, they motivate their students, they build self-concept and self-efficacy for their students, they have a positive influence on their students' outcome and lead the students through challenging tasks and they have content knowledge (Hattie, 2002).

Effective teachers according to Murphy, Delli and Edwards (2004) are patient, caring, respect their students, organize their classrooms, and as a result their students are enthusiastic (Murphy, Delli, & Edwards, 2004). A study by Larrivee (1985) reported that students with disability demonstrated a greater level of achievement in the mainstream classrooms when the teacher: used the time efficiently, his or her relationship with the students was good, gave the students positive feedback, made a high rate of success for learning tasks and responded for all students positively (Larrivee, 1985). In contrast, the students who had lowest achievement were in classrooms with a high degree of: off-task actions or behaviour, wasted in the time transition process, teachers criticized students' responses and when there was a low ability in terms of behaviour problems interventions (Larrivee, 1985).

An effective teacher in an inclusive classroom has the ability and skills to plan for the content coverage and takes into account the difference between students by scope and sequences their objectives. Moreover, effective teachers have good strategies in taking advantage of time by maximizing academic time on- task and have good presentation skills and therefore making the presentation very clear and keeping the students active and engaged, monitoring the academic practices in the inclusive classroom with frequent questioning and giving immediate feedback are vital factors that could influence teaching process (Mastropieri & Scruggs, 2004; Westwood, 2003). It is evident that the effective school plays an important role in students' outcome socially and academically. It is stated that "The most persuasive research suggests that student

academic performance is strongly affected by school culture. Successful schools are found to have cultures that produce a climate or ‘ethos’ conducive to teaching and learning” (Purkey and Smith cited in Mitchell, 2010). Clark, Dyson and Millward (1995) indicate that an effective school reinforces students’ performance, has a good work environment that meets the disabled students’ needs, and gives the opportunity for all the students to become involved and participate in school activities (Clark et al., 1995).

Including students with disability and having the knowledge of how to treat them are important characteristics of the effective school. In this regard Ainscow (1991) mentioned that the effective school has effective leadership and staff able to deal with all students and their needs and optimistic that all students can progress and develop their abilities toward successful achievement. Effective school has a willingness to support its staff by meeting their needs and taking into account the curriculum and ensuring that the curriculum meets all the students’ needs and also effective school reviews its programs (teachers, curriculum, students’ progress) frequently (Ainscow, 1991). Successful teachers challenge students’ abilities by setting good quality tasks, providing students with opportunities to choose their tasks, varying learning strategies and providing facilities that contribute to student learning (Ainscow, 1991).

2.7.4 Effective Behaviour and Classroom Management

Promoting effective learning and teaching is paramount to every early childhood center. Key to achieving effective learning and teaching is ensuring that class teachers have the necessary skills to approach their teaching in ways that reduce the likelihood of children misbehaving. Teachers also need to be equipped with effective skills and responses for those instances where difficult behaviour does occur. Where teachers

have good preventative and responsive skills the likelihood of difficulties emerging or developing into incidents will be markedly reduced.

Hall and Elliman (2003) defined psychological, emotional and behavioural problems as

‘behaviours or distressed emotions, which are common or normal in children at some stage of development, but become abnormal by virtue of their frequency or severity, or their inappropriateness for a particular child’s age compared to the majority of ordinary children’.

Behaviours such as noncompliance, aggression, and destruction of property comprise some of the typical behaviour problems found in preschool classrooms (Bear, Cavalier, & Manning, 2002). Behaviour management strategies that specifically target noncompliance are among the most relevant strategies for preschool teachers, as all preschool children exhibit noncompliance on at least some occasions (Carey, 1997). Compliance in the preschool classroom is beneficial for students academically, behaviourally, socially, and emotionally. It allows for all students to receive maximum educational opportunities (Carey, 1997), and research has shown that academic engagement increases as student rates of compliance increase (Matheson & Shriver, 2005). Thus, noncompliance is a relevant issue in preschool classrooms, and early prevention and intervention for noncompliance by educators, administrators, school psychologists, school counselors, and other related services personnel in schools are important for positive student outcomes.

Noncompliance in the Preschool Classroom

Classroom noncompliance has been defined as “the failure to comply with a teacher request or instruction” (Carey, 1997). There is some variation in the exact definition of “failure to comply,” but most of the literature defines noncompliance as a child failing to respond within 5 to 30 seconds of a request or instruction (Goetz, Holmberg,

& LeBlanc, 1975; Roberts, Hatzenbuehler, & Bean, 1981). Classroom noncompliance can vary in appearance, from students doing nothing, to verbally or physically refusing to comply. Noncompliance can also vary in function, from the child seeking attention from adults or peers, to being incapable of or confused about how to perform the request, to preferring another activity over the one requested, to escaping or avoiding an aversive task (Carey, 1997; Piazza, Bowman, Contrucci, Delia, Adelinis & Goh, 1999).

It is particularly important for Behaviour problems such as noncompliance to be addressed during the preschool years, usually ages 2 to 5. These years represent a significant period of development for children, and the preschool classroom is often the first place that socially and educationally relevant behavioural difficulties emerge (Carey, 1997). Unaddressed Behaviour problems during preschool can result in later academic challenges such as lower motivation, attention, persistence, and attitudes toward learning, as well as behavioural challenges such as verbal and physical aggression, and conduct disorders (Bulotsky-Shearer, Fernandez, Dominguez & Rouse, 2011; Carey, 1997; Webster-Stratton, 1997).

Effective behaviour management is based on the teacher's ability to successfully create a well-managed, structured classroom environment so that learning can occur. Teaching a number of children with different needs, behaviours and attention spans can be challenging. However, when a positive learning culture is created, the children will learn better because they will know what is expected of them. Rules create clear expectations for the children and need to define what acceptable behaviour is. These must be reinforced on a regular basis and placed in a visible place on the classroom wall. Include the children in developing the rules as this will give them ownership and they will be more likely to accept their terms and conditions and therefore comply.

In order to prevent or minimize these negative outcomes, interventions targeting preschool noncompliance must promote appropriate, socially responsible behaviour and foster the development of children's self-discipline. Self-discipline allows children to inhibit antisocial Behaviour, assume responsibility for their actions, differentiate between right and wrong, and develop cooperative relationships with peers and adults (Bear et al., 2002). Acquiring these skills in early childhood will likely prevent larger-scale social and behavioural difficulties later in life. Therefore, addressing a child's noncompliance during preschool will benefit the individual child, the child's peers and family members, as well as society as a whole.

Strategies to Increase Compliance

Proximity praise is one proactive strategy that is used to promote class wide appropriate behaviour and increase compliance in all children in a classroom. It includes a teacher praising or giving attention to students who behave appropriately. This allows other students in the class, particularly those in need of extra behavioural support, to learn or be reminded, through observation, of the Behaviours that are appropriate and that will lead to praise and attention from the teacher. This technique builds children's self-esteem, reinforces their sense of competence, and increases their internal motivation (Webster-Stratton, 1999).

Praise is an effective way to encourage children to engage in the desired behaviour as it focuses on a child's effort rather than on what is actually accomplished. When educators give genuine praise that is specific, spontaneous, and well-deserved, it encourages continuous learning and decreases competition among children. Rewards (or reinforcers), when they follow behaviour, make that behaviour more likely to occur again. They form the basis of human behaviour and motivation, and can be used effectively to encourage children to acquire skills and develop appropriate behaviour.

To be effective rewards need to be something to which the children aspire to and want. Younger children will desire different rewards than older children.

Guided compliance is another proactive strategy for increasing compliance in preschool children (Wilder & Atwell, 2006). It involves presenting the child with a command in clear behavioural terms, verbally prompting or physically guiding the child through the steps needed to comply with the command, and reinforcing the child for completing the command with guidance. Over time, less guidance is provided until the child is able to perform the command independently (Carey, 1997).

Instruction and Reinforcement for Appropriate Behaviour

The ultimate goals of behaviour management strategies in preschool classrooms are (a) to stop the problem behaviour, (b) to decrease the likelihood of the child repeating the behaviour, and (c) to replace the problem behaviour with a more appropriate one (Bear et al., 2002). Therefore, reinforcement, and in some cases, explicit instruction, of appropriate behaviours must occur in order for students to replace their problem behaviours with more acceptable ones (e.g., Carey, 1997; Matheson & Shriver, 2005). It is recommended that teachers repeat the original command after using a behaviour management strategy, and that they give immediate and specific verbal reinforcement so children can connect their appropriate behaviour to the reinforcement (Westwood, 2003; Webster-Stratton, 1999). Without the accompaniment of instruction and reinforcement, reactive behaviour management strategies may reduce inappropriate behaviour (i.e., noncompliance), but they will not necessarily promote appropriate behaviour (e.g., Bostow & Bailey, 1969). Therefore, effective behaviour management strategies must be comprehensive and include methods to decrease inappropriate behaviour as well as teach and reinforce positive, appropriate behaviour.

2.8 Context of Effective Teaching

Effective teaching does not occur in a vacuum. It occurs in a physical space and this cannot be removed entirely from the related contexts. The whole education system contributes to the teaching-learning process and, if one section or part of the education system is isolated from the other parts, then students' achievements may be affected. With this understanding, Wang and Walberg (1991) reviewed the professional literature and surveyed experts in instruction and learning to develop an understanding of the variables that influence learning. Their final framework included 228 variables or factors categorized into six main categories: the context outside of the school, variables linked to the students, variables linked to the district or education system in the state including political factors, variables linked to the school, variables linked to the program design and, finally, student outcomes. Their analysis of these categories for effective learning environments showed that variables linked to the program design possessed the greatest importance, followed by the context outside of the school, then classroom climate and instruction, and then variables linked to the students. Variables linked to the school and district or state ranked as the least important overall (Wang & Walberg, 1991). In the mentioned study, the variables relating to the classroom and teaching still have a high rank or influence.

For a long time, there have been debates and questions about which factors influence learners' achievements. Some researchers attribute learners' achievements to the school, while others indicate that the school has little impact on academic outcomes. Other researchers indicate that the effective teacher plays the main role in terms of learner progress. From the wide range of factors examined by extensive research, and the fact that this research makes claims that most of these contextual factors have at least some impact on learner learning, it may be presumed that all contextual factors,

such as the teacher, school context, classroom context and school community, contribute something toward learner achievement. Some researchers highlight further factors that may influence the teaching-learning process, including school reform, community dynamics, teacher attitudes, curriculum, school location, and student abilities and socio-economic backgrounds (Maxwell & Nannes, 2000; Paterson, 2000). Effective teaching operates within a complex teaching and learning context that can influence it in different ways. Effective teachers by themselves cannot work effectively and productively unless they are located in a supportive environment. The Organisation for Economic Cooperation and Development (OECD) (2005) stated that: ‘the quality of teaching is determined not just by the “quality” of teachers but also by the environment in which they work. Effective teachers are not necessarily going to reach their potential in settings that do not provide appropriate support or sufficient challenge and reward’. Also, Stringfield and Teddlie (1988) conducted a longitudinal study at Louisiana school, the aim was to examine the conditions that influence student’ achievement. They found out that the conditions relating to the school had a significant effect on student achievement more so than the conditions of the teachers. Also, it was found out that the socio-economic conditions, school and teacher factors could influence students’ achievement (Stringfield & Teddlie, 1988). In terms of leadership, the study found out that the principals in effective schools were more active, had long plans for their schools, and had a clear vision of how to achieve their goals for their schools, effectively concentrate, were involved about the classrooms in their schools and made the instruction processes easier for the teachers and the students. In addition it was found out that principals in effective schools usually remain close to the students in order to understanding the students and their needs. In terms of the connections between the effective schools and effective teaching, the

researchers found out that schools become more successful when the students receive from the teachers a good and an effective style of teaching, which thus increases the students' achievement (Stringfield & Teddlie, 1988).

