

**ASSESSING BARRIERS FACED BY PUPILS WITH DISABILITIES IN
INCLUSIVE AND NON-INCLUSIVE SCHOOLS IN THE CAPE COAST
METROPOLITAN AREA**

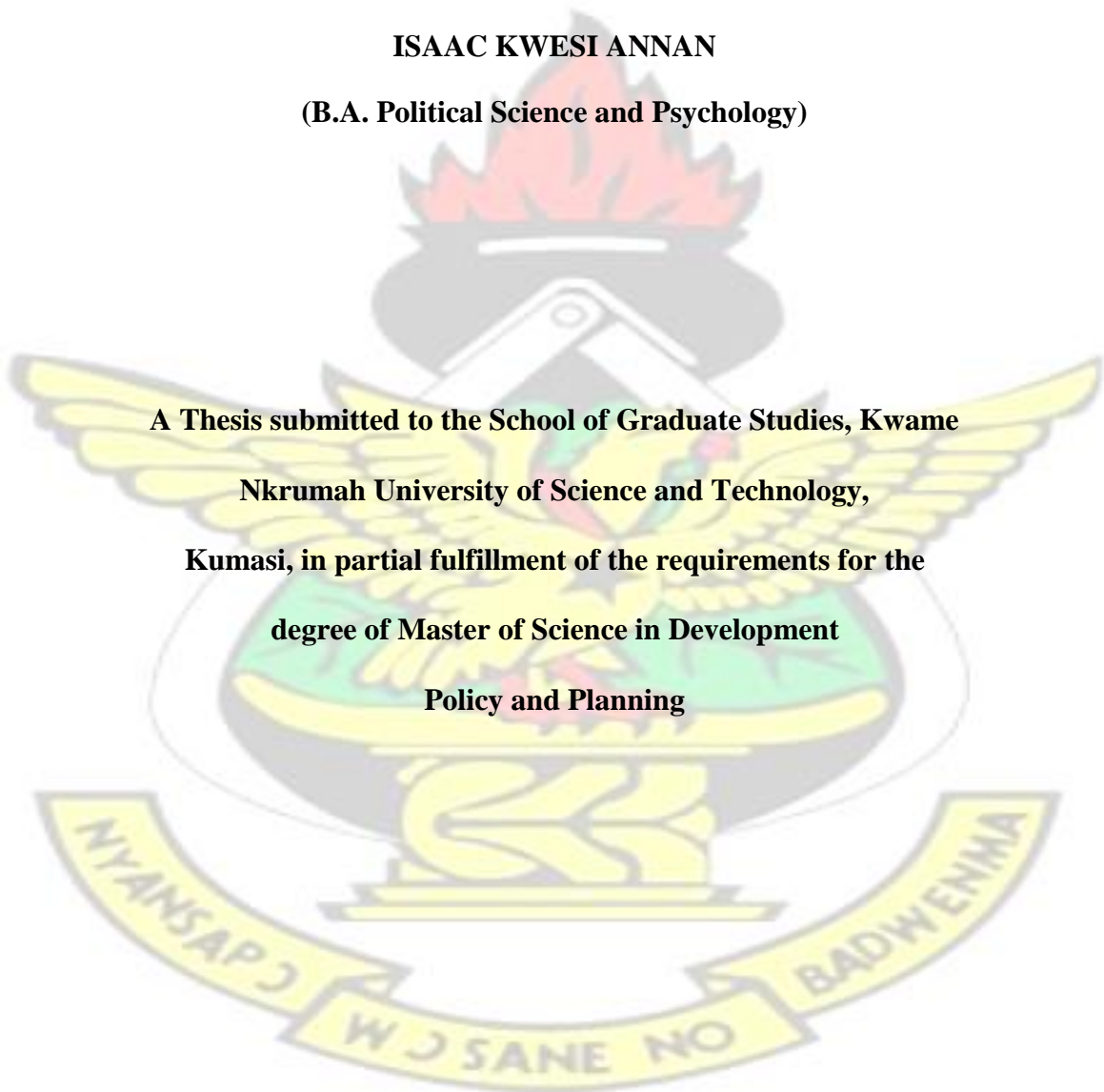
KNUST

BY

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**A Thesis submitted to the School of Graduate Studies, Kwame
Nkrumah University of Science and Technology,
Kumasi, in partial fulfillment of the requirements for the
degree of Master of Science in Development
Policy and Planning**



JUNE, 2016

DECLARATION

I hereby declare that this submission is my own work towards the M.Sc. Development Policy and Planning and, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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ABSTRACT

Inclusive approach to education has been accepted as the solution to the years of discrimination and marginalization experienced by children with disabilities but its implementation has come at an unacceptably slow rate. This study was designed to shed light on the plight of pupils with disabilities and to recommend measures to combat discriminatory practices and attitudes to achieve education for all. The study focused on the physical environment of inclusive and non-inclusive schools, the performance of teachers handling pupils with disabilities as well as the perception of pupils on the importance of inclusive education. A comparative social research design was used for the study. Seven (7) purposively selected inclusive schools and seven (7) randomly selected non-inclusive schools were chosen. In all forty one (41) pupils with disabilities were purposively selected for the study. Structured questionnaire was used for data collection and augmented by an audit of the school structures and the general environment. Finally, face-to-face interview was organized to further explore issues emerging from the survey.

The research revealed that the physical environments of inclusive schools were more accessible and had better facilities than non-inclusive schools. The research found that, teachers handling pupils with disabilities in non-inclusive schools were better than teachers in inclusive schools in terms of the professional practice of the teaching field and commitment to students and student learning. However, teachers in both schools had limited knowledge in the development of children with disabilities.

The study recommended that Colleges of education should incorporate practical disability issues into their programmes in order to equip teachers with the skills and knowledge needed to handle children with disabilities. The physical environments of all schools should undergo serious modification in order to provide universal access to all children.

ACKNOWLEDGEMENTS

This thesis has been successfully completed through the favour and grace of the Almighty God. This work would not have been fruitful without the inexorable support from several people. First of all, I am grateful to the inspiration and evergreen memory of my father, Mr. Joe Steve Annan- a towering example of excellent fatherhood. Second, I am thankful to my mother Madam Sarah Essien for being my rock and my blessed assurance here on earth. Third, I am immensely appreciative of the support of my dearest Erica Gloria Odoom and my siblings Steve, Jude and Belinda.

My thanks also go to individuals who availed themselves to me during the study. Great thanks go to all the headmasters and headmistresses of the fourteen schools under this study as well as their teachers for their patience and corporation. Finally, my unflinching gratitude goes to all the 41 pupils with disabilities for their time, honesty and contributions to the success of the thesis. Finally, I am sincerely grateful to my supervisor, Dr. Justice K. Owusu-Ansah, who guided and supported me in every step to complete the thesis. He was always available for discussions and gave me insightful advice.

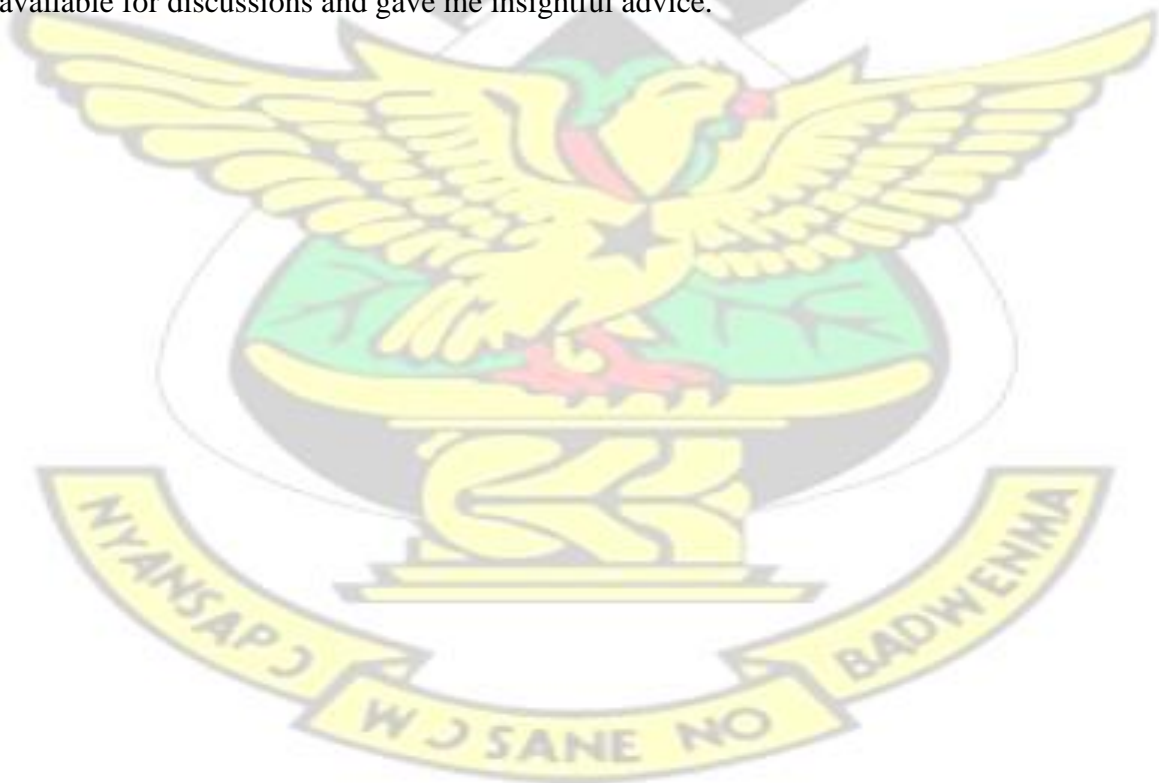


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CHAPTER ONE

BACKGROUND TO INCLUSIVE EDUCATION

1.1 Introduction

In the past, children with disabilities were conceptualized as objects of disgrace and pity. Gadagbui (1998) illustrates how in ancient Greece, infants from the city-states of Sparta and Athens were abandoned or destroyed upon the detection of their disabilities before the age of three. In Rome, blind boys who survived infancy were given training to be beggars while their female counterparts (blind girls) were trained as prostitutes (Winzer, et al, 1987). According to Avoke and Avoke (2004), persons found in Ghana to be with disabilities were thought of as possessed with evil spirits and carried curses from the gods because of their family's or parents' disobedience. Winzer, et al (1987) posits that, it was only after the 1700s that persons with disabilities in Europe were given any humane attention.

Over the past decades, disability has become a human right issue (UNESCO, 2009). The Convention on the Rights of the Child (CRC) (1989) became the first treaty to solidify the rights of children. CRC guarantees children with disabilities the enjoyment of all rights entitled to all children (United Nations, 1989). Article 2 of this Convention reveals that no child should be subjected to any form of discrimination on the grounds of their disability. Article 23 further makes concrete the rights and freedoms of children with disabilities and reiterates the importance of promoting their full enjoyment of life and the freedom of living as independent people. The Convention on the Rights of Persons with Disabilities (CRPD) also cites specifically in it Article 7 that children with or without disabilities must fully enjoy all human rights on equal basis and further demands measures for the protection of these rights.

The UNESCO World Conference on Special Needs Education: Access and Quality, held in Spain in 1994, pushed for a shift in policy requiring reforms dedicated to ensuring education for all children regardless of their disabilities (UNESCO, 1994). Additionally, the conference concluded that inclusive education was the surest means of ending discriminatory attitudes and ensuring an inclusive society as well as achieving education for all. This meant that Governments should employ all means necessary (legislative, policy and implementation) to alter national education and build an inclusive system of education. Action is however required at all levels including, management, teacher preparation,

curriculum flexibility, support services and the involvement of society as a whole. Avoke (2001), mentions that, although the world was gravitating towards inclusive systems, persons with disabilities were still being institutionalised. In Ghana, education for children with disabilities was cloaked with barriers in availability, accessibility, adaptability and acceptability predominantly due to insufficient preparation of teachers, ineffective monitoring and lack of resources to schools (Sayed et al, 2000).