In terms of school effectiveness, Teddlie, Kirby and Strinfield (1989) indicate that the school and the teachers demonstrate the following effective teaching behaviours: Spending time on teaching the task, develop new ways of presenting material, practice independently, the school and the teachers have high expectations, encourage, giving feedback and reinforce the students frequently, minimizing the interruptions, controlling the students and all of the school in a positive manner, provide a friendly environment and thus the students work hard. In comparison an ineffective school has no such characteristics (Teddlie, Kirby, & Strinfield, 1989). In the school context, the principal plays the main role in school improvement and effectiveness, leading to the students' achievement. Dinham, Cairney, Craigie, and Wilson (1995) conducted a case study into three schools and found out that the principals had significant influence on the school climate and culture and also on school staff, which led to progress in the students' achievement (Dinham et al., 1995).

Meta-analysis of the research into the influence of schools and teacher on students achievement has been done by Marzano (2000) found out that student achievement was influenced by three main factors: those relating to the school, those relating to the teacher and those relating to the student. The surprising thing in this analysis is that the school-level factors account for 7% and the teacher - level factors account for 13%, whereas the students-factors account 80% overall (Marzano, 2000). In terms of leadership and its influence on the school outcome, Dinham (2005) conducted case study based on AESOP (An Exceptional Schooling Outcomes Project), it was found out that the principals play the main role in school outcomes by providing suitable

conditions for the teachers and students to do well in terms of schooling outcomes which reflect eventually on the students' achievement. Also according to Dinham's model of principal leadership, the effective or the successful principal has the following characteristics or responsibilities: they take into account the external environment and engage with it, they have aptitude, ability to change and creativity, they have a good interpersonal skills and are respected by staff and students, they have long term visions and they prepare themselves to work toward these, they have responsibility, trust and they are concerned about their teachers professional development, they support the students and co-operate with the teachers and other staff and they focus more on the students in terms of teaching and learning (Dinham, 2004b).

In conclusion, the right of children with disability to be educated in an inclusive classroom rather than educating them in an isolated environment has been a main concern raising, issues and interest for educators, policy-makers and researchers in recent times. Thus it has become the basic issue in terms of teaching students with disability. Effective school and teachers characteristics influence positively students' achievement or outcome in an inclusive classroom. School characteristics could be: qualified leadership, learning environment, high expectation, positive reinforcement, monitoring student's progress and parent-school co-operation. Teacher characteristics such as: efficient use of time; good relationships with students; provides positive feedback; has a high student success rate; and in general provides support for the students with and without disabilities. All of that can only be operated in an appropriate educational context

2.9 Summary

The chapter established that integration was a major obstacle to learners and teachers alike. The flaws in the program were also noticed, as was the recognition that to ensure adequate instruction for children with disability it was necessary to engineer the substance of what they should be learning. The chapter concluded that an inclusive early childhood center must: enable and facilitate the specific needs of children with disability, be placed in an atmosphere that welcomes, supports and encourages integration and needs-based decision making, and be aware of the unique needs of children with disability.



CHAPTER THREE

METHODOLOGY

3.0 Overview

This chapter details out the method used for this study to assess the barriers faced by children with disability in inclusive early childhood centers in the New Juabeng Municipality. The highlights of this chapter entail research design, sample technique, data collection procedure, instruments and techniques for data analysis.

3.1 Philosophical Underpinning

This study used a constructivist lens to highlight the barriers faced by children in inclusive early childhood centers. The social constructivists believe that individuals seek understanding of the world in which they live and work. Individuals develop subjective meanings of their experiences and meanings directed toward certain objects or things. These meanings are varied and multiple, leading the researcher to look for the complexity of views rather than narrowing meanings into a few categories or ideas. The goal of the research is to rely as much as possible on the participants' views of the situation being studied. The questions become broad and general so that the participants can construct the meaning of a situation, typically forged in discussions or interactions with other persons. (Creswell & Creswell, 2018)

This study on inclusive school barriers to children with disability is borne out of the concern for children who are supposed to be with their colleagues without disability in the same classroom. The constructivist believes that through interaction with one another, one is able to construct knowledge. This interaction is of great value to children with disability who learn from their parents, peers, and teachers.

3.2 Research Design

Case study design was employed in the study primarily because according to Creswell, (2007). This approach provides the opportunity to observe selected informants daily interaction and behaviours in their natural setting. In addition a case study is an in depth study of a particular situation. It is a method used to narrow down a very broad field of research into one easily researchable topic. The case study research design is also useful for testing whether scientific theories and models actually work in the real world.

Case study research involves an in-depth investigation of a contemporary, real-life phenomenon in its context. A case study can focus on one person, a group, an organization, or an event. Case study research is used in many disciplines, including social sciences, education, health, business, law, and other disciplines. Case study research can be used to develop new theories, expand on existing theories, challenge traditional theories, and conduct pilot research. Case study research is good for understanding complex issues in their real-life setting, and it is often used to understand the perspective of participants in those settings.

Case study research is commonly described as a form of qualitative research. Qualitative case study research differs from quantitative research, which focuses on numerical data and uses statistics to answer interview questions, to answer a research question. Case study research also differs from research conducted through experiments. In case study research, the conditions of the setting and context are integral to the research, and the researcher does not exclude or control for those factors, as in experimental research.

3.3 Instrumentation

Blaikie (2009) defines a research population as an aggregate of all cases that conform to some designated set of criteria. It is the group the researcher wishes to use in the investigation. Semi-structured interview for teachers and observation checklist of learners were the research instruments used for data collection for this study. There are a number of reasons for the use of interviews in qualitative research. McNamara (2009) noted that interviews are particularly useful for getting the story behind participant experiences. Kvale (1991) also explains that qualitative research interview seeks to describe the meanings of central themes in the lives of the subjects. A semi-structured interview was used because the research interview sought to collect data at both a factual and a meaning level. Kumekpor (1999) opines that in a face-to-face interview, both the respondent(s) and the researcher see and observe each other personally and directly and, in the process, may develop personal friendship, rapport, collaboration and exchange of information beyond the specific interview. It is further argued that in an in-depth interview, longer time is spent on fewer questions or on more restricted aspects of the topic but a larger amount of information is collected in greater detail.

3.4 Population

Population has been defined by McMillan and Schumacher (2010) as a group of elements or cases, whether individuals, objects or events that conform to specific criteria in research. The population of these inclusive early childhood centers according to the Municipal Education Directorate is two hundred and sixty-seven (267). This figure includes all the learners and teachers in the inclusive early childhood centers.

3.5 Sample and Sampling Technique

A sample is a subset of a population. Sampling allows a researcher to analyze a small subset of a target group that is representative of the full population (Sarantakos, 1998). Cohen, Morrison and Manim (2004) pointed out that the sample size is determined by the relationship that the researcher wants to examine between groups within a larger sample.

The schools were made up of inclusive early childhood centers. Each early childhood center entails Kindergarten one (1) and two (2) with children with disability and regular classroom teachers.

Purposive sampling was used to select the early childhood centers and teachers. Purposive sampling refers to a criterion-based sampling (Merriam, 1998), was employed for the selection of the participants for the study. This type of sampling requires that one establishes a criterion bases or standards necessary for units to be included in the investigation. Patton (1990), further stated that the logical and power of purposive sampling lies in selecting information rich cases for in-depth study. The sample of the study was restricted to only inclusive early childhood centers. Patton (1990) reinforces the notion of sample size by asserting that there are no rules to sample size but what matters is what the researcher wants to know. According Creswell (2005) the ability to provide a detailed picture of the subject's experience is diminished with each additional participant.

The sample for this study was thirty-one (31); this was made up of 21 learners with disability and 10 teachers/facilitators. The five inclusive early childhood centers were purposively selected because they had learners with disabilities in an environment

which was comparatively more welcoming. Ten (10) teachers were interviewed because they were the teachers who had learners with disabilities in their classrooms.

3.6 Data collection

In this study, the researcher used semi-structured interview and observation checklist in order to understand the barriers faced by children with disability in inclusive early childhood centers.

3.6.1 Data Collection Procedure

An introduction letter was taken from the department to the New Juabeng Municipal Education Directorate to enable the researcher gain access to the inclusive early childhood centers to collect data.

The researcher had a discussion with the respondents about the aims of the study and why they were needed for the study. Patton (2002) posited that the adherence of informed consent requires the researcher to accurately inform the respondents on the purpose and aim of the study. The researcher sought the participants consent for the administration of research instruments. The assurance of confidentiality during the interview was important in order to curb any misunderstandings from the beginning. Names of respondents will not be published.

Semi structured interviews and observation (check list) were the research instruments used for data collection of this study. The researcher ensured that the content of the instruments (Observation (check list) and semi structured interview guides) were adequately used to capture in detail the issues of relevance to the study. Semi structured interviews are advantageous because they allow flexibility in the way questions are asked and answered and that they are viewed as the best ways of interviewing in qualitative studies. For the purposes of content validity, draft copies of

the semi-structured interview guide were given to colleagues to check and asked to discuss with the researcher any incomprehension and ambiguity about any section of the instruments. The instruments were pre-tested in early childhood centers outside the New Juabeng Municipality. The inputs and suggestions made were used to modify the drafted instrument which resulted in the final instruments.

3.6.2 Interview

The researcher used semi-structured interview since it is flexible in terms of the way questions are asked and answered. Semi-structured interview also involves the use of predetermined questions which are asked in a systematic and a consistent order and allows the interviewer to probe beyond the questions stipulated (Berg, 2004).

3.6.3 Observation

Literally, observation means a method of data collection that uses vision as its main means of data collection. In observation, the researcher collects data from the natural setting of the situation by watching, listening and taking records of occurrences. There are two types of observation, thus participant and non-participant observation. For this study the researcher used non-participant observation.

3.6 Gaining Access

Negotiating entry or gaining access into a field of study is an important element of qualitative research design and one of the most difficult encounters in research because it determines the success of the study. Failure to gain entry results in the study not undertaken (Jones, Torres & Amino, 2006). Access is a process which refers to the acquisition of consent to go where you want, observe what you want, talk to whoever you want, obtain and read whatever documents you require, and do all this

for whatever period of time you need to satisfy your research purposes (Glesne, 2006, p.44). It requires making contact with various gate-keepers within the institution or agency that you want to conduct your research in. Titchen and Hobson (2005) provide an illuminating account of the need to develop a relationship with the participants in order to gain entry into the field. They contend that in order to achieve shared social and situated ways of being with participants, one need to be willing to do the things they do and experience for themselves the backgrounds, practices and social contexts of the researched. This is where the idea of participant observer comes into play, because the researcher becomes part of the researched. For this study, I began by getting approval from my place of work, the Yilo Krobo Municipal Education Office. After being granted permission, I began the process of requesting for permission to conduct my study from the New Juabeng Municipal Education office since my research was based in that municipality. Upon receipt of permission to conduct the research from the Municipal Education office, I went to the selected schools to talk to the Heads of the schools to seek permission and explain my study to them. Once I got permission from the Heads of the schools and identifying teachers who met the criteria set in the study, I contacted individual teachers that have been identified or suggested and requested them to participate in the study. Ten teachers agreed to participate in the study.

3.7 Trustworthiness

The assurance of confidentiality during interviews was important in order to curb any misunderstandings from the beginning. Each teacher participating in this study was interviewed two or three times during the course of the study depending on their availability and willingness to do more. The researcher conducted a total of twenty interviews with the teachers participating in the study.

The interviews were tape recorded and transcribed immediately after the session while the researchers mind was still fresh on what transpired. As the researcher was transcribing data from the tape recorders, the researcher kept on highlighting with different colours some of the notes that were interesting, questionable and answering the study questions. This process then made the coding exercise easier and gave the researcher the opportunity to mine the data even more. Towards the end of the study, teachers were given transcripts of their notes to read, correct, comment and approve or disapprove. The edited transcripts from the interview were corrected and retyped. This process ensured that the data captured the information in the exact words of the teachers interviewed.

3.8 Data Analyses

Data analyses means trying to understand and make meaning out of a situation. This requires that one needs to be creative and think critically to be able to analyse and bring out the meaning the data collected presents using analytical strategies. The data analysis took place at the same time with data collection as the researcher constantly compared data from the interview to raise more questions and to close the gap.

The interview data was transcribed and responses expressing the same ideas were put under various themes based on the objectives of the study.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Overview

Chapter three detailed the methods used in collecting data on the barriers that confront learners with disabilities in inclusive early childhood centers in the New Juabeng Municipality. The highlights of the chapter entailed the research design, sampling technique, research instruments and data collection procedure. The last part of the chapter deals with the processes of data analysis used in the study.

Data gathered covered the demography of respondents, the categories of children with disability, resources available to support the teaching and learning of children with disability in inclusive early childhood centers. To add details observation of learners was made to confirm the categories of disability and the resources available at the centers to support the teaching and learning.

4.1 Demographic characteristics of respondents

In order to understand the issues of concern to the study, it was important to require the number of years of teaching of respondents in order to put their concerns into perspective. In all, there were a total of twenty one (21) learners with disabilities in the five (5) inclusive early childhood centers. Ten (10) teachers/facilitators were also interviewed. In total, four (4) disability types were found which included Low Vision (Partially sighted), Behaviour disorder (Hyperactive), Hearing impaired (hard at hearing) and children with Learning Disability. Each of the early childhood centers under study recorded at least one disability. Learners with learning disability were the highest (9) amongst the respondents. The inclusive early childhood centers visited include, Nana Kweku Boateng Experimental Basic 'A', Nana Kweku Boateng

Experimental Basic 'B', Koforidua Presbyterian Basic School, Sarkodie Basic School and Ave Maria Catholic Basic School.

4.2 Data Presentation and Analysis

Data analysis involves what the researcher had seen, heard, and read so that he/she can make sense of what he/she learned and it also requires categorizing, synthesizing, searching for patterns and interpreting the data (Creswell & Creswell, 2018). The researcher paid attention to observation, interview and the documents of the respondents. The data reduction bit dealt with reducing and condensing of responses to levels where themes were drawn for ease of analysis and comprehension of data. This involved drawing similarities, differences and the grouping of commonly expressed views by respondents. This exercise was critical to the researcher as this was the scientific approach adopted to craft standard meaning from the data collected from the interviewees.

The researcher undertook separate reproduction of the responses gathered from the interviewees by way of note takings. This was done to aid comprehension of the data in the clearest terms. The reproduction of the primary data was done in no particular order. For the avoidance of wordy study, repeated answers were not captured. The analysis of data was based on the research questions.

4.3 Categories of children with disability in early childhood centers in the New Juabeng Municipality.

The researcher presented the categories of disabilities that are observed at the centers as follows:

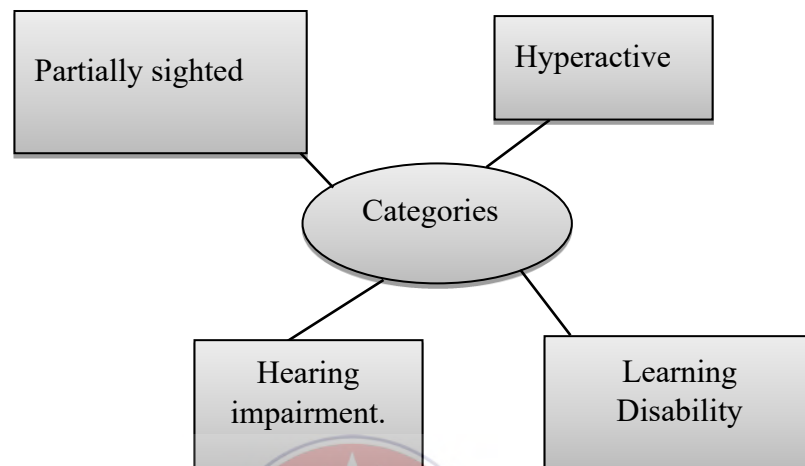


Fig 2: Categories of Disability

Categories of Disabilities Present

From the interview conducted the researcher recounted an interviewee stating a particular category of disability she is having in her early childhood center. She said:

“I have children with hyperactive behaviours in my classroom and they disturb a lot”

(R1)

The second respondent also stated:

“Having a hyperactive child in your class when you are the only teacher is difficult and I don’t find it easy handling them”

(R2)

Another teacher also responded:

“I have a hyperactive child in my class and he is always restless and like moving from one place to the other”

(R3)

From the responses some learners were classified as being hyperactive from three of the early childhood centers. Learners who were identified as hyperactive are fidgety, restless, and easily bored. They always have trouble sitting still, or staying quiet when needed. They rush through things and make careless mistakes. They may climb, jump, or roughhouse when they should not do so. This is in line with Kawabata, Tseng, and Gau (2012), who stated that attention-deficit/hyperactivity disorder (ADHD) is one of the most common disorders in school-aged children. The essential features of ADHD are a persistent pattern of inattention and/or hyperactivity and impulsivity more severe than in typically developing children. These features are associated with both behavioural and academic difficulties, which may cause difficulties in forming and maintaining relationships. In other words, being diagnosed with ADHD clearly introduces a set of risk factors, academically as well as socially in children's' school interaction.

The second category of disability the researcher came across during the interview is the visually – Partially sighted. Some of the responses are;

The first interviewee express:

“I have a learner in class who will always come close to the chalkboard before going back to sit and write and I have brought her to the front sit in the front row”

(R1)

In addition, another interviewee also said:

“There are two learners in my class who writes all their names and other words that are to be separated together and I think they can't see properly”

(R2)

Then another interviewee said:

“Am having two learners who are finding it difficult to see and write on the line instead of in between the line”

(R3)

From the foregoing responses, it can be stated that although the learners are not completely blind, they all have issues with vision. Patton (2002) stated that visual impairment refers to any condition in which eyesight cannot be corrected to what is considered normal. Not all visual impairments are the same. The word visual impairment also may be used to describe the consequence of an eye condition and disorder. There are two main categories for visually impaired students in the process of learning according to Carney, Nash and Sentell (2008): included blindness and low vision. It can be concluded from the learners observed that what they suffer from was low vision. Most of the learners with this disability use aids such as lens. This confirms the assertion of Carney et al (2008) that most low vision cases can be managed or corrected. Subbey (2017) states that there are two major types of visual impairment which are low vision, or partially sighted and total blindness. The low vision can read if modifications are made for them. The totally blind however has no or minimal vision and they can only read or write using the braille. From the responses, it was recorded from the respondents that few learner complain of not seeing either sitting close to the marker board or away from the marker board.

Another category of disability present at the early childhood center are the learners with learning disability.

These are some of the responses from the interviewee;

A respondent started that:

“Some of the learners can’t just identify some of the alphabets and numerals, I have tried all approaches that could help but still so I have concluded they have a problem”

(R1)

Another respondent said:

“There are children in my classroom who find it difficult to complete simple hands on tasks such as grouping based on shapes”

(R2)

From the preceding responses children with learning difficulties such as dyslexia and auditory processing disorder (APD) struggle with academics. To reach their full potential and avoid self-esteem issues and behavioural issues, they need specific learning methodologies.

Hearing impairment is another category of disability observed at the early childhood centers visited;

The responses are as follows;

The first respondent said;

“Some of my learners will only follow instructions after I have shouted at them, I sometimes feel bad when the rest of the children get startled”

(R1)

A second respondent said:

“The child in my class will always ask others to repeat what I have said and does not pay attention in class.”

(R2)

Another respondent said that:

“Some learners complain of not hearing what I said in class when they are not closer to me hence they provide the wrong answers to questions”

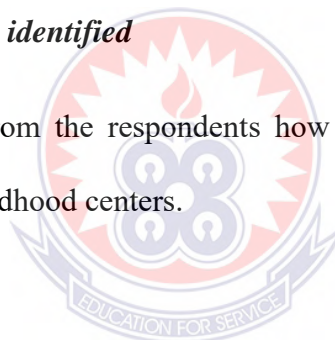
(R4)

From the antecedents it can be stated that all the children have problem with hearing.

Hearing impairment is a situation where one finds it difficult to hear or does not hear at all. It is also referred to as hearing loss. It occurs when there is a loss of part or all one’s ability to hear Subbey (2017), this means that as a result of a damaged inner ear part of an individual, he or she can’t hear.

How the Categories were identified

The researcher sought from the respondents how they identified the children with disability in the early childhood centers.



Identification

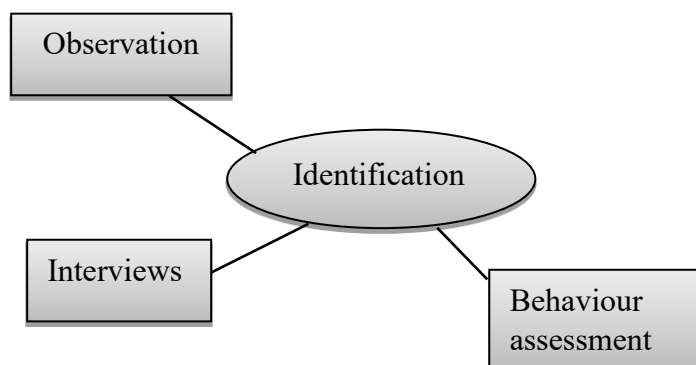


Fig 3: How the Categories were identified

This was recorded from a respondent at one of the early childhood centers.

“There are many times we look for signs that may be indicative of a problem and those that need our intervention, the parents are also interviewed to know more about the child”

(R1)

Another said:

“I observe them a lot and sometimes when the special education coordinator visits the school with some nurses for screening”

(R2)

A third respondent said:

“There are many types of disabilities that are obvious and visible when you see the child but some are also difficult especially the behavioural and the learning issues but I assess how they behave for some time before concluding”

(R3)

From the foregoing responses, the general way the respondents are able to identify the learners with disability is through observation and sometimes by general screening. The list is not exhaustive nor comprehensive, just a few indicators that if noticed in most situations and if observed to be sustained over an extended period of time is recommended to warrant further investigation. The disabilities that are hard to identify are typically learning disabilities and attention deficit disorders. It is for this reason that they are known as hidden disability. Before one takes the step to assess formally the presence of a disability or special needs, it is important to observe the child in all situations to see the pervasiveness of the issue at hand.

4.4 Resources available to support the teaching and learning of children with disabilities

This section discusses the resources available to support inclusive education in the early childhood center. The researcher sought from respondents the resources available at the early childhood center as represented by the diagram below.