Correspondingly, the Ghana Education Service (2004:15) stated that:

“The challenges facing the government of Ghana for ensuring social and educational inclusion include public prejudiced perception of persons with special needs, architectural barriers, inadequate assessment facilities, inaccessible curriculum, curriculum inflexibility and pre-/post-training in special education needs for regular teachers.”

In line with this, the Government of Ghana as a show of support to the Salamanca declaration decided to implement full inclusive educational systems by 2015 and to ensure that children with special educational needs co-exist with other children without disabilities in mainstream schools and are opened to equal opportunities (Yekple and Avoke, 2006). Further, Ghana, a subscriber to the principles and processes of the Education For All (EFA) developed a work programme within the Education Strategic Plan hinged on the goals 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 affirm government’s commitment to inclusion, the Parliament of Ghana, in August, 2006, passed into law the ‘Persons with Disability Act’ as a legal framework to institute a council for persons with disabilities, to protect the full enjoyment of the rights of persons with disability and to honour it international obligations (CHRI, 2007). In the light of this, 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 disabilities. Again, government provided within 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 expressly covered within the 'Persons with Disabilities Act'.

Despite actions by governments to integrate children with and without disabilities in mainstream schools, barriers still hinder the participation of children with disabilities in education (UNESCO, 2009). According to Holler (2005) these barriers force many persons with disabilities unlike their counterparts without disabilities to drop out of school. Estimations by the World Bank reveal that, of the 115 million out of school children globally, children with disabilities constitute 30% to 40% (World Bank, 2003). UNESCO (2009) posits that 10% of all children in school are children with disabilities, and of this, just half complete primary education.

In spite of the barriers encountered by children with disabilities, it is imperative on society, government and schools that all children including children with disabilities enjoy the rights to education. It is therefore government's responsibility that children with disabilities fully enjoy these rights. Hence, this study seeks to assess the hurdles that confront children with disabilities in inclusive and non-inclusive schools.

1.2 Problem statement

Inclusive approach to education is the solution to the years of discrimination and marginalization experienced by children with disabilities but its implementation though consistent has come at an unacceptably slow rate due to the fact that children with disabilities have been denied rights that are freely enjoyed by their counterparts without disabilities (UNESCO, 2009). According to Sayed et al (2000), education for pupils with disabilities in Ghana had been bedevilled by problems of availability, accessibility, adaptability and acceptability. Additionally, the Ghana Education Service (2004), state that the challenges of inclusive education in Ghana is perceptual, architectural, curricula and the training of teachers.

According to Holler (2005) these challenges compels many persons with disabilities unlike their counterparts without disabilities to drop out of school. Estimations by the World Bank reveal that, of the 115 million out of school children globally, children with disabilities constitute 30% to 40% (World Bank, 2003). UNESCO (2009) posits that 10% of all children in school are children with disabilities, and of this, just half complete primary education. These barriers hinder the quest of children with disabilities in enjoying their rights to education like their counterparts without disabilities.

The study therefore seeks to observe the difficulties that confront pupils with disabilities in both inclusive and non-inclusive schools. The study will assess the barriers that the physical environment of the school in the area of accessibility and use as well as the safety and sanitation presents to pupils with disabilities. The performance of teachers handling pupils with disabilities were also appraised as a means of assessing the barriers it presents.

1.3 Objectives of the study

In an attempt to underscore the plight of pupils with disabilities, this study seeks to explore the barriers bedeviling children with disabilities in inclusive and noninclusive schools in the Cape Coast Metropolis.

Specifically, this study aims to:

1. Ascertain the appropriateness of the physical environment of the schools for children with disabilities.
2. Appraise the performance of teachers in handling the needs of children with disabilities.
3. Ascertain the importance of inclusive education to pupils with disabilities.

1.4 Research questions

Based on the objectives, the following research questions were developed to guide the study's attempt to assess the barriers faced by pupils with disabilities in inclusive and non-inclusive schools.

1. What physical environment is present in inclusive and non-inclusive schools?
2. How well have teachers handling pupils with disabilities performed?

3. How important is inclusive education for pupils with disabilities?

1.5 Scope of the study

The central focus of this study is to assess the barriers bedevilling pupils with disabilities. Contextually, the study examines the physical environment of the inclusive schools and the selected non-inclusive schools in the area of accessibility, safety and sanitation of the physical environment. The study also appraises the performance of teachers handling pupils with disabilities in the area of commitment and professional practice.

Geographically, the study was conducted in the Cape Coast Metropolitan area in the central region. The Metropolis is encircled on the south by the Gulf of Guinea, west by the Komenda / Edina / Eguafo / Abrem Municipal, east by the Abura/ Asebu/ Kwamankese District and north by the Twifu/Hemang/Lower Denkyira District.. The study will centre on the seven (7) inclusive schools within the metropolis as well as seven (7) selected non-inclusive schools.

CENTRAL REGIONAL MAP



Figure 1.1 Map of Central region of Ghana showing the Cape Coast Metropolitan area

1.6 Significance of the study

The study would shed light on the plight of children with disabilities 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 pupils with disabilities.

The study would inform the appropriate authorities on the difficulties that confronts pupils with disabilities. The study would compare aspect of the current physical environment to what should be the ideal situation and also enquire from pupils the barriers that they encounter in their everyday quest to enjoy quality education. It will also seek the views of pupils with disabilities who are the beneficiaries of inclusive education on the importance of inclusive education.

Finally, the study would also serve as a guide in knowing the state of inclusive education in Ghana, the areas that presents barriers to pupils with disabilities and the measures proposed by pupils on how to solve these problems. This will be a guide to future policy and practice adjustment with the view of creating an inclusive society.

1.7 Limitations

The task of data collection was difficult due to frequent absenteeism of some pupils with disabilities. This means frequent visits had to be made to the schools in order to track respondents. The inability of some respondents to provide answers to the questionnaire due to the nature of their disability meant that other alternatives like observation of the physical environment and interview of teachers were used. Some respondents could not comprehend the issues under study due to their age. Issues had to be practically demonstrated for pupils to understand the issues under study.

Generally, pupils had difficulty in expressing themselves well in the English language; therefore pupils spoke in their local dialect (Fante) and further translated into English even though this means that the emotions and meanings conveyed in their response could be lost in translation. There was also a problem of measurement. The measurements of some indicators like the travel distance to toilet facilities had to be approximated due to the lack of measuring tools and to save time.

1.8 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 and ends with organization of the study. Chapter two focuses on the review of related literature. This includes the overview, understanding disability, the state of children with disabilities, development of disability education, teacher performance and the physical environment of inclusive schools

Chapter three deals with the research methodology which consist 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 conclusions made in the discussion of results and then prescribe and makes recommendations on the steps to be taken to remedy the situation.

CHAPTER TWO

UNDERSTANDING DISABILITY AND INCLUSIVE EDUCATION

2.1 Introduction

Disability is a natural human phenomenon and every human being would at some point in their life be temporarily or permanently impaired. According to Lee (2003), due to the youthful demographic nature of the world and the fact that disability increases with age, disability would be more heightened as majority of people live to be old. This revelation prompts the study and understanding of disability related issues.

Estimates from the World Bank indicate that out of the 115 million out-of-school children globally, children with disabilities are 30% to 40%(World Bank, 2003).According to Filmer (2008), children with disabilities are less likely to attend school. This means that one will experience restricted opportunities for the creation of human capital and a reduction of employment opportunities and decreased productivity later in life.

Children with disabilities are faced with barriers everyday due to their status and special needs. These barriers emanate from the impairments of the child and the conditions created by society (Brett, 2002). The barriers faced by these children often times require a multi-dimensional approach in tackling them (Heiman, 2002). However, measures adopted for intervention are usually not based on the understanding of the peculiar needs of children with disabilities and the school system. Issues like this retards the dream of meeting the needs of children with disabilities.

2.2 Understanding disability

Disability is a complex, multi-faceted and a highly contentious term. Models of disability however provide basis for understanding the context and causes of disability (Imrie, 1997). Fougeryollas and Beauregard (2001) opine that a model is essentially a lens for comprehending disabilities with a selective prioritization of some factors to the neglect of others. This means that in trying to understand disability, models used should be employed strategically on the basis of the child's pressing challenges, the type of disability and the social environmental context.

On the other hand, models do not only provide a description of the disability but also stress on the basis for attenuating the adverse effects of disability on functioning. Different models however provide a different focus for understanding disability therefore no single model provides a sufficient understanding of the entire field of disability (Bricout et al, 2004). Models must be seen as instruments not isolated structures for understanding disability. There are basically two distinct models of disability, the medical model and the social model.

The medical model of disability is undoubtedly amongst the most influential and high ranking models of today for understanding disability due to the influence of the institutions and professionals on whose perspectives the model was based (Gregory, 1997). The model defines disability in a pathological context focusing on deficiencies (Bax, 1998). The medical model assumes that barriers arise from the symptoms imposed by a disease, condition or disorder which for instance prevents an individual from seeing, walking or hearing. In simple terms, disability is understood as a problem of the individual and hence sometimes referred to as the 'personal tragedy model'.

According to Drake (2001), the goal of the medical model is the prevention, treatment and management of diseases, disorders or conditions with the intention of dipping or eliminating the pathology responsible for the disability. For instance the stamina training for a child with cerebral palsy helps to lessen the barriers encountered at each of the child's developmental stage (Damiano and Abel, 1998). This however offers a vital advantage for intervention for the child with disability only to the point where there are signs of a pathogenic process.

For development disability, this is not always tenable because even when there is a clearly established medical diagnosis or where the diagnosis is unclear like in the case of autism spectrum disorder, there isn't any particular palpable medical intervention to assuage the symptoms associated with the disability and therefore the only option left for children with disabilities and their families is to adapt to the disability which primarily focuses on the person-environment interaction (Bricout et al, 2004). The medical model however is not suited for this interaction (person-environment) due to the factors actively influencing disability (Fougeyrollas & Beaugard, 2001).

The medical model's definition of disability is contrary to what disabled people experience on a daily basis. What the medical model lacked was its failure to take account of the many individuals with impairments and the effects that their social and physical environment have on them. Irrespective of diagnosis, disability transcends beyond the individual's condition or disorder to cover the consequences and experience of disability which is linked essentially to functioning (Bricout et al, 2004). When policy makers understand disability as an individual tragedy, they tend to rather channel efforts on the targeting of welfare benefit or compensation for people with disability. This affects the way people with disability think about themselves and eventually their isolation and refusal to challenge their exclusion from mainstream society.

On the other hand, the social model, , considers functioning and establishes a structure for comprehending the impact of the environment (social) on the functioning of children or persons with disabilities. The model is a product of the experiences of persons with disability opposing other models espoused by persons without disability (Swain and French, 2000). Hughes & Patterson (1997) posits that disability is designed by society when barriers are

created to limit persons with disability from full social inclusion. Harlan Hahn, defined disability from a North American point of view as:

“The failure of a structural social environment to adjust to the needs and aspirations of citizens with disabilities rather than from the inability of the disabled individual to adapt to the demands of society.” (Hahn, 1986:128)

According to the proponents of this model, society unfairly brands some appearances or functioning at some level “normal” and in the process, socially excludes others (Imrie, 1997). Similarly, individual right and community responsibilities are viewed differently by society depending on its effect on society’s majority (Bricout et al, 2004). For example, school violence is considered a community issue warranting community attention whereas a child with an eye injury is a family concern unqualified for community resources. Persons with disability have been oppressed socially throughout history through fear, pity and over-protection (Barton, 1996). Charlton (1999) asserts that, society; irrespective of its socio-political character subjects persons with disability to oppression and marginalization that undermines their status as citizens to the extent that they believe that others are more capable than them. He argues that beneath the oppression is the notion that societies are structured along the conflict between the dominant and the subordinate.

At the centre of current disability debate is the distinction between disability and impairment (dualistic Cartesian distinction). According to Oliver (1995), disability has no connection to the body but that impairment is an issue of the physical body. Disability theorist, Hughes and Patterson argues that the disability-impairment discourse only solidifies the social model. They contend that, despite social models’ opposition to the medical model, it nonetheless relegates body and impairment to the realm of bio-medicine, away from social examination (Hughes and Patterson, 1997).

In contrast, Marks (1999) opines that the distinction between impairment and disability position the social model as being extremely individualistic. She asserts that by eliminating the social analysis of experience and the body, a vacuum is created. Additionally, Crow (1996) argues that the social model fails to recognize the pain that disabled people constantly face due to their impairment. She states unequivocally that:

“an impairment such as pain or chronic illness may curtail an individual’s activities so much that the restrictions of the outside world becomes irrelevant for many disabled people personal struggles relating to impairment remain even when disability barriers no longer exist”(Crow, 116:9 and 209).

Liz Crow and Jenny Morris, both feminist disability theorists, advocates for a change in the social model with a social look at impairment. The social model or the minority model of disability according to Asch (2001) must employ the necessary measures to ensure that the full participation of persons with disability becomes a human rights issue. However, the limits of these rights have become the bone of contention especially when practices and services are challenged with pricey modifications (Bricout et al, 2004). The social model pegs the accommodations needed by children with disability on the same level with their peers without disability. However, the model recognizes the role of the political, social and institutional environment in enhancing or hindering the right of persons with disability (Barton and Armstrong, 2001).

The World Health Organization recognizes disability and impairment as having a symbiotic relationship constructed socially. In view of this W.H.O classifies disability as “biopsychosocial”, which essentially is a fusion of the medical and social dimensions of disability (Bickenbach, 1999). W.H.O’s new classification conceptualizes disability as a continuum from a medical to a social sphere (W.H.O, 1997). The classification also takes into account material and cultural factors like poverty, gender, and environment and among others, which hinders one’s ability to be a part of a modern society. Dimitris Michailakis in his comment on the malfunction of the body and it relationship to the nature of society’s structure, stated:

“....the person-environment approach implies a view of handicap as something that involves the individuals’ functional limitations, as well as his environment. Handicap is not a property, a characteristic of the individual in the first hand, but something that develops between the individual and the environment.....

(Michailakis, 1997:22).

The difficulty in defining and understanding what disability is, is the reason for the many barriers faced by children or persons with disability across the world. Disability across every spectrum has been engineered within the context of the developed world. This however, does not offer any meaningful help to developing countries' quest to tackle the barriers of disability. Again, the countless approaches and attempts at defining disability affect the collection of data. This is the reason for the lack of information on the situation of persons with disabilities and measures to help meet their special needs. With this situation, comparison is very difficult and also a constraint for cross-country discussion and analysis.

According to varying schools of thought, disability is a multifaceted concept. This in any way does not offer insight into the special needs of persons with disability. Not being able to ascertain the needs of persons with disability ultimately affects how we plan for them. Again, broad definitions only succeed in capturing what is conspicuous to the neglect of the inconspicuous detail which foils the general definition of disability.

2.3 Marginalization and Social Exclusion

'Exclusion' is a difficult term to define. The problem is the term closely has relations with other concept which are often used to mean similar ideas on concepts like poverty, inequalities and others. Usually, the definition is dependent on the context of usage and a matter of debate. Fisher (2011) argues that 'exclusion' potentially offers a scope wide enough for analysis especially in situations of disadvantage. He indicates that the different forms may not necessarily refer to lack means (like poverty) as people can be excluded on the grounds of age, disability, gender and among others.

To situate this in the realm of disability, social exclusion can be defined as:

“the lack or denial of resources, rights, goods and services and the inability to participate in the norman relationships and activities available to the majority of people in the society” (Levitas, 2007:9)

This definition has been buttressed and slightly modified to be concise and flexible. Amidst the general lack of consensus among scholars, the generally accepted understanding amongst scholars is that exclusion is both process and condition, usually resulting from

combined forms of social and economic inequalities resulting in the denial of rights, opportunities and resources.

A profound attempt to bring order to the concept of 'exclusion' could be found in the writings of Silver (1994) in which she discusses 'exclusion' from diverse theoretical, political and national perspective. She takes a look at social exclusion in three (3) conflicting dimensions (solidarity, specialisation and monopoly). Each of these dimensions attach different causes in three (3) different philosophies (republicanism, liberalism and social democracy).

In the solidarity dimension, exclusion means a break of social ties in society. This dimension is more of a moral and cultural nature. Here it is the state's responsibility this fragmentation through a middle ground between liberalism and socialism. In the specialisation dimension, exclusion means the separation of function and economic division of labour with emphasis on the exchanges between individual rights and obligations within a neo-liberal contractual model.

In the monopoly dimension, exclusion is when monopolies are created. Therefore exclusion arises from the relationship of class, status, political power in the interest of the included.. the creation of monopolies only serve the purpose of "unequal insiders" who dominate the outsiders. Exclusion is fought through formal rights or the extension of membership. Silver's work clearly conceptualises 'exclusion' as a political one.

The political realm of 'exclusion' was strongly influenced by urban studies in Western Europe. Despite this conceptualising, exclusion has become dormant. This is because, countless theoretical meaning has been linked to the term. The definition has therefore been static, essentially dividing society into two (the excluded and the included) (Levitas, 1998). According Murie and Mustered (2004), this dichotomy is a means of understanding that both inclusion and exclusion are two sides of the same coin.

The term exclusion remarkably covers a wide range of economic and social problems. Rene' Lenoir described exclusion to include, single parents, social misfits, mentally and physically handicapped as well as the marginal (Silver, 1995). Further literature has hugely widened the list of socially excluded. Silver (1998) advocated that the list of the socially excluded should include a livelihood, housing, earning, education, the welfare state, democratic participation, public goods, family and sociability.

According to Silver (1998) being excluded can itself be a deprivation. Not being able to have a relationship with others in the community can directly impoverish the people. This is what is termed constitutive relevance of social exclusion. On the other hand, deprivation caused by the lack of relations may not necessarily be bad like the use of the credit market, however, the lack of it can lead to income poverty or the loss of opportunities (instrumental relevance of social exclusion) (Yunus, 1998). Further Silver (1998) categorises exclusion into active and passive. For instance, the refusal to give refugees any useful political status is an active exclusion and this can be linked to many minority communities around the world (Ogata, 1998). However, when deprivation is not conscious and only comes about through social processes, it can be termed as passive. An example is the poverty caused by a bad economic situation. This distinction is relevant as a measure for policy response.

Marginalization on the other hand is almost comparable to 'exclusion', however, the term marginality is often times used variedly. In the field of sociology, marginality was introduced in 1923 in describing the cross-pressures experienced by immigrants in getting involved with other cultures (Park, 1923). Their status as outsiders and the difficulty in integrating with the dominant cultures is what Park term 'Marginality'. The term 'marginality' has developed and broadened ever since (Billson, 2005). Billson indicates that marginality has been used in sociology in three main ways which includes cultural marginality, social role marginality and structural marginality. Structural marginality which refers to social and economic powerlessness has attracted a lot of attention in the decade. Under the structural realm of exclusion, oppression and power are laced with the idea of 'outsidedness' to build a modern definition of marginality which revolves around the lack of power, integration and participation experienced by a group.

Geographically, the term marginalization has struggled. The struggle has been the difficult in defining the term to suit different socio-spatial scales. This has resulted in the tension between the definition of 'marginal areas' and the definition of insufficient integration. As a consequence, the term remained a constant topic for discussion in geographical studies, making it unspecified and under going debate, meaning that in identifying marginal areas, variety of criteria should be considered. Leimgruber (2004) suggested that the criteria should include lower per capita incomes, low infrastructure, equipment, cultural isolation and difficult natural conditions. Comparing the geographical and sociological approaches

indicate that the geographical approaches go beyond measurement of the term and establish a multi-faceted concept which encapsulate the lack of integration, cultural, economic, political and social disadvantages (Schmidt, 2007).

Again, another attempt to define marginalization can be situated within the leftist American debates in the 1960s and 1970s (Galdeira, 2009). This was set in a massive urbanization mainly driven by the growth of informal settlement and a work force settled outside the established economies. To portray the outsideness and exclusion of these immigrants from the established economies countless Latin-American theorist employed the term marginal masses or marginal settlement for the settlements of the marginal masses. Theoretically, this discussion was directly linked to the dependencio-theories which describe the dependent industrialization of third world countries (Cortes, 2012). Later on, this argument was criticized for its dualist approach and a counter argument was made to support the fact that the outside population who have been excluded would perform low skilled tasks for bad pay for the economy of the insider cities and this is far from marginality (Perlman, 1976).

2.4 The state of disability

Comparatively, limited data exists on the state of children with disabilities and what is available is based on some few studies. The reasons for this uncertainty stems from archaic definitions and means of measuring disability, lack of resources, statistical incapacity and denial by families of the existence of a child with disability (WHO, 2011). Estimates reveal that out of the over 200 million youth with disabilities globally, almost 80% are from developing countries (Groce, 2003; Roggero et al, 2005). The Global Burden of Disease study, 2004 report, estimates that amongst children between the age 0-14 years, approximately, 93 million (5.1%) of all children live with a mild or severe disability, while 13 million (0.7%) children live with severe difficulties (WHO, 2011). Despite the uncertainty of figures, it is undeniable that persons with disabilities make a significant percentage of every society's population. Amidst this gloom, Aito et al, (2005), projects that disability amongst the youth will increase due to developing countries, youthful age-structure.

Often times, persons with disabilities are branded not by what they can do but what they cannot do. Their near invisibility within society render them most vulnerable and deprive them of their dignity and their right to life itself (UNESCO, 2013). They, like all social beings, also desire a sense of identity and to be a part of a society that appreciates and respect them regardless of their difference. To date, the greatest barrier is still discrimination and marginalization (Despouy, 1991).

Disabled people are faced with countless barriers that threaten their very existence and participation in mainstream society. Health protection schemes require their compliance to ridiculous conditions which is difficult for children with disabilities to honour. Children with disabilities are faced with numerous technical barriers ranging from long slippery floors, bad lighting system, high water pumps, and washroom doors and among others which hinder access of children with disabilities. Again, they are undermined in humanitarian situations and are vulnerable to abuse, violence and exploitation (UNICEF, 2013). UNICEF (2013), assert that it is shocking that beliefs about the causes and limitations of disability, although negative, are religiously held and hard to dispel.

Family is undoubtedly, the thread that holds the fabric of every individual together, but for some families, having a child with a disability can pose some serious challenges. Loads of empirical evidence indicates that children with disabilities and their families stand a great chance of experiencing economic and social disadvantages than those without disability. The onset of disability obviously leads to worsening of economic and social well-being through numerous channels including the adverse impact on education, employment, earnings and increased expenditures (Jenkins, 2003).

In the first place, society imposes stigma on families with young ones with disabilities. Children with disabilities are perceived to be possessed with evil spirits, who bear curses and anger from gods for breaking taboos by their parents or families (Avoke and Avoke, 2004). Members of the society being influenced by such negative perceptions, extricate themselves from members of that family thereby depriving the young ones of community participation and social inclusion.

The shame and embarrassment emanating from stigmatization pushes the families of children with disabilities to keep them hidden and at home, and limit their interaction with

the rest of society (Inclusion International, 2006). Some families also believe that children with disabilities need protection from the stigmatization imposed on them by society. This act of protection often leads to the violation of the independence of these children resulting in the cultivation of lower self-esteem.

Many children with disabilities live the most part of their productive years in institutions, nursing homes, group homes or other residential institutions. The implications for such children in terms of child development are profound. Evidence exists of children with disabilities locked to beds, sometimes to the point of death, from lack of food, care and medical treatment. Children continuously remain institutionalized thereby curtailing their right to life (UNICEF, 2013). Despite growing awareness of these violations, the high number of children with disabilities in residential care persists.

People with disabilities and their families often incur additional costs to achieve a standard of living equivalent to that of non-disabled people (Saunders, 2006). They spend heavily on health care, assistive devices, costlier transportation options, laundry services, special diets, or personal assistance. According to Van Brakel (2006) and Beresford and Rhodes (2008), households having a disabled child are likely to experience hardship, which includes food insecurity, poor housing, lack of access to safe water and sanitation and inadequate access to healthcare.

Despite the clarion call for universal access to primary education, many children with disabilities remain excluded from equal access to education and its associated benefits. Some families do not feel that youth with disabilities should receive an education, often believing that young people with disabilities are incapable of learning (Groce, 2004). Parents with several children prioritize the education of their children without disabilities to the detriment of their children with disabilities. In situations where these children with disabilities do get the opportunity to start school, they often drop out due to stigma and lack of understanding on the part of teachers, parents and other children (UNICEF, 2013).