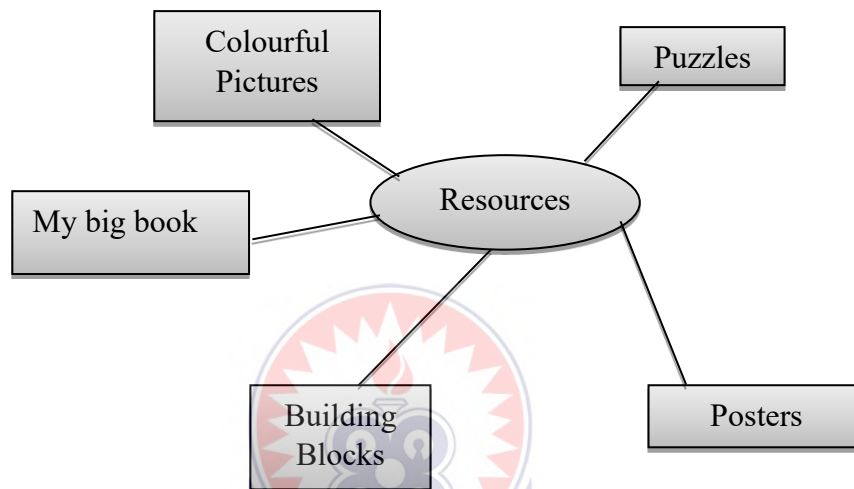


Fig 4: Resources available to support the teaching and learning

The researcher gathered from the interviewees the resources available to support inclusive education in their classrooms and it was very evident that there were no specific resources available to give evidence that they were practicing inclusion. The following were their responses;

Pictures and Posters

On the availability of pictures and posters available for teaching and learning, an interviewee said that;

“I have some posters, and pictures which I use in teaching literacy and also assist my learners in coming up with creative stories.”

(R1)

Another interviewee recounted;

“The few resources we have around are the alphabet tree and pictures that I have printed out myself. It is difficult to help the special needs children but we always give off our best. I have personally written to my headmaster to request for some manipulative to make the class more interesting for all learners but the age old excuse of lack of funds has been the story till now.”

(R2)

Building blocks and Puzzles

One of the respondents mentioned the availability of building blocks and puzzles as part of the resources in her school but bemoaned their adequacy. According to her;

“There are a few manipulative such as building blocks and puzzles in my classroom for the learners to use. It is quite unfortunate that they are not enough considering the fact that the number of learners in the class is high. The word puzzles enhance the reading ability of the learners but if picture puzzles were available, they would have appealed more to the senses of learners.”

(R1)

Reading materials (My big book)

On the availability of reading materials, one of the respondents intimated that;

“The few reading materials and the ‘my big books’ which contains interesting pictures with stories that learners can relate with are woefully inadequate. These books were provided by USAID in 2016 and with the growing class size, we are just managing to use them proportionally.”

(R1)

From the fore going responses, the resources (teaching and learning materials) available are just few and have no specification for the child living with disabilities.

The researcher sought from the interviewees about the sources of the materials they have in their classrooms.

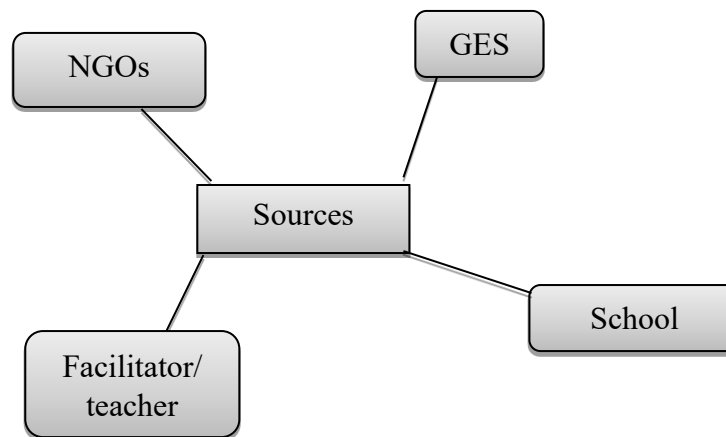


Fig 5: Sources of teaching and learning resources

Some of the responses are as follows;

An interviewee mention that:

“Most of the resources are provided by me especially those I can make and afford to buy such as the manila cards for drawing, makers, masking tape and sometimes their writing materials. When luck smiles on us some NGOs sometimes provide us with some of the materials.”

(R1)

Another interviewee said:

“The school provides some of the teaching and learning materials such as the wall charts (colourful pictures), manipulatives whenever grant are made available by government. GES also provides some of the resources to the school sometimes.”

(R2)

From the fore going it can be stated that provision of the resources are not regular and the teachers use those they can afford or improvise and those they cannot afford are left forcing them sometimes to teach in abstract.

The researcher also inquired from the interviewees about how often they use the resources during teaching and learning and below are some of the responses.

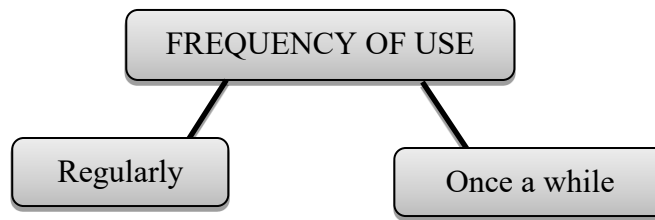


Fig 6: Frequency of use of resources

An interviewee said;

“Most of the materials are not there and those that are available do not always match with the indicators, since the new curriculum was introduced without the accompanying materials so hardly do we use the materials.”

(R1)

Another interviewee said;

“With teaching resources learning becomes easier and fun so I always do my best to get some for my lessons. I use it on a regular basis to make my work easier”

(R2)

From the fore going responses it can be realized that due to irregularities and inadequacy of the teaching and learning materials, some of the teachers hardly use them to teach making most of their teaching done in abstract. According to Stubbs (2008) learning is a complex activity that involves interplay of students’ motivation, physical facilities, teaching resources, and skills of teaching and curriculum demands. Availability of TLR therefore enhances the effectiveness of schools as they are the basic resources that bring about good academic performance in the learners. The necessary resources that should be available for teaching and learning include material resources, human resource such as teachers and support staff and, physical facilities such as laboratories, libraries and classrooms.

4.5 Level of training for teachers handling children with disabilities in early childhood centers

This section discusses the various kinds of training teachers in the selected study areas use in handling children with disabilities. Teacher preparation programs can be powerful measures for supporting the success of learners with disabilities.

Levels of Training of Teachers Present

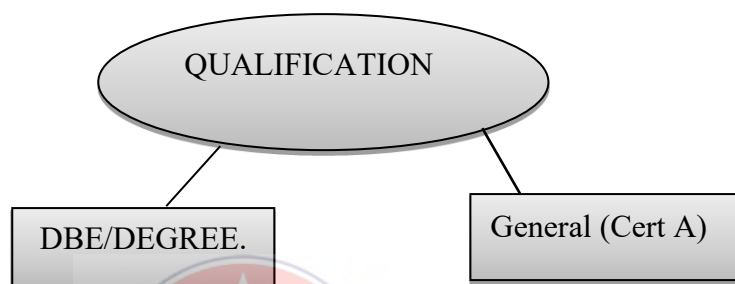


Fig 7: Levels of Training of Teachers

The researcher gathered from the respondents the following responses;

A respondent said:

“I was trained as a general classroom teacher with certificate A”

(R1)

Another said:

“I am a trained teacher with cert A and I continued with my Diploma and Degree through Distance education.”

(R2)

From the antecedents, teachers training level was generally geared towards how to manage children in the classroom. Teacher preparation programs can be powerful measures for supporting the success of learners with disabilities.

Teachers need to have the training and skills to teach learners with disabilities who spend most of their instructional time in general education classrooms. If teachers are to develop a positive attitude towards inclusive education, they must first be trained and supported.

Inset Programs Attended

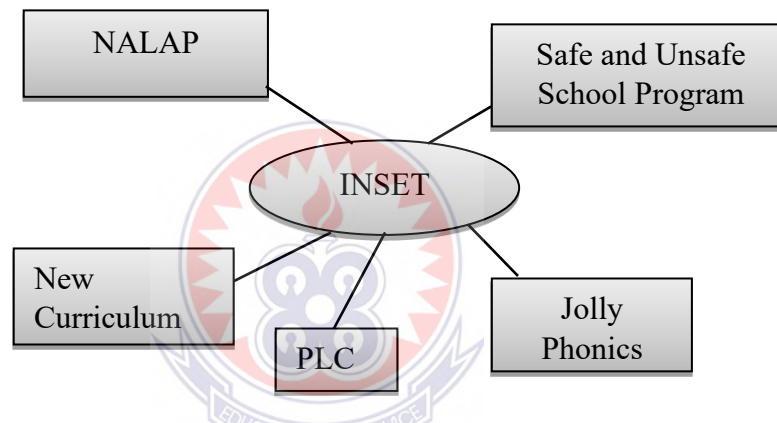


Fig 8: Inset Programs Attended

The researcher sought from the interviewees about some in-service programs attended and their responses are stated as follow;

An interviewee said:

“The inset programs I have attended are on NALAP, Jolly Phonics and the new standard base curriculum since I joined the teaching service”

(R1)

Another said:

“I have attended Jolly phonics, National Literacy Accelerated Program (NALAP), safe and unsafe school work shops and the new standard based curriculum which came with a new inset called Professional Learning Community (PLC) which we attend every Wednesday.”

(R2)

From the foregoing responses, all the inset programs organized were all about general classroom activities without the child living with disability in focus. On the question of in-service training organization for teachers to be able to handle learners with disability with care, it was deduced from the interview section that teachers and management do not place much value on the issue of in-service training since most managerial heads are afraid of the cost involved in getting the resource person; hence the study recorded that in-service training are not regularly organized for teachers in the early childhood centers. This is contrast with Charnov’s argument, as he stated that training and development are an educational process. People can learn new information, re-learn and reinforce existing knowledge and skills, and most importantly have time to think and consider what new options can help them improve their effectiveness and performance at work. Effective training conveys relevant and useful information that inform employees and develop skills and behaviours that can be transferred back to the workplace (Charnov 2001). De Cenzo and Robbins (1996) have also added their voices to what training is. To them, training is a learning experience that is seeking a permanent change in the individual to improve on a particular job. The absence of ongoing in-service training of educators, in particular, often leads to insecurity, uncertainty, low self-esteem and lack of innovative practices in the classroom (Department of Education 1998:11).

Special Education Courses Attended

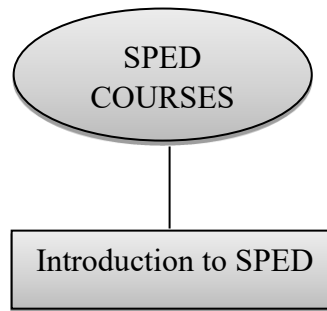


Fig 9: Special Education Courses Attended

The researcher sought from the respondents the various kinds of special education courses they have been trained in,

An interviewee said:

“We did introduction to special education at the training college and after that nothing on special education again” (R1)

Another also said:

“Introduction to special education at the college of education and degree level” (R2)

It was recorded from the interview section that few of the respondents have received professional training from the universities and colleges of education. Based on this, the researcher sought from the interviewees if they have received some special training concerning the job they are doing, from the responses it was recorded that few of the interviewees have had formal education in Early Childhood Education but they have no professional skills and knowledge in handling learners with disability. In the case of dealing with disabilities one needs a special training to be able to pay a particular attention to the special needs of the children.