The facts indicate that, of all the children with disabilities, only 10% are in school (UNESCO, 2007) and of this number only half who begin, complete primary education, with many leaving after a short while, because they are gaining little from the experience.

This would mean that only 5% of all children with disabilities worldwide have completed primary school (Peters, 2003). In India, a 2007 World Bank study revealed that disability has a stronger correlation to non-enrolment than gender or socioeconomic status. In Malawi and Tanzania, having a disability doubles the probability of children not attending school (Filmer, 2008).

In societies that favour males, girls with disabilities are disadvantaged as families may not be willing to allocate resources to them. The WHO World Report on Disability estimates that more females than males are disabled over the course of their lifetimes. This makes them less likely than either boys with disabilities or girls without disabilities to obtain health care, get an education and find employment or benefit from full inclusion in the social, political or economic lives of their families (Groce, 2004).

The only befitting reason to this appalling situation is that, educational establishments lack the appropriate facilities to offer children with disabilities the needed assistive help. Most schools throughout the world lack the systems for enhancing communication and are physically inaccessible. Children with disabilities go through everyday facing severe challenges in their quest to obtain an education. According to Smith, Nelsdworth and Green (1978) environmental constraints make it difficult for teachers to teach and students to learn especially children with disabilities.

Further, the competence of teachers in handling the special needs of children with disabilities in inclusive schools is questionable. Teachers frequently have preconceived ideas about what is appropriate for their students with disabilities, often resulting in the exclusion of youth with disabilities from certain activities. Fulcher (1989) put it in simple terms that in the classroom the teacher is essentially a policy maker. Sensitization, awareness-raising, and capacity building programmes to prepare teachers adequately are sorely lacking and must be prioritized.

Discriminating legislations exclude children with disabilities from accessing education. For example, some countries still have legislation declaring certain categories of children to be 'uneducable'. In China, university students with disabilities are forbidden from majoring in the sciences because it is felt that the degree would be wasted as they must compete with

their colleagues without disabilities in the same field (Groce, 2004). Such legislative discrimination poses insurmountable barriers to children with disabilities in accessing equal educational opportunities.

For most children with disabilities, been excluded from community participation in their formative years means that the experience of employment can be particularly challenging. Lack of the necessary skill set and qualification limits the employment opportunities for children with disabilities. Unemployment rates for people with disabilities are higher than for people without disabilities in every nation, often exceeding 80% (ILO, 2002). For young women with disabilities, it is very difficult to find a job despite a good education (Roggero et al. 2005).

The erroneous perceptions of disability remain a huge stumbling block for young people with disabilities to attract employment (UNICEF, 2013). Over the years it has been widely accepted that children with disabilities are less productive than their peers and therefore require expensive measures to ensure complete adaptations to the workplace. This comes at a great cost to the employer. Although this negative perception is widely believed to be true, a growing body of research shows that young people with disabilities are as productive and dependable as their peers without disabilities (Du Pont 1993; Zadeck & Scott-Parker 2003). According to Du Pont de Nemours and Company (1993) this is due to their limited job opportunities if they lose their job.

2.5 Types of Disabilities

2.5.1 Hearing Impairment

The reading of lips can be an interesting task to develop and improved with consistent practice but lip-readers can only understand an estimated 50 percent of the things they see (Kaplan, 1996). Kaplan reiterates that, the complex similarity of English sounds and its production presents a cumbersome task for a person with hearing impairment to perceive only an estimated 30 to 40 percent of spoken words.

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 and Malian, 1980). Winzer (2005) asserts 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 (Kaplan, 1996).

It is very vital for pupils with hearing impairments to be detected so that the required remedial 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) indicates that pupils 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 and 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.

Educational Intervention

Teaching children with hearing impairment is a daunting task which presents a lot of challenges to educators. To better handle such challenges certain adaptations should be made. The National Network for Child Care (1998) recommends the following:

- Teachers should speak without any exaggerated lip movement 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.
- Teachers should observe any moments of fatigue amongst pupils with hearing impairments since they need to have full concentration which can be exhausting.
- 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

2.5.2 Visual impairment

The absence of visions leads to difficulty in the functioning of individuals and can truncate the learning, social growth and adjustment process of children (Immen, 1995). Barraga (1976) discusses vision impairment in three (3) categories namely blind, low vision and visually limited. According to Barraga, blind person are individuals who have light perception without projection or without any sense of vision. On the other hand, persons with low vision have limitations in terms of distance but are able to see objects within a few feet away while visually limited persons are often limited in their use of vision under average circumstances. Generally, visually limited person are considered for mainstream educational purposes like seeing children.

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.

Educational Adaptation

To allow children with vision impairment to fully participate in class activities, educators and teachers should make certain adaptations. According to National Network for Child Care (1998), pupils with vision impairment should be allowed to sit at a comfortable spot of their choice. To enhance their learning, teachers should read aloud what is written on the chalkboard for the benefit of pupils with vision impairment.

Work meant for children with vision impairment should be reduced in terms of quantity since they work under a lot of pressure and might result in fatigue at the end of the school day. Teachers should as a matter of urgency avoid the using of visual references but rather use auditory and tactile methods of learning. Further, children with vision impairments should be encouraged to share problems with teachers for remedial measures to be taken.

2.5.3 Communication disorders

Of all the achievements of the stages of childhood, the acquisition of speech and language is classified as the most significant (Winzer, 2005). This is because speech and language are essential tools for communication especially in the educational system. Children with bad speech development may feel embarrassed as this will affect academic work and interpersonal relationship.

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 posits that communication disorders results in problems of cognitive development, academic achievement as well as social and emotional development.

Educational intervention

To help in the development of children with communication disorders, a number of educational programmes should be implemented. According to National Network for Child Care (1998), the programmes should include both parents and educators. Teachers are encouraged to communicate in a simple and clear language with a rich and comprehensible vocabulary. There should be the creation of a participatory class environment so that pupils with communication disorders would feel free and comfortable to communicate. This can be achieved when teachers respect and listen to the opinions of pupils and answering their questions.

Teachers are also encouraged to use reinforcements when teaching pupils with communication disorders. Reinforces such a simple smile or a nod are essential in encouraging children with communication disorders. Teachers should also adopt the expansion technique which involves the extension and modification of an idea communicated inaccurately by a child with communication disorders.

Parents should collaborate with teachers to understand the problems of children and to be educated on how to help. Similarly, parents should seek to clarify sections of the child's speech and also employ the expansion technique. 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.

2.5.4 Attention Deficit and Hyperactive Disorder (ADHD)

ADHD is undoubtedly amongst the most popular disabilities in the last decade (Winzer, 2005). The situations whereby pupils are unable to sit or concentrate on anything for a long period are classic symptoms of ADHD. These symptoms are not limited to specific situations but are manifested at all times. Children with ADHD find difficulty in active participation in class activities and are easily distracted by stimuli of auditory or visual nature. ADHD is categorized into hyperactive and impulsivity.

Hyperactivity in children compels them to excessive motor behaviour that is too high for their age group. They are unable to simply restrain their activity in order to sustain attention. This excessive and meaningless investment of energy disturbs teachers and cause discomfort to other children. When compelled to behave appropriately, they transmit their need to be hyperactive into disruptive activities such as foot and finger tapping.

Impulsivity is when actions are performed without thinking. Children with ADHD find it difficult to stay organized, therefore they require supervision. They are unable to wait for their turns in activities such as games which usually results in a fight with others. ADHD students ignore detail, fail to plan and learning from experience or mistakes

Educational intervention

For effective teaching of pupils with ADHD, National Network for Child Care (1998) recommends that teachers target the exact behaviour they intend to change. The teacher should therefore establish a baseline in the form of events happening before the modification programme or records about the child's behaviour. Teachers or educators should choose a definite outlined procedure to implement.

To adequately lay out a clear procedure for behaviour modification, teachers should have an in-depth understanding of the child's peculiar behaviour and the appropriate means or strategies to remedy it. After a period of implementation, teachers should evaluate or assess the progress or failure of the programme to inform further decision. Teachers should initiate

an alternative programme if it found out that the current programme has failed to achieve the desired outcome.

2.5.5 Autism Spectrum Disorder

The term Autism is derived from the Greek word ‘autos’ which means ‘self’ to reflect the sense of detachment of individuals with autism from the rest of the world. Autism is a developmental disorder that affects the verbal and non-verbal communication and social interaction of children (Bowler, 2006). American Psychiatric Association (2000) characterize autism as including irregularities in communication, resistance to environmental changes, intellectual disabilities, behavioural disorders and unusual response to sensory experience. The term ‘spectrum’ means that the effect of autism varies from child to child.

To manage and effectively teach a child with autism, attention should be focused on the management and strategy proposed by Stakes and Hornby (2000) which requires that tasks meant for autistic pupils should be broken into similar units and each unit taught one step at a time. Teachers should prioritise and teach an autistic child what is essential for their development. Materials meant for autistic children should be presented in an orderly manner with emphasis on the child’s confidence and self esteem. Desirable behaviours exhibited by the child should be reinforced and undesirable and inappropriate behaviours should be rewarded.

2.6 International Disability Policy Discourse

There can be no such thing as the universal exercise of human rights unless these rights are enjoyed by all including the most vulnerable in the society. In line with this, disability has over the years been conceptualized and addressed as a human right issue marking a paradigm shift from seeing persons with disabilities as objects of pity to holders of rights. Since that time the right to education has been consistently endorsed and expanded by the international community. Although response to this call has been varied, national governments have within their means moved in the direction of fulfilling these rights for children with disabilities.

To be able to understand the position of countries globally on inclusive education, there is the need to have a look at some policy documents from the 1960s to date. There is also the need to look at the different phases that international disability policy discourse have gone through over the years. This exercise seeks to offer a re-examination of this discourse and their contribution to the development of inclusive education globally.

2.6.1 The elimination and prevention of discrimination

The Convention against Discrimination in Education (OHCHR, 1960) was instrumental in ensuring the elimination and prevention of discrimination of persons with disabilities in the educational system. However, it failed to make a categorical mention of disability. Despite the fact that Articles 4 and 6 required the promotion of equity, Article 4 part (a) required equal opportunity to higher education based on ‘individual capacity’. Although ‘individual capacity’ in the language of the convention meant the use of IQ test in determining normal capacity, this could be a tool to separate students with subnormal intelligence(mental retardation) from those of normal intelligence. Further, Article 4, part (b) stated that quality education provided be equivalent to all public educational institutions.

The Declaration on the rights of disabled persons, 1975 (UN, 1975), which was underpinned by the tenets of the 1948 Universal Declaration of Human Rights, for the first time focused on the needs and rights of persons with disabilities. However, the declaration was influenced by the medical model which essentially defined persons with disabilities by their deficiencies. The focus of the declaration was to integrate disabled persons into everyday life without touching on vital areas like social life, family, employment and economic opportunities. This meant integrating individuals with disability through treatment (medical model) and education as well as related services.

2.6.2 Providing the needs of disabled people

World Programme of Action Concerning Disabled Persons, 1982 (United Nations Enable, 1982)was the first international policy addressing the needs of disabled people. The programme’s goals were prevention, rehabilitation and equalization of opportunities. This policy document opened with the statement:

“Persons with disabilities should be expected to fulfill their role in society and meet their obligations as adults. The image of disabled persons depends on social attitudes based on different factors that may be the greatest barrier to participation and equality. We see the disability, shown by the white canes, crutches, hearing aids and wheelchairs, but not the person. What is required is to focus on the ability, not on the disability of disabled persons”. (p. 4)

The document recommends that persons with disabilities should be as far as practicable be educated in the general school system (p3). Also, the document adds as a precautionary measure, that in the event where facilities for general education are inadequate, a special school system should be prepared (p8). Peters (2003) postulate that the 1982 document evidenced the growing concerns for the segregation of large number of persons with disabilities. Further, the education of disabled persons is considered equal when it's possible pedagogically. This ultimately is the reason for the shocking perceptions by general educators who considered their class a place for the dumping of difficult to teach students.

2.6.3 Education for All

In Jomtien, Thailand, the first World Conference on Education for All was hosted by UNESCO. Although the conference had Universal Primary Education as its goal, it also focused on providing educational opportunities designed to meet basic learning needs in a flexible manner responding to the needs, culture and circumstances of learners. Following the Jomtien conference, two significant developments took place. The first was the United Nations initiative to provide a guide for Governments and civil society to promote full participation and equal opportunities for persons with disabilities. The second was UNESCO's call for equal access to children with disabilities within the mainstream education system. This inherently ushered in the development of the seemingly far-reaching goal of inclusive education.

The Standard Rules on the Equalization of Opportunities for Persons with Disabilities (United Nations Enable, 1993), required states to recognize the principle of equal educational opportunities at all levels of the educational ladder. It further encouraged states to have clearly stated policy, accepted at the school level and by the community as a whole in order for education for persons with disabilities to be accommodated. In situations where

general school system woefully dealt with the needs of persons with disabilities, special education may be considered with the goal of preparing students for mainstream education.

2.6.4 Inclusive education

The focus on educating all children in the mainstream education system received massive endorsement at the UNESCO World Conference on Special Needs Education: Access and Quality, held in Spain in 1994 (UNESCO, 1994). The conference popularly known as the Salamanca conference adopted principles, policies and practices in Special Needs Education and a Framework for Action. The Salamanca statement advocated for a shift in policy which would require regular schools to become inclusive and serve all children especially those with special needs. This approach was essentially vital in advancing the move towards Education for All despite their intellectual, physical, social and emotional conditions. Article 2 acknowledged the fact that schools with inclusive orientation were most effective in the fight against discriminatory attitudes and to create a welcoming and inclusive society. The statement called on governments to take policy, legislative and implementation measures to transform national education and develop a system of inclusive schools. Clear guidelines were provided for action needed to ensure changes at the level of school management, apposite training of personnel, curriculum flexibility and the development of support services.

The Dakar forum offered the platform for the global EFA 2000 assessments for over 180 countries to be presented (UNESCO, 2000). The conclusion drawn was that, unless progress towards education for all is heightened targets for the reduction of poverty will be missed and inequalities would be widened within and between countries. Concerning constraints and opportunities, inclusive approach was emphasized as a tool for achieving education for all, taking into consideration early childhood education, primary education and life skills and literacy programmes.

As a matter of urgency, governments were required to be committed to at least achieving the goals and targets of the framework for Action by 2015. Although it is undeniable that the Dakar framework renewed the global commitment towards achieving education for all as a right for all children, it failed to explicitly mention minority groups by name. Additionally, apposite strategies for inclusion were not clearly articulated. The right to

education for children with disabilities is essentially the reason for the global movement towards inclusive education.

2.7 Legal and Regulatory Frameworks for PWD in Ghana

There are various legal and regulatory provisions which seek to protect the fundamental human rights of PWD in Ghana. The fourth republican constitution of 1992, Persons with Disability Act 2006 and the National Disability Policy, 2000, provides for the equal rights of PWD to a decent social life. These legal and regulatory frameworks provide countless opportunities for PWD in Ghana as well as enormous challenges for PWD. This section takes a look at these regulatory frameworks that seeks to guarantee equal opportunities for PWD.

2.7.1 The 1992 constitution

The 1992 fourth republican constitution of Ghana makes provisions for the fundamental human rights of all Ghanaians. The constitution guarantees the protection and promotion of the rights of PWD against all forms of discrimination, marginalization and abuse. It requires that PWD are subjected to no form of differential treatments.

Article 29 of the constitution states that as far as practicable, all public places should have appropriate facilities to ensure that PWD have access to public places. The constitution also makes provision for special incentives for PWD in the area of business and employment. To ensure the enjoyment of these rights parliament is obliged to legislate laws for the protection of the rights of PWD. Pursuant to this obligation the Disability Act 2006 (Act 715) was passed.

2.7.2 The National Disability Policy 2000

The National Disability policy document addresses the needs of PWD in Ghana. The policy as part of its long term goals seek to ensure the equalization of opportunities for PWD by 2020. The policy hopes to do this through the mainstreaming of PWD into the development process of Ghana. Among others, the policy in the short to medium term, will also seek to conscientize the general public on the need to treat PWD as equal as their counterpart without disabilities. However, the policy did not offer enough to civil society organizations

in mounting pressure for the implementation of the objectives of the policy document due to the lack of legal backing.

2.7.3 The Disability Act 2006 (Act 715)

In 2006, the Disability Act (715) was passed by parliament after series of agitations from civil society organizations. PWD were given a great deal of power to exert pressure on government to act in fulfillment of the law. The Act is made up of eight (8) sections with the first section dwelling on the rights of PWD and the third on education.

The Act requires the minister of education by legislative instrument to include in the curricula of teacher training, special education such as sign language, Braille writing and reading. The Act makes it an offence for parents and guardians to refuse a child with disabilities of school going age from enrolling in a school. The Act also requires the government to provide free education for PWD in formal school or special school if by reason of their disability cannot enrol in a public school. The disability Act called for the establishment of a national Council on Disability with the mandate to propose policies to ensure the full participation of PWD in national development.

2.8 Inclusive Education

There exist numerous definitions on what inclusive education is due to countless definitions opined by scholars (Ainscow et al, 2000). Even within countries and schools, there is no single dimension on inclusion (Booth et al, 2000). Pearson (2005) reiterates that in spite of the call for inclusion internationally, there is no cogent inclusive definition. Again, in the words of Okyere and Adam (2003), inclusion has no palpable agreed definition. The danger of this phenomenon is that its manifestations may be varied due to its complexities (Lindsay, 2003).

According to Winzer (2005), inclusive education is a means of providing educational equity for persons with exceptionalities to the greatest extent possible in terms of access, instruction and support in mainstream educational environment. This definition focuses on the restructuring of the education system and acceptance of all learners. On the other hand, Mittler (2000) defines inclusion as a militant assessment and reforms of curriculum and pedagogy within the school system. Mittler, further asserts that, the definition of inclusion should go beyond just putting children with disabilities in mainstream schools but emphasis

should be made on making the educational system responsive to the special needs of children with disabilities.

In recent times, there has been a new approach to inclusive education. Sandkull (2005) in contributing to the complex realm of inclusion defined inclusive education as recognizing the exceptionalities of every child and therefore given education within their community regardless of their difference (cultural, religious, social etc.). Additionally, skipper (2006) asserts that inclusive education is when the needs of persons with disabilities and their peers without disabilities are met within a platform of acceptance and belongingness. This shifts the discourse from society's structures and systems to one of transformation for the improvement of all. This therefore intends to increase the opportunities of social interaction in general education (Shear and Bauer, (1994).

Ainscow et al (2006), suggest a system for defining inclusion as concerned with disability and 'special educational needs'. This typology assumes that inclusive education is essentially about educating children with disabilities. It is the most dominant definition of inclusion in most countries due to its ability to absorb the difficulties that arise from the education of children with disabilities (Mittler, 2000). The opponent of this typology doubt the usefulness of this approach, arguing that, by focusing on the special needs of children with disabilities, the needs of their peers without disability is ignored. Booth and Ainscow (2002) move for the shift in the focus on 'special educational needs' to one that focuses on participation and support system. Although, the opponents of this approach raise valid and innovative arguments, there is the danger that attention on the special needs of children with disability would be deflected from the peculiar plight of children with disabilities.

Further, Ainscow et al (2006), reiterated that inclusion was as about all groups vulnerable to exclusion. Inclusion under this system is viewed as a means of overcoming the marginalization and discrimination of vulnerable groups (Mittler, 2000). In terms of education, inclusion refers to groups like children with disabilities, children with disciplinary problems, and children living in poor communities, whose educational participation is threatened.

Further, Ainscow et al (2006), posited inclusion as the promotion of a school for all. This typology views inclusion as establishing a common school for all children, regardless of their differences with a means of ensuring effective teaching and learning. This system termed 'comprehensive school' in the U.K is generally a response to the class base school system which distributed children to different types of schools. This approach seeks to provide a single school system aimed at serving a socially diverse community.

Additionally, Ainscow et al (2006), also defined Inclusion as Education for All. This typology stems from the failure of the international community to achieve the targets set at the Dakar conference. Concerns were raised on the lack of prioritization of persons with disability in the Education for All declaration (UNESCO, 2000). In line with this, attention was drawn to an inclusive system of education for all children especially children with disabilities.

Again, the Education for All declaration defines inclusive education as making access to education universal for all while promoting equity (UNESCO, 2000). This ultimately requires a process of responding to varied needs of children through enhancing participation and the reduction in exclusion within the education system.

To consider a school as inclusive, certain things must be seen to exist. Stainback and Stainback (1996) assert that inclusive schools though different share similarities. In the view Hocog and Qugley (2009) inclusive education focuses on fostering a sense of belongingness for children with or without disabilities. However, this sense of belongingness can be achieved when all students regardless of their differences feel welcome (Stainback and Stainback, 1996). This means that children with disabilities be placed in mainstream schools and not segregated from their peers without disabilities.

Inclusive education is centered on the outcomes of individuals. Stainback and Stainback (1996) posited that, the services provided by inclusive education should focus on the needs of individuals instead of labels. This feature require that learning objectives be tailored to meeting the individual's learning needs. According to Okyere and Adams (2003) inclusive education is heterogeneous in nature. This characteristic of inclusive education ensured the education of all students with or without disabilities in group with all students in natural

proportions. Inclusive education therefore accepts varied goals of learning for groups which is heterogeneous in nature. Inclusive education must create a supportive community which is sensitive to the needs of all (Sapon-Shevin, 1992).

A feature of inclusive education is the collaboration of support facilitators into the inclusive school system. Thousand and Villa (1989) acknowledges that, although support facilitators are usually teachers and consultants, others are encouraged to help in organizing support for general education. Collaboration means support facilitators playing an evaluator or supervisory roles.

The above definitions of Inclusive Education all emphasize that quality of education should focus on the development of children to the fullest extent possible. This means that all educational institutions must accommodate all children no matter how different they are. This however does not imply that children with no visible disability should be ignored. Rather, this means that the marginalized should be included by its difference in ethnicity, gender or social status. This is vital because it prepares the ground for children with disabilities to be eventually accepted in the society.

Inclusive Education is essentially about acceptance of diversity not only with reference to children with disabilities but all children. This means that education should be available to every child of school going age without any discrimination. This does not imply mere integration but rather the acceptance and adaptability to the special needs and diversity of children with disability. This is inextricably linked to the quality of education. Quality of education in this case refers to the general school environment, which encapsulate the physical environment, the teaching staff and a curricular that responds to the needs of the special child. For schools to adapt and effectively implement Inclusive Education, policies and school culture must change and should carry along parents, teachers, community and Government as a whole.

2.9 The development of Inclusive education

In recent times countries have considerably invested efforts in enhancing educational practices and policy towards inclusion (Mittler, 2000). Inclusive education has gone through

stages in an effort to respond to the needs of children with disabilities. Insight into education of persons with disabilities across many countries reveals a pattern (Reginald and Ainscow, 1994).

The first phase of education for children with disabilities was termed educational segregation. According to Ferguson (2008) and Tomlinson (1985), this phase was characterized by the education of children in special schools created due to the specific disability of children. Such schools in the view of Sebba and Ainscow (1996) were separated from regular education. In recent times, separate educational systems have been criticized from a human right and effectiveness view point (Ainscow et al, 2006).

The second phase often referred to as educational integration in the words of Furgeson (2008) and Wade and Moore (1992) was an approach at providing education for both children with and without disability in mainstream educational institutions. This attempt was necessitated by the international clarion call for education for all. This stage, as a result, was to ensure that children adapt to normal mainstream instruction when integrated in segregated units within mainstream institutions and only integrated when benefit is expected (Ferguson, 2008; Wade and Moore, 1992).