4.6 Challenges teachers face in handling children with disabilities in inclusive classrooms.

The researcher sought from the interviewees the challenges they face in handling children with disabilities in their early childhood centers. The challenges centered around three thematic areas; Furniture, physical facilities available, Behaviour and class management.

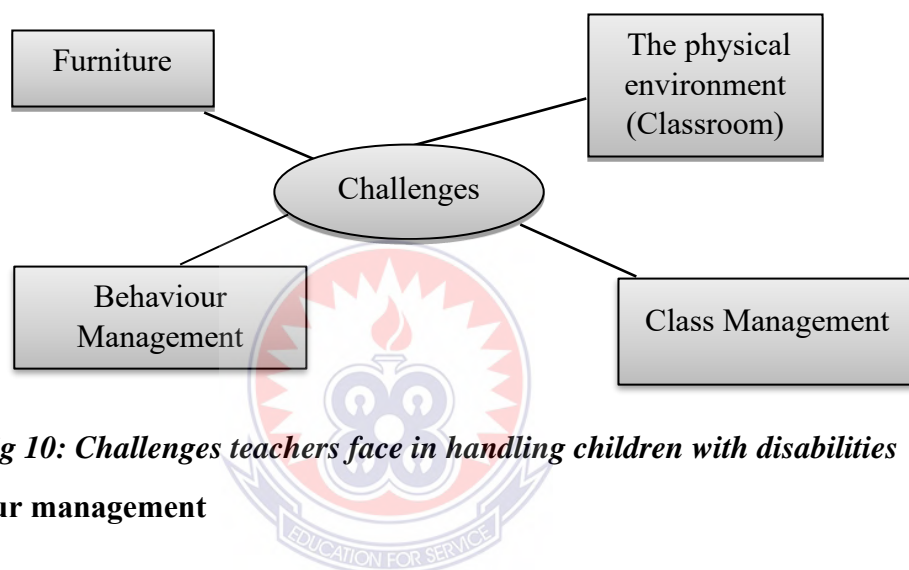


Fig 10: Challenges teachers face in handling children with disabilities

Behaviour management

During the interview with one of the interviewees, she complained that:

“Handling learners with disability and those without disability is difficult in terms of their behaviour since one behaviour modification plan does not fit all”

(R1)

During the interview with one of the teachers, one remarked:

“The learners in the classroom needs different attention at every given time which needs prompt action but since am alone I sometimes get exhausted”.

(R2)

Another respondent remarked:

“Getting the learners to put up acceptable behaviours in the classroom and during play is sometimes difficult.”

(R3)

Physical facilities available

On the physical facilities available, one of the respondents remarked:

“Our structure is not even ideal for the learners, the only toilet facility is shared with the primary. Instead of hexagonal tables and chairs the children sit on decks which are not appropriate for them”

(R1)

Another respondent commented:

“It is very difficult for learners to navigate through the columns in the classroom. This poses a serious challenge to one of the learners who has a problem with his vision. He is capable of doing things for himself but it seems he has to adjust to the classroom environment instead of us creating a conducive environment for him.”

(R2)

One respondent who was very passionate with her responses asked:

“If we claim we are truly practicing inclusion, how can we site the urinal so far away from the main classroom block? Some of the sitting and writing places of learners are not appropriate for the learners”

(R3)

Class Management

It was obvious that most of the facilitators who availed themselves for the interview conducted had issues with class management.

One of the respondents remarked:

“Sometimes it is not easy managing these children especially the hyperactive ones, the little opportunity they are everywhere”

(R1)

Another facilitator commented:

“To help effectively manage the learners, we have simple classroom rule which I made with the learners input but sometime they do not obey is.”

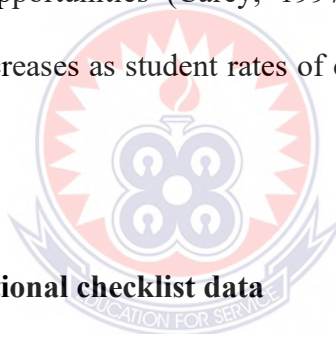
(R2)

From the foregoing responses, the researcher realized that teachers handling children with disabilities faced challenges from furniture, the classroom environment, class management and behaviour management.

The government needs to provide the various early childhood centers with the furniture and other important facilities to help with the practice and implementation of inclusion. Proper facilities and infrastructure need to be provided in the early childhood centers to encourage and motivate teachers to teach children with disability (Kuyini, 2014). Agbenyega (2007) added that it is important to provide the resources and facilities to offer opportunities for children with disability. This is part of the proper organization to help include children with disability into mainstream schools and make sure the facilities needed to improve their learning are provided in the school (Sharma, 2015).

Behaviour and class management is difficult for the teachers since children with disability and their friends without disability need to be handle with a lot of care and professionalism.

Promoting effective learning and teaching is paramount to every early childhood center. Where teachers have good preventative and responsive skills the likelihood of difficulties emerging or developing into incidents will be markedly reduced. Behaviours such as noncompliance, aggression, and destruction of property comprise some of the typical Behaviour problems found in preschool classrooms (Bear, Cavalier, & Manning, 2002). Behaviour management strategies that specifically target noncompliance are among the most relevant strategies for preschool teachers, as all preschool children exhibit noncompliance on at least some occasions (Carey, 1997). Compliance in the preschool classroom is beneficial for students academically, behaviourally, socially, and emotionally. It allows for all students to receive maximum educational opportunities (Carey, 1997), and research has shown that academic engagement increases as student rates of compliance increase (Matheson & Shriver, 2005)



4.7 Analysis of Observational checklist data

From the observation section it was identified that children with hyperactive behaviour and learning disability were the majority found in the classroom. Learners with visual impairment (partially sighted) and the hearing impairment (hard at hearing) were in the minority in the classroom. The frustration of the teachers when trying to put the hyperactive learners in check was very evident. Most of the teachers struggled to give individual attention to the learners. A few of the teachers also demonstrated commitment to the learners who were hard at hearing by mostly trying to repeat most of the salient points in lessons.

The environment inside and outside the classroom was observed and the following was identified, inappropriate writing and sitting places for children, spacing in some

of the column in the classroom are small and prevent easy movement and some of the classrooms are not easily accessible too. The learning centers in the classroom had no specific provision for learners with disability. Most of the early childhood centers shared toilet and urinal facility with their peers at the primary.

It was evident from the observation that the resource constraints that besiege the Ghanaian classroom in general extended to the early childhood centers. Most of the classroom resources available were from the ingenuity of teachers. Most of the books which were available were not suitable for early childhood settings. The manipulatives which learners have to experiment and explore with, were virtually non-existent.

Apart from a few drawing books and a few reading materials, the early childhood centers lacked most resources that make teaching and learning exciting for learners.

Two observation sessions were carried out. The observations sessions provided the researcher with a way to record data of interest directly, instead of relying on the completion of a survey or questionnaire about the teachers' daily practices (Rolfe & Emmett, 2010). The observation sessions occurred within each of the classrooms, but also extended to school activities which were occurring at times when the researcher was on site. The extra school activities included break times and other activities.

The researcher assumed the role of a non-participatory observer (Wolcott, 1988) who does not participate within the activities of the class. The aim was to not disrupt the normal course of the day; however, it was noted that by having an extra person in the room this was a disruption in itself. The researcher had already developed a rapport with the participants through the initial meeting and interview before observing within the context. These initial meetings were set up to decrease any potential feelings of

anxiety that may have been felt by the teachers having a researcher in their own classrooms watching them. The observations and field notes were then written up into full research notes for later analysis. The researcher maintained a diary of notes with informal notations and observations recorded throughout the data collection period.

The use of the observation sessions provided contextual information collected within the natural setting of the participants (Bloomberg & Volpe, 2008). The implementation of the observation protocol allowed the observation sessions to be both targeted and relevant to the research problem outlined in this study. The data collection within the observation sessions was used in conjunction with the interview data and the data gathered through the document analysis. The observation sessions began after the first interview was conducted to add depth to the interview data (Patton, 2002).

The use of an observation protocol was deemed to be beneficial for this study. The use of an observational protocol in qualitative research design facilitates researchers documenting what is seen at the research site (Creswell, 2008). It also acted as a way of organising field notes taken during observation sessions. The observation protocol design offered large amounts of space for field notes to be taken as well.

Using an observation protocol in this study was important to provide cohesion between how what was going to be observed could result in answering the research questions. For this to occur, the researcher needed to go back to the research problem and research questions and pull out particular themes for observation. Rolfe and Emmett (2010) noted the importance of creating congruence between the choice of observational technique and the research questions. These themes were then matched

with themes from the literature reviewed for this study. This yielded several themes which formed the basis for the observation protocol.

4.8 Documentary Analysis

A discussion time to look through the participants' planning documents was made. The researcher and participants discussed the teacher's planning documents such as lesson plan and scheme of learning including the participant talking about their planning strategies. Handwritten notes were used by the researcher to document information for later reflection and interpretation of the planning documents.

Marshall and Rossman (2006) identified that the incorporation of local documents provides background and context to a study, even though this may not constitute a large part of the data collection. School policy documents and handbooks were used in this research as well as the teachers' planning documents. Individual education plans were not used in this research as the focus was on the teacher's planning, not on the learners' progress as such.

One planning and document discussion was carried out with each teacher. The length of these discussions ranged from approximately 25 minutes to 30 minutes. Teachers shared their planning documents with the researcher and talked about the process they go through in planning for the learners in their class. The focus was on how the teacher planned for the learners with learning needs. This exercise was done to establish whether there was a direct link between theory and practice.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Overview

The study aimed at exploring inclusive school barriers to learners with disability in inclusive Early Childhood Centers; the case of New Juabeng Municipality. In all, 21 learners were identified from five early childhood center in the Koforidua Township to be living with any form of disability. Also, teachers were interview and the information gathered was thematically analyzed. This chapter discusses the summary of the findings, as well as challenges faced by teachers teaching in the inclusive early childhood centers.

5.1 Summary

This work gives credence to the assertion that attitude to inclusive education is of great importance in every learning situation. It generally means that when the appropriate resources are provided and teachers are adequately trained it will help alleviate the barriers children with disability face in inclusive early childhood centers. It also help teachers to have positive attitude and it gives rise to great success in the teaching and learning in an inclusive early childhood centers. On the other hand, when teaching and learning materials are not enough, teaching and learning become difficult and abstract. The outcomes of this research are discussed according to the research questions as follows:

5.1.1 Categorization of children with disability in early childhood centers in the New Juabeng Municipality.

The findings showed that (21) learners with disabilities in the five (5) inclusive early childhood centers. Ten (10) teachers/facilitators were also interviewed. In total, four (4) disability types were found which included Low Vision (Partially sighted), Hyperactive, Hearing impairment and children with Learning Disability. Each of the early childhood centers under study recorded at least one disability. Learners with learning disability were the highest (9) amongst the respondents. The inclusive early childhood centers visited include, Nana Kweku Boateng Experimental Basic 'A', Nana Kweku Boateng Experimental Basic 'B', Koforidua Presbyterian Basic School, Sarkodie Basic School and Ave Maria Catholic Basic School.

5.1.2 Resources available to support inclusive education in the early childhood centers.

The study is very evident about the resource constraints that besiege the Ghanaian classroom in general. Most of the classroom resources available are from the ingenuity of teachers. Most of the books which are available are not suitable for early childhood settings. The manipulative which learners have to experiment and explore with, are virtually non-existent.