The assertion that integration was a mere transplantation of special education to regular educational system (Meijer et al, 1997), led to the third phase which is inclusive education. This is a response to the defects of the educational integration as being a façade for segregation. This approach implies adapting classroom instructions to the needs of individuals. The rationale for inclusive education is basically to eliminate special education and regular education. Rather, inclusive education provides a platform where all students can learn together (Winzer, 2005). In clear terms, inclusive education is a perfect blend of some sort of mainstream education and special education (Will, 1986). This means the establishment of a general system of education that serves all students with or without disabilities.

At the core of this, is the belief that persons with or without disability will co-exist as members of one community when they learn together (Ihenacho and Osuorji, 2006). Sapon-Shevin (1992) adds that the world is a community of inclusive people, unique in terms of

culture, religion, race and disability. Further, Sapon-Shevin reiterates that since eventually children will live to be adults in an inclusive setting, they must learn to grow in one. Proponents maintain that segregating children with disabilities from mainstream education imposes restrictions on the right to education alongside their peers without disability (Winzer, 2005).

2.9.1 The role of teachers

Globally, inclusive education has been accepted as an important direction for education with the view of including children with disabilities in mainstream schools. Teachers under this policy direction are to accommodate children with diverse needs in one classroom. However, it is very shocking to note that the views and perception held by teachers about inclusive education which is essential for the success of inclusion have been relegated to the background (kiester,2000). It is common practice for teachers to welcome policies and practices and adapt to it associated changes without considering the personal beliefs of teachers (Forlin, Hathe and Douglas cited in Pottas, 2005). Sabban and sharma (2006) reiterates that the perception and concerns of teachers of inclusive education have not been giving the needed attention. According to Meijer (2001), teachers' attitude towards the practice of inclusive education influences the effectiveness of inclusion in schools. For Obeng (2007), the main reason for the inability of teachers to accommodate children with disabilities in mainstream schools is the inadequate preparation of teachers. Available literature affirms the assertion that, for inclusive education to be successful, it ultimately rest on the knowledge of teachers.

Inclusive education has been accepted the world over as the best alternative educational approach in ensuring inclusion for all. The challenge, however rest on both experienced and inexperienced teachers (Eileen, 1999). In like manner, Hardman et al (2002) posit that it is essential that the skill set and knowledge needed by teachers in dealing with the special needs of children with disabilities be accosted the needed seriousness.. For this reason, the nature of teacher development has become a matter of concern (Whitworth, 2001). There has therefore been the need for a thorough re-examination, communication and understanding of the importance of the special role of teachers in the inclusive educational set up. Golder et al (2005) in the context of England, recommends a policy direction towards teacher education.

Overwhelming evidence reveals that, to achieve a successful implementation of inclusive education, there was the need to pay attention to certain factors such as positive teacher attitude and knowledge of inclusive education (Avramidis et al, 2000). Again, effective teaching should be based primarily on institutional adaptations sensitive to the needs of children with disabilities (Mastropieri and Scruggs, 2000). Forlin (2001), argues that, the barriers to inclusive education are further heightened by the lack of adequate preparation of teachers. In a study in the U.K, there are growing concerns about the preparation of teachers for inclusive education (H.M.I, 1990). In the U.S, preparing teachers for inclusive education has been a far reaching goal (Blanton and Pugach, 2007).

The journey towards full education for all has become a huge challenge for many schools around the world due to the fact that most teachers were trained for general educational classroom or special educational classroom. In the views of Pigash and Johnson (2002), training programme offered to teachers in the various universities or colleges of education do not possess the necessary course work to equip new teachers to teach in inclusive schools. Whitworth (2001) as a matter of urgency, recommended that to be able to equip teachers with the necessary skill and knowledge to teach in inclusive settings, a whole new teaching approach should be adopted for the preparation of teachers. Again, Whitworth asserts that if educational programmes are to prepare teachers to be successful in the future, teacher preparation models must be re-conceptualized and redesigned.

Pre-Tertiary Teacher Professional Development and management

To ensure the quality of training for teachers and the establishment as well as provision of support system, the Government of Ghana together with the relevant stakeholder instituted the Pre-Tertiary Teacher Professional Development and management policy framework to contribute to the quality of education in Ghana in order to respond to the changing demands of education. The policy framework hinged on the 2008 Education Act calls for the establishment of a national Teaching Council with the mandate to employ teachers, offer in-serve education and training as well as the periodic review of the professional standards for teachers and teaching for basic and second cycle schools in Ghana.

The policy framework mandates the National Teaching council to together with the Ghana education service and other teacher educational universities to develop standards and

competencies for teachers in the area of professional attributes, planning teaching and learning, observable classroom skills and management. To ensure quality assurance, the council is again mandated to develop competency based curricula for teachers, organize resource training for teachers, organize appraisals as well as evidence based curriculum review when recommended. To ensure the Professional Development and management of teachers, the framework states a structure to be followed. This includes an initial teacher training programme, induction and in-service programme, an in-service training for professional knowledge and skills development and finally an upgrading programme.

Teacher performance appraisal

For the advancement of any educational system it is important that the role of teachers is treated with much importance. The teacher performance appraisal is a means of promoting teacher development. The continuous administration of appraisals is an effective tool for encouraging the learning and growth of teachers. Ultimately, appraisal presents an opportunity for the provision of support for teachers who need it.. The Pre-tertiary Teacher Professional Development and Management is Ghana's commitment to meeting the international provisions of the teaching profession. The framework mandates the Head teacher with certification from the National Teaching Council to organize appraisal for new and old teachers. Although there are no clear cut procedures, the appraisals should be guided to elicit good communication and interpersonal skills, good technical skills and management and leadership skills.

Morkabaiera et al (2013) in ascertaining the professional competence of teachers in inclusion and to determine the readiness of teachers to work with children with disabilities, a competence approach perspective was adopted. The study was designed to identify, motivational orientation, information and operational motivation at adaptive, reproductive and optimal levels. To identify the motivational orientation, appraisers were look out for the presence of motivation to implement inclusive education, teachers values, level of tolerance and the need for the development of inclusive education. To assess the informational motivation of teachers, appraisers were to find out the theoretical, legal, psychological knowledge on inclusive education and ability to design and plan projects to develop students. On operational motivation, competences such as strategic skills, communication skills, project planning, designing and implementation.

2.9.2 The Physical Environment

To ensure that mainstream schools are capable of providing quality and equal educational opportunities for student of varied needs and abilities, the physical environment of inclusive schools must be accessible for teaching and learning. According to UNESCO (2004), an accessible environment comprises the psychosocial and physical setting (environment). Additionally, UNESCO (2004) also considers the relationship between the school staff (teaching and non-teaching) as well as the children and parents as issues of the learning environment. The study will focus on the physical environment for the purpose of the topic under discussion.

Smith et al, (1978), argues that the physical nature of the environment and the manner of it arrangement has a profound effect on student and teacher behavior. Smith et al, further reiterate that constraints within the environment hinder the teaching of such activities like the supervision of a group discussion in an auditorium with unmovable seats. This means that the physical environment in and out of the classroom must be well managed to enhance teaching and learning.

Doorlog (2003), postulate that for students and teachers to learn and teach respectively, factors such as lighting, ventilation, temperature and level of noise must be considered. Weinstein and Nignango (1997) in support, assert that, to influence behavior, thought process and feelings of both students and teacher, the planning of the physical environment must be a pivotal part of classroom management. Studies show that the nature of a classroom, although of less impact on activities has an effect on behavior and attitude of students (Doyle, 1986).

In theory, inclusive education requires the creation of environment which is conducive for all regardless of any differences. In line with this, there is the need to make sure the physical environment can accommodate all manner of persons. This calls for an effective design of the physical environment underpinned by the philosophy of inclusion to ensure the inclusion of all students in mainstream classroom (U.K.E.E, 2001). It is also necessary or schools without the ability to design their environment to make modifications to the existing physical environment to allow access to children with disabilities.

In the United State of America, there are about four legislative Acts requiring the provision of facilities such as elevators, wide doorways for the passage of wheel chairs, stairs with hand rails and among others. The Acts includes PL 94-142, Rehabilitation Act (1973) section 504, PL 99-457 and PL 101-336. In Ghana, there are no existing guidelines expressly requiring the planning and designing of public infrastructure (Tsagli, 1998). The absence of facilities sensitive to the needs of disabled people is a huge blow to the success of inclusive education.

According to Adams and Biddle (1970) classroom environment can have both direct and indirect effect on students. Further, they added that a child can relate seating arrangement to whether their participation is needed. Children need an environment that exudes care and which is stimulating and enhances their understanding of what is being taught. Teachers should therefore as matter of importance make modifications to settings, methods and materials which meets the needs of all children instead of the children adjusting the practices that exist. Such modifications and adjustments enhance the quality of education for all regardless of their disability. A positive physical classroom environment that is nurturing is essential in making children with disabilities feel a sense of belongingness to the group (Okyere and Adams, 2003).

2.10 Conceptual Framework

The quest to ensure that Children with disabilities have access to equal educational opportunities without discrimination and marginalization as their counterpart without disabilities has come at an unacceptably slow rate. This situation has been necessitated by the countless barriers that confront children with disabilities. According to Holler (2005) these barriers have compelled many persons with disabilities to drop out of school. UNESCO (2009) posits that 10% of all children in school are children with disabilities, and of this, just half complete primary education. These barriers hinder the quest of children with disabilities in enjoying their rights to education.

According to Ghana Education Service (2004), the barriers that confront children with disabilities in Ghana are perceptual, architectural, curricula and the training of regular

teachers. Peters (2004) indicates that in preparing for the 48th International Conference on Education (ICE) on Inclusive Education: the Way of the Future, UNESCO and its partners identified and discussed attitude, curricula, teacher education and resource and legislation as some perceived challenges of inclusive education. Results UK (2010) also identified policy and system factors, social and community factors and school factors as barriers that hinder children with disabilities from accessing equal educational opportunities.

In general, these barriers can be categorized and summarized into attitudinal, school and policy factors. For the purpose of this study, barriers created by school factors will be looked at in terms of the physical environment of schools and the performance of teachers. The study would then assess how these barriers hinder children with disabilities from accessing equal educational opportunities.

Our quest to ensure that children with disabilities have equal educational opportunities can only be achieved when measures are put in place to alleviate these barriers. This means the capacity of the educational system must be enhanced to reach out to all learners. This principle should serve as a guide to all educational policies and practices especially from the point where education is seen as a basic human right and the means to achieving an inclusive society. This requires changes in content, structures and procedures with a vision that captures all children regardless of their age, gender or disability.