Apart from a few drawing books and a few reading materials, the early childhood centers lack most resources that make teaching and learning exciting for learners.

5.1.3 Training level of teachers handling children with disabilities in early childhood centers.

On the question of the level of training, it was revealed by the study that in-service training is not regularly organized for teachers handling children with disability in

inclusive early childhood centers. This has contributed to the low level of teachers to perfectly handle learners with disabilities

It was discovered from the study that, aside the introduction to special education course they took at the colleges of education and at the university, no other training has been organized for them in the area of special education. Also, the study revealed that low teacher commitment, non-professional teachers and work habit contribute to the ineffectiveness.

5.1.4 Challenges teachers face in handling children with disabilities in inclusive early childhood center.

The challenge the study identified was that the physical environment was not easily accessible to learners. Spaces inside the classroom are not enough for easy movement and some of the facilities in the classrooms are not easily accessible for the learners. Some of the teachers with early childhood background do not like to teach at the inclusive early childhood centers due to their inability to handle those with disability alongside their counterparts without disabilities. The findings showed that factors such as infrastructure of the early childhood centers and lack of appropriate furniture were contributing to the challenges that have hindered inclusive education. Behaviour and class management is also a challenge in the early childhood centers due to the different categories of children with disabilities found at the center which makes it difficult for teachers to handle them effectively. This has influenced the attitude of teachers towards the teaching and learning in the inclusive early childhood centers.

5.2 Conclusion

The findings made so far from the study suggest several important conclusions.

Firstly, the various categories of children with disabilities should be grouped according to their categories so as to help the teachers to relate to them frequently and particularly, since they need special attention.

Also, it was apparent from the findings that, Inadequate Teaching and learning resources (T/LRs), inadequate training of teachers in special education and inadequate in service training for teachers at the inclusive early childhood centers are related factors that contribute to inclusive school barriers to children with disabilities in Early Childhood Centers. It can be emphasized that these factors generally do not operate in isolation. Inadequate training of teachers for example would result in the usage of inappropriate teaching pedagogies and would also affect their commitment to the teaching and learning of children with disabilities. Therefore, to improve the teaching and learning of children in early childhood center, there is the need to look at these issues holistically.

5.3 Recommendations

Based on the findings of the study, the following recommendations are made:

- There should also be expert of teachers on the various categories of the disabilities since teachers might major in one and might have problem in dealing with the other categories.
- There should be regular sensitization on learners with disabilities in the municipality. Ghana Education Service in collaboration with Ghana Health Service should organise regular health screening programmes for children by health personnel to enable parents and teachers know the specific problem they have in order to address them.

- The Ghana Education Service should supply inclusive early childhood centers in the municipality with adequate teaching and learning resources as well as other study materials to help enhance teaching and learning.



REFERENCES

- Ackah-Jnr, F. R. (2010). "Teacher characteristics as predictor of attitudes towards inclusive education in the Cape Coast Metropolis of Ghana." *Ife Psychologia* 18 (2): 35-47.
- Ackah-Jnr, F. R. (2016). Implementation of inclusive early childhood education policy and change in Ghana: Four case sites of practice. Unpublished doctoral thesis; <https://hdl.handle.net/10072/367710>
- Ackah-Jnr, F. R. (2017). System and school-level resources and transforming and optimizing inclusive education in early childhood settings: What Ghana can learn. *European Journal of Education Studies*, 5(6). 45-57
- Agbenyega, J. S. (2007). Examining teachers' concerns and attitudes to inclusive education in Ghana. *International Journal of Whole schooling*, 3(1), 41-56.
- Ainscow, M. (1999) *Understanding the development of inclusive schools*. London: Falmer.
- Ainscow, M. (Ed.). (1991). *Effective School for All*. London: David Fulton Publishers.
- Allen, K. E., & Cowdery, G. E. (2015). *The exceptional child: Inclusion in early childhood education*. 8th ed. Australia: Cengage Learning.
- Allison, P. D. (2001). *Missing Data (Vol. 136)*. Thousand Oaks, CA: SAGE Publications, Inc.
- Avoke, M. K. & Avoke, S. K. (2004). *Inclusion, Rehabilitation and Transition Services in Special Education*. Winneba: Department of Special Education.
- Avoke, M. K. (2001). Some historical perspective in the development of special education in Ghana. *Eur. J. Spec. Needs Educ.* 16(1), 29-40.
- Avramidis, E., Bayliss, P. & Burden, R. (2000). A survey into mainstream teachers' attitudes toward the inclusion of children with special educational needs in the ordinary school in one local education authority. *Educational Psychology*, 20, 191-195
- Ballard, K. (1997) 'Researching disability and inclusive education: participation, construction and interpretation'. *International journal of inclusive education*, 1(3), 243-256.
- Bean, W. B., Townsend, M. & Tung, C. (1963). The pathogenesis of duodenal ulcer disease in the pathothenate-deficient rat. *The Yale Journal of Biology and Medicine*, 34(7): 1073-1084

- Bear, G. G., Cavalier, A. R., & Manning, M. A. (2002). Best practices in school discipline. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology* (4th ed., pp. 977 – 991). Bethesda, MD: National Association of School Psychologists.
- Berg, B. L. (2004). *Qualitative research methods for the Social Sciences* (5th ed.). Person Education, Boston
- Blaikie, N. (2009). *Designing social research: The logic of anticipation*. Hoboken, NJ: John Wiley & Sons.
- Blanton, L. P., & Pugach, M. C. (2007). *Collaborative Programs in General and Special Teacher Education: An Action Guide for Higher Education and State Policy Makers*. Washington, D.C.: Council of Chief State School Officers.
- Bloomberg, L. D., & Volpe, M. (2008). *Completing your qualitative dissertation: A roadmap from beginning to end*. Thousand Oaks, CA: Sage Publications, Inc.
- Booth, T., Ainscow, M. & Kingston, D. (2006). Index for inclusion: Developing play, learning and participation in early years and childcare. *Disability, Handicap & Society*, 8(3): 235-248.
- Bostow, D. E., & Bailey, J. B. (1969). Modification of severe disruptive and aggressive Behaviour using brief timeout and reinforcement procedures. *Journal of Applied Behaviour Analysis*, 2, 31 - 37
- Britzman, D. (2003). *Practice makes practice: A critical study of learning to teach*. Sunny press.
- Bulotsky-Shearer, R. J., Fernandez, V., Dominguez, X., & Rouse, H. L. (2011). Behaviour problems in learning activities and social interactions in head start classrooms and early reading, mathematics, and approaches to learning. *School Psychology Review*, 40, 39 - 56
- Carey, K. T. (1997). Preschool interventions. In A. P. Goldstein & J. C. Conoley (Eds.), *School violence intervention: A practical handbook* (pp. 93 – 106). New York: The Guilford Press.
- Carney, F. P., Nash, W. L. & Sentell, K. B. (2008). The adsorption of major tear film lipids in vitro to various silicone hydrogels over time. arvojournals.org
- Charles, C. M. & Malian, I. M. (1980). *The special student*. St. Louis: CV. Mosby
- Charnov, O. & Stoop, C. M. (2001). Introduction of statistics for the social and behavioural sciences. *Industrial Relations*. 33(4), 411-425
- Cheryan, S., Sianna, A. Z., Victoria C. P. & Andrew, N. M. (2014). “Designing classrooms to maximize student achievement.” *Policy Insights from the Behavioural and Brain Sciences* 1(1):4-12.

- Clark, C., Dyson, A., & Millward, A. (Eds.). (1995). *Towards Inclusive Schools?* London: David Fulton Publishers
- Cohen, L., Morrison, L., & Manim, K. (2004). *Research methods in education*. Accra: City Publishers
- Cologon, K. (2014). "Better together: Inclusive education in the early years." In K. Cologon *Inclusive education in the early years*, 1-26. South Melbourne: Oxford University Press.
- Commonwealth Human Rights Initiative (CHRI) (2007). *The Simplified Version of Disability Rights in Ghana*. Accra: CHRI, Africa.
- Creswell, J. W. & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. Sage Publications Inc.
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches (2nd ed.)*. Thousand Oaks, CA: Sage
- Creswell, J. W. (2008). *Education research (3rd ed.)*. New Jersey: Pearson Education, Inc.
- Creswell, J.W. (2005). *Educational Research: Planning, Conducting and Evaluating Qualitative and Quantitative Research (3rd ed)*. Upper Saddle River, NJ: Merrill.
- Crow, L. (1996). *Including all our lives; Renewing the Social Model of Disability*, London: Women's Press.
- Crawford, L. & Tindal, G. (2006). Policy and Practice: Knowledge and Beliefs of Education Professionals Related to the Inclusion of Students with Disabilities in a State Assessment. *Remedial and Special Education*, 27, 208-217.
- De Cenzo, D. A. & Robbins, S. P. (1996). *Human Resource Management*. New York: John Wiley and Sons.
- Department for International Development-DFID (2007). *Development on the Record*. Norwich; St. Clements House.
- Department of Education, (1998). *Quality education for all: Overcoming barriers to learning and development*. Retrieved from <http://www.thutong.doe.gov.za>
- Dinham, S. (2004b). The Influence of Leadership in Producing Outstanding Outcomes in Junior Secondary Education. Paper presented at the British Educational Research Association (BERA), Manchester.
- Dinham, S. (2005). Principal leadership for outstanding educational outcomes. *Journal of Educational Administration* 43(4): 338-356.

- Dinham, S., Cairney, T., Craigie, D., & Wilson, S. (1995). School Climate and Leadership: Research into three Secondary Schools. *Journal of Educational Administration*, 33(4), 36-58.
- Dunn, L M. (1968). Special education for the mildly retarded: Is much of it justifiable? *Exceptional Children*, 35, 5-22.
- Eileen, C.W. (1999). Preparing new teachers for inclusive schools and classrooms. Retrieved from <http://www.interscience.wiley.com>
- Eleweke, C.J. & Rodda, M. (2002). The Challenges of Enhancing Inclusive Education in Developing Countries. *International Journal of Inclusive Education*. 6(2). 113-126.
- Elkins, J. (2005). "Inclusive education in Queensland: Where are we going and how will we get there?" *Social Alternatives* 24 (4):45-49.
- Engelbrecht, K. (2003). *The impact of color on learning*. Chicago, IL: Perkins & Will.
- Englert, C. (1983). Measuring Special Education Teacher Effectiveness. *Exceptional Children*, 50(3), 247-254.
- Florian, L. (1998). Inclusion: Special or inclusive education: future trends. *British Journal of Special Education*, 35(4): 202-208.
- Foreman, P. & Arthur-Kelly, M. (2008). Social justice principles, the law, and research, as bases for inclusion. *Australasian Journal of Special Education*, 32(1): 109-124
- Foreman, P. (ed). (2011). *Inclusion in action*. (3rd ed.) South Melbourne, Victoria: Cengage Learning Australia
- Foreman, P. (Ed.). (2001). *Integration and Inclusion in Action* (2nd ed.). Sydney: Harcourt.
- Forlin, C. (2001). Inclusion: Identifying potential stressors for regular class teachers. *Educational Research*, 43(3), 235-245.
- Friend, M., & Bursuck, W. (1996). *Including Students with Special Needs: A Practical Guide for Classroom Teachers*. London: Allyn and Bacon.
- Gaines, K. & Curry, Z. (2011). The inclusive classroom: The effects of colour on learning behaviour. *Journal of Family & Consumer Sciences Education*, 29(1) 76-89
- Ghana Education Service (GES). (2003). *Increasing Access to quality Basic Education for Children with Special needs: Special Education project with VSO*. Accra: GES.