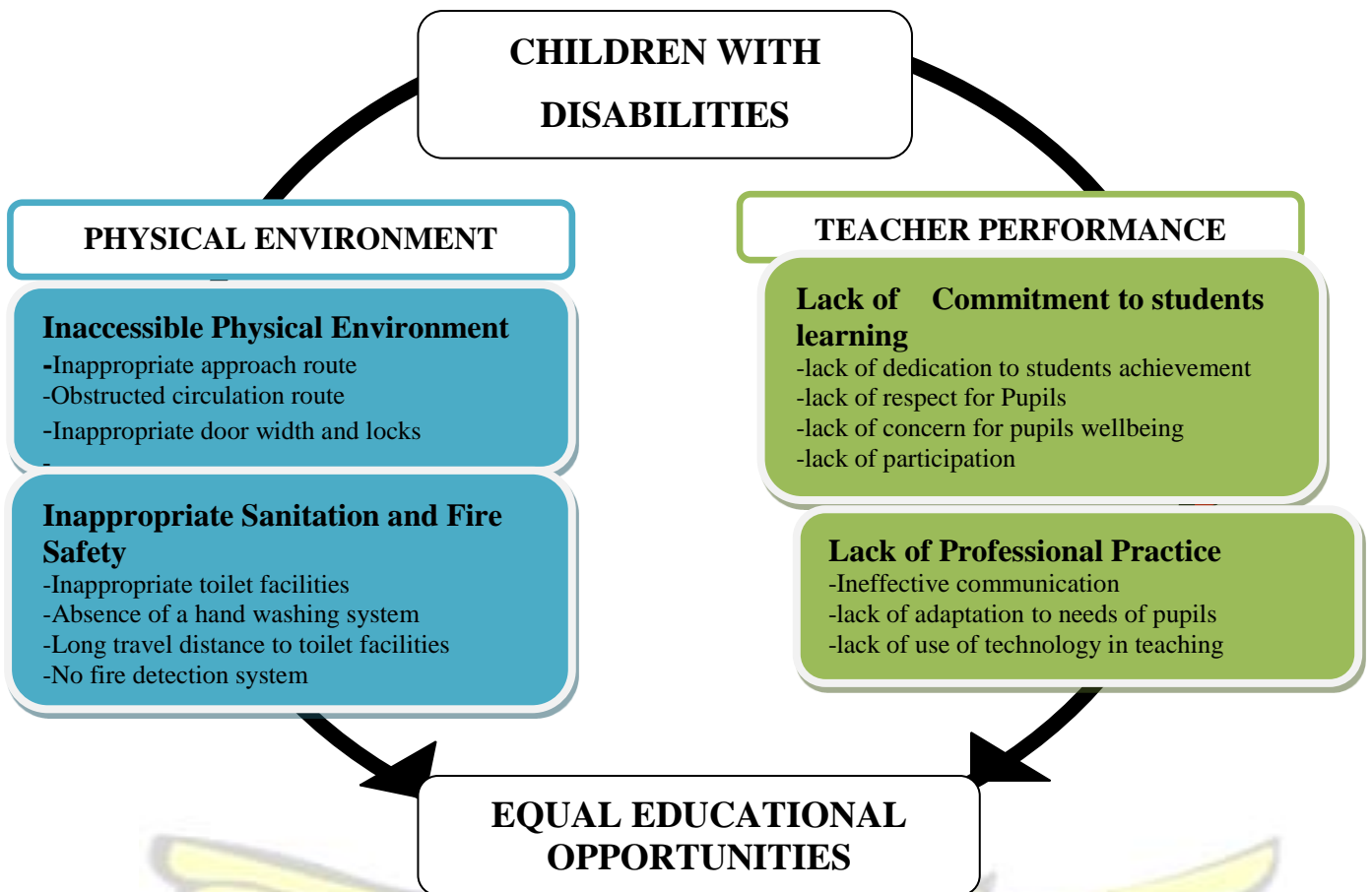


Figure 2.1 Barriers faced PWD in assessing equal educational opportunities.

2.11 Study Area: Cape Coast Metropolis

The Cape Coast Metropolis is the capital of the Central Region. The metropolis is encircled on the south by the Gulf of Guinea, west by the Komenda / Edina / Eguafo / Abrem Municipal, east by the Abura/Asebu/Kwamankese District and north by the Twifu/Hemang/Lower Denkyira District. It covers an area of 122 square kilometers and is the smallest metropolis in the country. Cape Coast is largely characterized by a youthful population with those less than 15 years accounting for 42.2 percent of the total population. Females fairly outnumber males in each cohort except that of the 0-14 age cohort. The ageing cohort (65+) is relatively normal and characteristic of developing areas.

Cape Coast Metropolis is noted for setting the pace in the earliest educational establishment in the Gold Coast. The English castle school at Cape Coast castle was amongst the few castle schools dotted along the coast of Gold Coast. The school was established in 1694 by the Society for the propagation of the Gospel (SPG) and was controlled by the British Merchants

and Trading Companies from England. The castle school at Cape Coast was to offer education to children of European traders (Mulattoes) as well as to train trade representatives, clerks and interpreters. Additionally, education became a vital tool for the propagation of the Christian faith and colonization. The castle school developed to be known as the Cape Coast Philip Quaque Boys and Girls.

Today, Cape Coast is home to the University of Cape Coast which is a pioneer educational institution responsible for the training of teachers as well as the development and management of education in Ghana. The Metropolis also has a polytechnic, two (2) nurses training college, one (1) teacher training college, thirteen (13) government assisted senior high schools, two (2) private senior high schools and a hundred and thirty three (133) government and private basic schools with seven (7) inclusive schools, a school for the deaf, a blind unit within the school for the deaf and an Autism centre.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The earlier chapter revealed the complexities in integrating children with and without disabilities in an inclusive setting. Further, the chapter reiterated that integration posed serious hurdles to both experienced and inexperienced teachers. It also became apparent that to provide quality education for children with disabilities it was important to engineer the content (curriculum) of what they should be taught. The chapter concluded that an effective inclusive education must be situated in an environment that accept and accommodates the special needs of children with disabilities.

This chapter details out the method used for this study to assess the barriers faced by children with disabilities in inclusive and non-inclusive schools in the Cape Coast metropolis. The highlights of this chapter entail preliminary investigation, research design, sample technique, data collection procedure, instruments, pre-testing of instruments and analysis of data.

3.2 Research Design

Comparative social research in education is basically a multilevel analyses of issues (Bray et al, 2007). The issues usually are demographically about religious groups, gender groups or geographically about schools, classrooms or regions and other aspects of education. In view of this, a comparative research design primarily seeks to find similarities and/or differences amongst more than one case. Summarily, it is a research design that offers comparison between organizations, institutions, regions or traditions structured in a more defined context (Bray et al, 2007).

The study therefore used a comparative social research design to explore and detect the differences and/or similarities in the barriers faced by children with disabilities in both inclusive schools and non-inclusive/mainstream schools. In order to compare and contrast the responses, the same questionnaires were administered to children with disabilities in both categories of schools. Similarly, the teachers were interviewed with the same guide. According to Bryman (2008), this is the surest way of identifying accurate differences and similarities.

3.3 Sampling Technique

A sample is basically a representative portion of a population. Sampling however helps the researcher to relatively study a small unit within a target population which represents the entire population (Sarantakos, 1998). Cohen (2004) cautions that a sample size is dependent on the relationship the researcher seeks to assess amongst groups within an entire sample. The schools were made up of the seven (7) inclusive schools and seven (7) selected non-inclusive schools. Each school is government assisted and entailed primary one (1) to JHS three (3) with children with disabilities and regular classroom teachers.

Purposive and random sampling was mainly used for this study. Purposive sampling is a process where units of analysis are intentionally chosen so that instruments for the study can be administered (Bryman, 2008). Basically, the sample is selected intentionally because they typically show most of the characteristics of relevance to the study. For this study, a purposive sampling technique was employed in the selection of the seven (7) inclusive schools in Table 3.1 because the study revolved around inclusive schools.

Table 3.1: Inclusive schools

No.	Inclusive Schools	Classification
1	Pedu M.A Basic 'A'	Primary and J.H.S
2	Pedu M.A Basic 'B'	Primary and J.H.S
3	Aboom Methodist	Primary and J.H.S
4	A.M.E Zion	Primary and J.H.S
5	Philip Quacoe Boys	Primary and J.H.S
6	Ghana national basic	Primary and J.H.S
7	Christ Church Anglican Basic	Primary and J.H.S

Source: MoE, Central Region (Special Education Unit)

On the other hand, random sampling is a technique where all the units within a population have an equal chance of being selected. To randomly sample seven (7) non-inclusive schools from a list of one hundred and twenty six (126) non-inclusive schools, forty three (43) non-inclusive schools with characteristics like the seven (7) inclusive schools (government assisted, primary and J.H.S and pupils with disabilities) were drawn out of the list. A computerized random number generator was used to sample the seven (7) non-inclusive schools. The list of 43 schools were entered for random numbers to be generated for each of the 43 schools on the list. The list was sorted in increasing order of their corresponding random number. The first 7 (seven) school on the sorted list was then selected as shown in Table 3.2.

Table 3.2: Randomly selected non-inclusive schools

No.	Inclusive Schools	Classification
1	St. Lawrence Catholic School	Primary and J.H.S
2	Ayifua St. Mary's Anglican School	Primary and J.H.S
3	E.J.P Brown	Primary and J.H.S
4	St. Anthony's Anglican School	Primary and J.H.S
5	Kakumdo Basic School	Primary and J.H.S
6	Antem Basic	Primary and J.H.S
7	Efutu Basic	Primary and J.H.S

Source: Fieldwork, April, 2015

3.4 Data Collection Procedure

To commence the data collection procedure, respondents were briefed on the purpose and aim of the study and why they are of interest to the study. Patton (2002) posits that the adherence of informed consent requires the researcher to accurately inform the respondents on the purpose and aim of the study. The consent of the respondents was then sought for the administration of research instruments. Names of respondents were not published to prevent the personal experience and views of respondents with regards to the plight of persons with disability from been traced.

Questionnaire administration, face-to-face interviews and field observation were the research methods used for data collection of this study. It was ensured that the content of the instruments (questionnaires, field observation checklist and face-to-face interview guides) used adequately captured in detail the issues of relevance to the study. The instruments were pre-tested on some selected teachers and students with disabilities outside the schools selected for this study in the Cape Coast metropolis. The purpose of the pre-testing was to improve upon the reliability and validity of the instrument used. The teachers and disabled students were given draft copies of the questionnaire and interview guide and asked to discuss objectively with the researcher any incomprehension and ambiguity about any section of the instrument. The instruments were then refined. The final outputs of the instruments were a product of the suggestions and evaluations.

3.4.1 Questionnaire Survey

Questionnaire survey was chosen because it is known for its effectiveness in making enquiries into attitudes and opinions as well as information surrounding practices. According to Kerlings (1971), questionnaire survey is the most widely used instrument for data collection in educational research. Sarantakos (1998), posit that the best way of translating concepts into variables, variables into indicators and indicators into questions is the questionnaire.

The target group for the administration of the questionnaire was all forty one (41) pupils with disabilities in the seven (7) inclusive schools and the selected seven (7) non-inclusive schools. The questionnaires were personally administered during school time to enhance the total participation and cooperation of children with disabilities and teachers. This helped in ensuring a high return rate.

The questionnaire was divided into sections with the first section eliciting respondent's bio-data. The second sections sought to assess the physical environment of the schools while the third section looked at the performance of teachers handling pupils with disabilities. The fourth section was to establish the perception of pupils with disabilities on the importance of inclusive education.

The likert scale format was adopted in the design of the questionnaire. Oppenheim (1992) asserts that questionnaires with a likert scale format are advantageous and are with a high return rate. The two (2) point likert scale questionnaire was adopted with allocated values. Statements were scored as Agree or Disagree and Yes or No.

3.4.2 Face-to-face Interview

According to Kvale and Brinkman (2009), it is a carefully planned interview with a certain degree of flexibility. An interview allows for replication but essentially they provide a more relaxed atmosphere in which to elicit information. Respondents usually feel more relaxed and comfortable having a conversation as opposed to filling out a questionnaire. For this study a face-to-face interview was used.

The target groups for the interview were pupils with disabilities and teachers from the seven (7) inclusive and seven (7) selected non-inclusive schools. For the purpose of this study all (41) pupils with disabilities were interviewed while a teacher handling a pupil or pupils with disabilities were randomly selected from each of the schools. The interview was conducted one-on-one with the aid of a guide to offer respondents a relaxed atmosphere. The guide consisted of a list of topics of particular relevance to the study to add details that were difficult to capture in the administration of the questionnaire.

3.4.3 Field Observation

Structured observation was used to collect information on the nature of the physical environment. This was done with the aid of a checklist which was grounded in the relevant literature discussed early on in the previous chapter. The structured approach was to limit the observation to only the issues of relevance to the study. The checklist consisted of a list of indicators which are core to the study.

The target of the observation was the physical environment of the seven (7) inclusive and seven (7) selected non-inclusive schools. The observation centered on the physical accessibility and the safety and sanitation of the physical environment of schools. The checklist was administered during school hours in order to connect the activities of pupils with disabilities to the physical environment.

Table 3.3 Summary of research design

Objectives	Variables	Source of data	Sampling Technique	Instrument
To ascertain the appropriateness of the physical environment of the schools	1. Physical accessibility 2. Safety and sanitation	1. Pupils with disabilities 2. Physical environment of inclusive and selected non-inclusive schools	1. Purposive 2. Purposive & Simple Random	1. Questionnaire & Interview Guide 2. Observation checklist
To appraise the performance of teachers in handling the needs of pupils with disabilities.	1. Teacher commitment 2. Professional practice	1. Pupils with disabilities 2. Teachers handling pupils with disabilities	1. Purposive 2. Simple Random	1. Questionnaire & Interview guide 2. Interview Guide
To ascertain the importance of inclusive education to pupils with disabilities	The importance of inclusive education	Pupils with disabilities	Purposive	Questionnaire & Interview Guide

Source: Fieldwork, April, 2015

3.5 Data Processing and Analyses

Data analyses emphasize “sense making” or the understanding of a phenomenon. This requires a creative and investigative mindset based on an ethically enlightened and participant-in-context attitude, and a set of analytic strategies. Data collected were finally transformed into usable format such as tables, with respect to frequencies and percentages.