- Ghana Education Service. (2004). *The development of education national report of Ghana: the basic education division*. Accra; Government Publications.
- Ghana Statistical Service (2012). *2010 Population and Housing Census: Summary of Reports of Final Results*. Accra: GSS
- Glesne, C. (2006). *Becoming Qualitative Researchers: An Introduction* (3rd Ed.). New York: Pearson.
- Goetz, E. M., Holmberg, M. C., & LeBlanc, J. M. (1975). Differential reinforcement of other behaviour and non-contingent reinforcement as control procedures during modification of a preschooler's compliance. *Journal of Applied Behaviour Analysis*, 8, 77 – 82
- Golder, G., Norwich, B. & Bayliss, P. (2005) Preparing teachers to teach learners with special educational needs in more inclusive schools: evaluating a PGCE development. *British Journal of Special Education*, 32(2), 92-99
- Guardino, C. A., & Fullerton, E. (2010). "Changing Behaviours by changing the classroom environment." *Teaching Exceptional Children* 42(6):8-13.
- Gyimah, E. K., Ackah-Jnr, F. R., & Yarquah, J. A. (2010). "Determinants of differing teacher attitudes towards inclusive education practice." *Ghana Journal of Education Issues and Practice* 2 (1):84-97.
- Hall, D. & Elliman, D. (ed) (2003), *Health for All Children* (4th ed.), Oxford University Press.
- Hardman, M. I., Drew, C. L., & Egan, M. W. (2002). *Human exceptionality*. Boston, M. A: Library of Congress Cataloguing in Publication Data.
- Hattie, J. (2002). Distinguishing Expert Teachers from Novice and Experienced Teachers: What are the Attributes of Excellent Teachers? Paper presented at the New Zealand Council for Educational Research Annual Conference on: Teachers Make a Difference: What is the research Evidence? University of Auckland
- Higgins, S., Hall, E., Wall, K., Woolner, P., & McCaughey, C. (2005). *The impact of school environments: A literature review*. London: Design Council.
- Jha, M.M. (2002). *School without Walls: Inclusive Education for All*. Oxford: Heinemann.
- Jones, S. R., Torres, V. & Arminio, J. (2006). *Negotiating the complexities of qualitative research in higher education: Fundamental elements and issues*. New York: Routledge.
- Jin, J., Yun, J., & Agiovlasitis, S. (2017). "Impact of enjoyment on physical activity and health among children with disabilities in schools." *Disability and Health Journal* 11(1):14-19.

- Kawabata, Y., Tseng, W. & Gau, S. (2012). Symptoms of attention deficit/hyperactivity disorder and social school adjustment: The moderating roles of age and parenting. *Journal of Abnormal Child Psychology*, 40(2): 177-188.
- Keister, L. A. & Moller, S. (2000). Wealth inequality in the United States. *Annual Review of Sociology*, 26:63-81
- Kumekpor, T. K. (1999). *Research methods and techniques of social research*. Accra: SonLife Press & Services.
- Kuyini, A. B. (2014). "Special education today in Ghana." *Special Education International Perspectives: Practices across the Globe* 28:431-469
- Kvale, S. (1991). Post-modern psychology-a contradiction in terms? In S. Kvale (Ed.), *Psychology and postmodernism* (31-57). London: Sage.
- Larrivee, B. (1985). *Effective Teaching for Successful Mainstreaming*. New York: Longman.
- Leedy, P. & Ormrod, J. (2001). *Practical research: Planning and design* (7th ed.). Upper Saddle River, NJ: Merrill Prentice Hall.
- Lewis, R. B., & Doorlag, D. H. (2006). *Teaching special students in general education classrooms*. 7 ed. Upper Saddle River, NJ: Pearson/Merrill-Prentice
- Lockheed, M. E. (1991). *Improving primary education in developing countries*. London: Oxford University Press.
- Loreman, T. & Earle, C. (2007). The development of attitudes, sentiments and concerns about inclusive education in a content-infused Canadian teacher preparation program. *Exceptionality Education Canada*, 17(1), 85-106
- Loreman, T. (2010). A content-infused approach to pre-service teacher preparation for inclusive education in Forlin, (ed.) *Teacher Education for Inclusion. Changing Paradigms and Innovative Approaches*. London: Routledge
- Marshall, C., & Rossman, G. (2006). *Designing qualitative research* (4th ed.). London: SAGE Publications.
- Martiny, K. M. (2015). How to develop a phenomenological model of disability. *Medicine, Health Care and Philosophy*, 18(4), 553-565.
- Marzano, R. (2000). *A New Era of School Reform: Going Where the Research Takes Us*. Retrieved from www.mcrel.org
- Mastropieri, M. & Scruggs, T. (2000) *The Inclusive Classroom: Strategies for effective Instruction*. Upper Saddle River, NJ: Prentice-Hall.

- Mastropieri, M., & Scruggs, T. (2004). *The Inclusive Classroom: Strategies for Effective Instruction* (2nd ed.). Ohio: Pearson.
- Matheson, A. S., & Shriver, M. D. (2005). Training teachers to give effective commands: Effects on student compliance and academic Behaviours. *School Psychology Review*, 34, 202 – 219.
- Maxwell, T., & Ninnes, P. (Eds.). (2000). *The Context of Teaching* (2nd ed.). Armidale: Kardoorair Press.
- Merriam, S. B. (1998). *Case Study Research in Education: A qualitative Approach*. San Francisco: Jossey- Bass.
- McConkey, R. (2001). *Understanding and Responding to Children's Needs in Inclusive Classrooms: A Guide for Teachers*. Paris: UNESCO.
- McCreey, J., & Hill, T. (2005). "Illuminating the classroom environment." *School Planning* (3)24: 127-136
- McMillan, J. H. & Schumacher, S. (2010). *Research in Education: Evidence-based enquiry*, (7th ed). New Jersey. Person Education
- McNamara, C. (2009). *General guidelines for conducting interviews*. Retrieved from <http://managementhelp.org/evaluatn/intrview.htm>
- Meijer, C.J.W. (Ed.) (2001). Inclusive education and effective classroom practices. European Agency for Development in Special Needs Education. Internet: [www page at URL:http://www.european-agency.org/publications/ereports/inclusive-education-and-effectiveclassroom-practice/IECP-Literature-Review.pdf](http://www.european-agency.org/publications/ereports/inclusive-education-and-effectiveclassroom-practice/IECP-Literature-Review.pdf)
- Mendis, P. (2006). *Children who have Disability in Early Childhood Care and Development Centers: A Resource Book for Teachers*. Sri Lanka: Save the Children.
- Mitchell, D. (2010). In *Education that fits: Review of international trends in the education of students with special educational needs*. Christchurch, New Zealand: University of Canterbury.
- MoE. (2015a). *Inclusive education policy*. Accra, Ghana: MoE.
- Momoh, P. (2010). Effects of instructional resources on students' performance in West African School Certificate Examination. *American Journal of Social Sciences and Humanities* 4(3) 448-460
- Morrison, G. M. & Cosden, M. A. (1997). Risk, resilience and adjustment of individuals with learning disabilities. *Learning Disability Quarterly* 20(1), 43-60

- Murphy, P. K., Delli, L. A., & Edwards, M. (2004). The Good Teacher and Good Teaching: Comparing beliefs of second-Grade Students, Pre-service teachers, and In-service Teachers. *The Journal of Experimental Education*, 72 (2), 69-92.
- National Institute on deafness and other Communication Disorder (2014). Communication disorders. *The Encyclopedia of Clinical Psychology*, 1-5.
- National Network for Child Care (1998). *Caring for Children with Special Needs*. Retrieved from <http://www.nncc.org>
- Ngugi, W. M. (2007). *Introduction to Inclusive Education*. Kenya Institute of Special Needs Education (KISE).
- Obeng, C. (2007). Teachers' views on the teaching of children with disabilities in Ghanaian classrooms. *International Journal of special education*, 22(1), 96-102.
- OECD (2005). *Teachers matter: Connecting work, lives and effectiveness*. McGraw-Hill Education
- Okyere, B. A., & Adams, J.S. (2003). *Introduction on special education: An African perspective*. Legon-Accra: Ghana, Adwinsa Publications (Gh) Ltd.
- Owoko, I.S. (2009). *The Role of Advocacy in Enhancing Equalization of Opportunities for Disabled People* (unpublished paper) presented in Leonard Cheshire Disability workshop in Kisumu.
- Paterson, D. (2000). *Teaching in Inclusive Classrooms in Secondary Schools: A Study of Teachers' Inflight Thinking*. Unpublished Doctor of Philosophy, University of Alberta, Alberta.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc
- Patton, M. Q. (1990) *Qualitative Evaluation and Research Methods* (2nd Ed). Newbury Park: Sage.
- Pearson, S. (2007) Exploring inclusive education: early steps for prospective secondary school teachers. *British Journal of Special Education*, 34 (1), 25-32
- Perner, D. (2004). *Changing Teaching Practices: Using Curriculum Differentiation to Respond to Students' Diversity*. Paris: UNESCO
- Piazza, C. C., Bowman, L. G., Contrucci, S. A., Delia, M. D., Adelinis, J. D., & Goh, H. (1999). An evaluation of the properties of attention as reinforcement for destructive and appropriate behaviour. *Journal of Applied Behaviour Analysis*, 32, 437 – 449

- Pijl, S. J., Meijer, C. J. W., & Hegarthy, S. (Eds.). (1997). *Inclusive education: A global agenda*. London, UK: Routledge.
- Pivik, J., J. McComas, & M. Laflamme. (2002). "Barriers and facilitators to inclusive education." *Council for Exceptional Children* 69 (1):97-107.
- Pottas, L. (2005). Inclusive Education in South Africa: the challenge posed to the teacher of the child with a hearing loss. University of Pretoria, Electronic thesis and dissertation (etd), Internet: WWW page at URL: [http:// upetd.up.ac.za/thesis/available/etd-09072005105219/unrestricted/03chapter3.pdf](http://upetd.up.ac.za/thesis/available/etd-09072005105219/unrestricted/03chapter3.pdf)<http://www.gslis.utexas.edu/~ssoy/usesusers/l391d1b.htm>
- Prizant, B. (1983). Language Acquisition and communicative Behaviour in autism: Toward an understanding of the "Whole" of it. *Journal of Speech and Hearing Disorders*, 48, 296-307.
- Pugach, M. C. & Johnson, L. J. (2002) Collaborative practitioners, collaborative schools: 2nd edition, Denver: Love
- Puri, M, & Abraham, G. (2004). *Inclusive Education*. Sage Publication
- Reynolds, M.C. & Ainscow, M. (1994) 'Education of children and youth with special needs: an international perspective'. In T. Husen and T.N. Postlethwaite (eds) *The international encyclopedia of education* (2nd edition). Oxford: Pergamon.
- Roberts, M. W., Hatzenbuehler, L. C., & Bean, A. W. (1981). The effects of differential attention and time out on child non-compliance. *Behaviour Therapy*, 12, 93 – 99
- Rolfe, S., & Emmett, S. (2010). Direct Observation. In G. Mac Naughton, S. Rolfe, & I. Siraj-Blatchford (Eds.), *Doing early childhood research: International perspectives on theory & practice* (pp. 309–325). Crows Nest: Allen & Unwin.
- Sakarneh, M. (2004) "Effective Teaching in Inclusive Classroom: Literature Review" AARE International Education Research Conference, Melbourne. <http://www.aare.edu.au/04pap/>
- Sandkull, O. (2005). Strengthening education by applying a rights-based approach to educational programming. *International Special Education Conference*. 2005.
- Sapon-Shevin, M. (2007). *Widening the circle: The power of inclusive classrooms*. Boston: Beacon Press.
- Sarantakos, S. (1998). *Social research* (3rd ed.). NY Hound mills, Palgrave: Macmillan.

- Sayed Y, Akyeampong, K. & Ampiah, J.G. (2000). Partnership and Participation in Whole School Development in Ghana. *Education through Partnership* 4(2), 40-51 ISSN 1364- 4203
- Schepens, A., Aelterman, A. & Vlerick, P. (2009). Student teachers' professional identity formation: Between being born as a teacher and becoming one. *Educational Studies* 35(4), 82-97
- Sebba, J. & Sachdev, D. (1997). *What Works in Inclusive Education*, Barnardo's, Ilford
- Shanoski, L., & Hranitz, J. (1992). Learning from America's Best Teachers: Building a Foundation for Accountability through Excellence (Unpublished)
- Sharma, A. (2015). Perspectives on inclusive education with reference to United Nations. *Universal Journal of Educational Research*, 3(5), 317-321
- Simovska, V. (2004). "Student participation: A democratic education perspective-experience from the health-promoting schools in Macedonia." *Health Education Research* 19 (2):198-207.
- Slee, R. (2000) 'Inclusive schooling in Australia? Not yet'. *Cambridge Journal of Education*, 26(1), 19-32.
- Slee, R. (2001a). 'Inclusion in practice': Does practice make perfect? *Educational Review* 53(2): 113-123
- Slee, R. (2013). "How do we make inclusive education happen when exclusion is a political predisposition?" *International Journal of Inclusive Education*, 17 (8),895-907.
- Smith, E., Naess, K. A. B. & Jarrold, C. (2017). Assessing pragmatic communication in children with down syndrome. *Journal of Communication Disorders*, 68(5), 121-135
- Smith, R. M., Neisworth, J. T., & Green, J.G. (1978).Evaluating educational environments. Columbus: Merrill/Prentice.
- Smith, T. E. C., Polloway, E. A., Patton, J. R., & Dowdy, C. A. (2012). *Teaching students with special needs in inclusive settings*. Boston: Pearson Education Inc.
- Stancis, V. (2009). Attitudes towards children with disabilities: A challenge to inclusive education. *Journal of Learning Disabilities*, 28(5), 528-537
- Stanovich, P., & Jordan, A. (1998). Canadian Teachers' and Principals' Beliefs about Inclusive Education as Predictors of Effective Teaching in Heterogeneous Classrooms. *The Elementary School Journal*, 98 (3), 243-256.

- Stayton, V. D. & McCollum, J. (2002). Unifying general and special education: What does the research tell us? *The Journal of Teacher Education Division of the Council for Exceptional Children*.
<https://doi.org/10.1177/0888406402002500302>
- Stringfield, S., & Teddlie, C. (1988). A Time to Summarize: The Louisiana School Effectiveness Study. *Educational Leadership*, 46(2), 43-49.
- Stubbs, S. (2008). *Inclusive Education: Where there are Few Resources*. Oslo: Atlas Alliance.
- Subban, P. & Sharma, U. (2006) Teachers' perceptions of inclusive education in Victoria, Australia. *International Journal of Special Education*, 21 (1), 42-52
- Subbey, M. (2017). *Introduction to special education for the early childhood educator*. Edsam Printing and Publishing Ltd.
- Tanner, K. C. (2008). "Effects of school design on student outcomes." *Journal of Educational Administration* 47 (3):381-399.
- Teddlie, C., Kirby, P., & Strinfield, S. (May, 1989). Effective versus Ineffective Schools: Observable Differences in the Classroom. *American Journal of Education*, 221-236.
- Thomas, G., Walker, D. & Webb, J. (1998). *The Making of the Inclusive School* London: Routledge
- Tichten, A. & Hobson, D. (2005). Phenomenology. In B. Somekh & C. Lewin (eds). *Research Methods in the Social Sciences*, pp.121-130. London: SAGE Publications.
- Tomlinson, S. (1985). "The Expansion of Special Education". In Mitchell, D. (2004): *Special Educational Needs and Inclusive Education: Major Themes in Education, Volume I: Systems and Contexts*. New York: Routledge
- UNESCO (2000) '*Inclusive education and education for all: A challenge and a vision*'. Paris: UNESCO.
- UNESCO (2009). Policy Guidelines for Inclusion in Education. Retrieved from: <http://unesdoc.unesco.org/images/0017/001778/177849e.pdf>
- UNESCO. (1994). The Salamanca statement and framework for action on special needs education. Adopted by the World Conference on Special Needs Education: Access and Quality. Salamanca, Spain, 7–10 June. Paris: UNESCO.
- United Nations. (1989). Convention on the rights of the child. Retrieved from <http://www.cirp.org/library/ethics/UN-convention/>

- Wang, M. & Fitch, P. (2010) Preparing pre-service teachers for effective co-teaching in inclusive classrooms. In Forlin, C. (ed.) (2010) *Teacher Education for Inclusion. Changing Paradigms and Innovative Approaches*. London: Routledge
- Wang, M. C., & Walberg, H. (1991). Teaching and Educational effectiveness: Research Synthesis and Consensus from the Field. *Review of Educational Research* 63(3) 249-294
- Webster-Stratton, C. (1997). Early intervention for families of preschool children with conduct disorders. In M. J. Guralnick (Ed.). *The Effectiveness of Early Intervention* (pp. 429 – 453). Baltimore: Brookes.
- Webster-Stratton, C. (1999). *How to promote children's social and emotional competence*. Thousand Oaks, CA: SAGE Publications Inc.
- Weinstein, C. S., Mignano, A. J., & Romano, M. E. (2011). *Elementary classroom management: Lessons from research and practice*: New York , McGraw-Hill.
- Weinstein, C., S. (1979). “The physical environment of the school: A review of research.” *Review of Educational Research* 49 (4):577-610.
- Westwood, P. S. (2003). *Commonsense methods for children with special educational needs: Strategies for the regular classroom*; Psychology Press.
- Westwood, P.S. (1995) ‘Learner and teacher: perhaps the most important partnership of all’, *Australasian Journal of Special Education*, 19 (1): 5 -16.
- Whitworth, J. (2001). *A model for inclusive teacher preparation*. Abilene, Texas: Department of Education, Abilene Christian education.
- Wilder, D. A., & Atwell, J. (2006). Evaluation of a guided compliance procedure to reduce noncompliance among preschool children. *Behavioural Interventions*, 21, 265 – 272
- 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.
- Winzer, M. (2005). *Children with exceptionalities in Canadian classrooms*. Toronto: Prentice hall Inc.
- Wolcott, H. (1988). Ethnographic research in education. In R. Jaeger (Ed.), *Complementary methods for research in education*. Washington, DC: American Educational Research Association.

- Woloshyn, V., Bennett, S., Berrill, D. (2003) Working with students who have learning disabilities – teacher candidates speak out: Issues and concerns in pre-service education and professional development. *Exceptionality Education Canada*, 13 (1), 7-28
- World Bank. (2003). “Education for All: Including Children with Disabilities-- Summarized Lessons Learned and Key Policy Findings on the World Bank’s Work in Education.” Education Notes, Human Development Network, The World Bank
- Yekple, Y. E. & Avoke, M. (2006), “Improving inclusive education at the basic school level in Ghana”, *African Journal of Special Educational Needs*. 5(2), 239-249.



APPENDIX A

UNIVERSITY OF EDUCATION WINNEBA

FACULTY OF EDUCATIONAL STUDIES

DEPARTMENT OF EARLY CHILDHOOD EDUCATION

INTERVIEW FOR TEACHERS

NAME OF SCHOOL:

REGION:

NUMBER OF YEARS OF TEACHING:

INTERVIEW DATE: **DURATION:**

1. Categories of children with disabilities at the early childhood centers

a. Please what category of children with disability are there in the class?

.....
.....

b. Please how do you identify the children with special needs?

.....
.....

2. Resources available to support inclusive education in the early childhood center.

a. What type of resources are available in the early childhood center?

.....
.....

b. Who provides the resources? (Teaching and learning aids)

.....
.....

c. How often are the resources used by children with disabilities in the early childhood center?

.....
.....

3. Training level of teachers handling children with disability at the early childhood centers.

a. Initial teacher training program attended

.....
.....

1. Induction and INSET programs (within one year after pre-service)

.....

b. Upgrading programs attended.

.....
.....

c. Special education courses attended.

.....
.....

4. Challenges teachers face in handling children with disability at the early childhood center.

a. What challenges are there in terms of sitting places for children with disability?

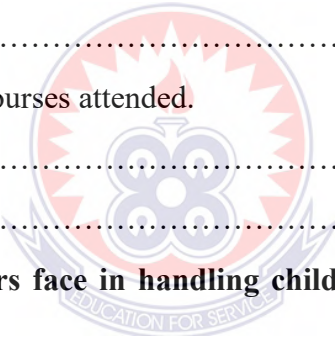
.....
.....

b. What challenges are there in terms of teaching and learning resources for children with disability?

.....
.....

c. What challenges are there in terms of reading and writing?

.....



APPENDIX B

Checklist for categories of children with disability in Inclusive early childhood centers

Instruction: Indicate with a tick (√) in the appropriate box on the appropriateness of physical environment for inclusive early childhood center. The response options for this section are 2 (two) namely, (Y) Yes and (N) No.

No.	STATEMENT	YES	NO
1	There are physically challenged children in the class (using crutches, wheel chair).		
2	There are mild to moderate visually impaired children in the classroom		
3	There are no hearing impaired children in the classroom		
4	There are children with attention hyperactive disorder in the classroom		
5	There are no children with speech and language disorder in the classroom.		

APPENDIX C

Teaching and learning resources available to support teaching of children with disability.

Instruction: Indicate with a tick (√) in the appropriate box on the appropriateness of physical environment for inclusive early childhood center. The response options for this section are 2 (two) namely, (Y) Yes and (N) No.

No.	STATEMENT	YES	NO
1	There are large print reading materials for children		
2	There are television or radio set in the classroom		
3	There are appropriate tables and chairs in the classroom		
4	There is enough space for easy movement in the classroom		
5	There are large print and colourful teaching and learning materials.		
6	The classroom is easily accessible		

APPENDIX D

Level of training for Teachers handling children with disabilities

Instruction: Indicate with a tick (√) in the appropriate box on the level of training for teachers handling children with disabilities. The response options for this section are 2 (two) namely, (Y) Yes and (N) No.

1. Commitment to the learning needs of children with disabilities

No.	STATEMENT	YES	NO
1	Teachers show commitment to development and well-being of children with disabilities		
2	Teachers show dedication in the learning and achievement of children with disabilities		
3	Teachers respect and treat all children equally		
4	Teachers show dedication in the learning and achievement of children with disabilities		

2. Professional practice

No.	STATEMENT	YES	NO
1	Teachers effectively communicate with children with disabilities		
2	Teachers regularly assess the progress of children with disabilities and report to their parents.		
3	Teachers adapt their teaching practices to the needs of children with disabilities.		
4	Teachers apply appropriate technology in teaching children with disabilities.		