The questionnaires were numbered serially for effective analysis and to ease identification. This was to facilitate the detection of errors during data tabulation. Responses collated were statistically tabulated into frequencies and percentages. The results were then compared between the inclusive schools and the selected non-inclusive/mainstream schools and discussed with reference to literature reviewed when deemed appropriate.

Result from the observation of the physical environment was tabulated and compared to best practices from literature. Transcripts of field interviews were also examined. Responses expressing a common idea were categorized under a subject matter (single word) like dependence, fatigue, injury, delays etc. Responses placed under each subject matter were later sorted for variations and placed under thematic areas. For instance, the subject matter 'injury', were sorted into themes such as frequent falls of pupils, frequent bumping into things by pupils, frequent slips by pupils etc. The results were used to substantiate the responses of pupils with disabilities stated in the questionnaire and to explore the similarities and differences of their response.



CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

Chapter three detailed out the methods used in collecting data to assess the barriers that confronts pupils with disabilities in inclusive and non-inclusive schools in Cape Coast. The highlights of the chapter entailed the research design, sampling technique, research instruments and data collection procedure. The chapter climaxed with an insight into the process of data analysis used in the study.

This chapter presents the results and discussion of data gathered from pupils with disabilities in inclusive and non-inclusive schools within the Cape Coast metropolis on the barriers threatening the achievement of inclusive education. Data gathered covered the demography of respondents, the performance of teachers handling children with disabilities and the physical environment. To add details that were difficult to capture in the administration of the questionnaire, the physical environment was observed and a pupils with disabilities as well as a sample of teachers handling pupils with disabilities were also interviewed. .

4.2 Demographic characteristics of respondents

In an attempt to understand the issues of concern to the study, it was imperative to require the demographic data of respondents to be able to put their concerns into perspective. For this reason, the gender, age and disability types of pupils with disabilities in the seven (7) inclusive schools and the seven (7) selected non-inclusive schools were obtained. This was to understand the issues that confront their everyday quest for full and equal education.

In all, there were a total of forty one (41) pupils with disabilities in the seven (7) inclusive and the selectec seven (7) non-inclusive schools which include thirty (30) pupils from the inclusive schools and eleven (11) pupils from the selected non-inclusive schools. The difference in the number of respondents can be attributed to the the injection of nineteen

(19) pupils with blindness into the Ghana National Basic School from the Blind Unit within the school for the deaf. Table 4.1 depicts the distribution of pupils with disabilities across the seven (7) inclusive schools and the seven (7) selected schools.

Table 4.1 Pupils with disabilities in inclusive and the selected non-inclusive schools

Type	School	Disability							Total
		Mobility	Vision	Attention	Hearing	Autism	Blind	Speech	
Inclusive									
1	Pedu 'A'	-	-	-	1	-	-	-	1
2	Pedu 'B'	-	1	1	-	-	-	-	2
3	Philip Q. Boys	2	-	-	-	-	-	-	2
4	Aboom Meth.	1	-	-	1	-	-	-	2
5	Christ Ch. Ang.	-	1	-	-	1	-	-	2
6	A.M.E Zion	1	-	-	1	-	-	-	2
7	Ghana Natl. Basic	-	-	-	-	-	19	-	19
Non-Inclusive	Total	4	2	1	3	1	19	0	30
1	E.J. P Brown	-	-	1	-	1	-	-	2
2	Efutu Basic	-	-	-	1	-	-	-	1
3	Antem Basic	-	1	-	-	1	-	-	2
4	St. Law. Catholic	1	-	-	-	-	-	-	1
5	Ayifua St. Marys	-	-	-	-	-	-	1	1
6	St. Anth. Anglican	1	-	-	1	-	-	-	2
7	Kakumdo Basic	1	1	-	-	-	-	-	2
	Total	3	2	0	2	1	0	1	11

Source: Fieldwork, April, 2015

In total, seven (7) disability types were found which included physical, vision, attention deficit, hearing, autism, blindness and communication impairment. Blindness and vision impairment which are usually categorized as one are for the purpose of degree (severe and mild) of the disability treated as different disabilities. Pupils with communication impairment were exempted as they could not respond to issues raised in the study. As shown in table 4.1, each of the schools under study recorded at least one disability. Pupils with blindness and communication impairment were present only at Ghana National Basic

(Inclusive school) and Ayifua St. Marys’ Anglican (Non-Inclusive school). Again, pupils with blindness were the highest (19) amongst the respondents. The reason for this outcome is due to the fact that Ghana National Basic School is adjacent to the Blind unit of the School for the Deaf. Due to the lack of facilities for the unit, blind pupils are educated at Ghana National Basic School resulting in the huge numbers discovered in the study. Table 4.2 analyzes the seven (7) disability types, their characteristics and the special educational interventions or the special needs of pupils with these disabilities.

Table 4.2 Distribution of disability by age and sex

	Age range	Sex	Mobility (%)	Vision (%)	Attention (%)	Hearing (%)	Autism (%)	Blind (%)	Speech (%)
Inclusive	6-8 years	Male	-	-	1(100)	1(33)	-	-	-
		Female	-	-	-	-	-	-	-
	9-11 years	Male	-	1(50)	-	-	-	-	-
		Female	-	-	-	2(67)	-	-	-
	12-14 years	Male	1(25)	1(50)	-	-	1(100)	1(5)	-
		Female	-	-	-	-	-	2(11)	-
	14+	Male	2(50)	-	-	-	-	10(53)	-
		Female	1(25)	-	-	-	-	6(32)	-
	Total	Male	3(75)	2(100)	1(100)	1(33)	1(100)	11(58)	-
		Female	1(25)	-	-	2(67)	-	8(42)	-
Non-Inclusive	6-8 years	Male	-	-	-	-	-	-	-
		Female	-	-	-	1(50)	-	-	-
	9-11 years	Male	-	1(50)	1(100)	-	-	-	-
		Female	-	-	-	1(50)	-	-	1(100)
	12-14 years	Male	1(33)	1(50)	-	-	2(100)	-	-
		Female	1(33)	-	-	-	-	-	-
	14+	Male	1(33)	-	-	-	-	-	-
		Female	-	-	-	-	-	-	-
	Total	Male	2(67)	2(100)	1(100)	1(50)	2(100)	-	-
		Female	-	-	-	-	-	-	-

		Female	1(33)	-	-	1(50)	-	-	1(100)
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Source: Fieldwork, April, 2015

Table 4.3 indicates that majority of the respondents in both inclusive (63.3%) and noninclusive (72.7%) schools were males with the females constituting the minority. It was also observed that majority (63.3%) of respondents in the inclusive schools were above 14 years while 45.5% in non-inclusive schools were aged between 12-14 years. Comparatively, pupils with disabilities in inclusive schools were much older than pupils in the selected non-inclusive schools.

As shown in Table 4.1, pupils with vision/sight (blind pupils and visually limited pupils) impairment constituted the majority of disability type in inclusive schools while respondents in the non-inclusive schools with mobility impairment recorded a majority of 27.3%. Nationally, about 40 percent of PWDs had sight or visual impairments, which was the most common type of disability, followed by physical disability with 25.4 percent. In this case, while majority of respondents in inclusive schools recorded the most common disability (sight or vision impairment), majority of respondents in the non-inclusive schools recorded the second most common disability type (physical disability). Attention deficit and autism recorded the lowest disability in the inclusive school while autism and speech impairment recording the lowest disability type in the non-inclusive schools. Speech impairment and Intellectual disability are highly related and are often grouped under the Autism Spectrum Disorders (ASD) and reported as the lowest proportion of person with disabilities in the central region (13.0%). However, there were no females with attention deficit and autism and this confirms August, Raz, & Baird (1985) assertion that autism now occurs in one in 100 child births and affects four males for every one female. Further, the only speech impaired pupil recorded in the study was a female.

4.3 The physical environment

To ensure that inclusive schools were capable of providing quality and equal educational opportunities for student of varied needs and abilities, the physical environment of inclusive schools must be accessible for teaching and learning. Smith et al, (1978), argued that the physical nature of the environment and the manner of it arrangement has a profound effect on student and teacher behavior. They further reiterated that constraints within the

environment hindered teaching and learning. For that matter, this section of the study was to ascertain the nature of the physical environment and the barriers it creates for pupils with disabilities.

In all, two areas of the physical environment were assessed which included:

1. the accessibility of the physical environment
2. the safety and sanitation of the physical environment

Under each area or domain respondents were required to respond to a list of statements. Pupils' responses were augmented with the researcher's observation and interview of respondents to understand the issues under study and to unveil the barriers and difficulties encountered by pupils with disabilities.

4.3.1 Physical Accessibility

This is the ease of approach, entry or exit to the physical environment of the school. Accessibility aims at ensuring a suitable and free movement of pupils regardless of their age, gender and disability from the entry point of the school premise, within and around the classroom blocks as well as exit. Ultimately, reasonable measures should be put in place for pupils to gain access to freely use school facilities.

For the purpose of this study, the following accessibility requirements were assessed.

1. Slope of the surface of approach route from the school boundary
2. Surface width of approach route
3. Nature of approach route surface
4. Level of obstruction on circulation route of the school compound
5. Width of a single leaf door or one leaf of a double leaf door
6. Nature of door opening furniture
7. Width of verandah
8. Nature of verandah floor finish

Table 4.3 Best practices on the physical accessibility of school premise

Indicators	Definition	Best Practices	Purpose
Approach route	This is the means of access from the entrance point of the school boundary to the school premise.	As far as possible, approach route should be level at the entrance point of the school boundary and should not be a gradient of 1:20 or steeper	This is to enable pupils with or without disabilities to travel easily without risk or the need to apply excessive effort.
width of approach route	This is wideness or space for people to approach the school.	As far as possible of a minimum surface width of 1800mm.	This is to offer sufficient space for pupils with or without disabilities to accommodate and pass each other at opposite direction
Approach route surface	This is the nature or material composition of the surface.	As far as possible the surface should be firm and slip resistant. Gravels and loose sand are materials to avoid.	This is to prevent pupils with or disabilities from falling or tripping.
Hazard free access route.	This is the absence of any thing that impedes the movements of pupils on the access route.	Potential obstructions or hazards on access routes should be prevented	This is to prevent injuring or causing harm to pupils with or without disabilities.
Width of a single leaf door or leaf of a double leaf door	This is the width of the door	Should be 750mm straight-on	To ensuring the smooth passage of pupils with disabilities especially pupils on wheel chair.
Nature of door opening furniture	This refers to the userfriendliness of the door furniture.	Door fitted opening furniture should be opened with one hand using a closed fist and should contrast visually with surface of door and not cold to touch.	To ensure that pupils can open and close doors with ease
Width of verandah	The wideness of the passage ways	An unobstructed width of at least 1200mm	This is to offer sufficient space for pupils with or without disabilities to accommodate and pass each other at opposite direction
Nature of floor finish	This is the nature or material composition of the surface.	As far as possible the surface should be firm and slip resistant	This is to prevent pupils with or disabilities from falling or tripping.

Source: The School premises (England) Regulation (2012, No. 1943)

Table 4.4 shows responses of respondents on the physical accessibility of the physical environment of the schools.

Table 4.4 Responses of pupils on the accessibility of inclusive schools

Disability type	Level approach route (%)	Appropriate Width of approach route (%)	Slip resistant Approach surface (%)	Obstruction free circulation route (%)	Appropriate width of doors (%)	Easy to open door furniture (%)	Appropriate width of verandah (%)	Slip resistant verandah surface (%)
Mobility								
Yes	3 (75)	4 (100)	3(75)	3(75)	4(100)	4(100)	4(100)	4(100)
No	1(25)	-	1(25)	1(25)	-	-	-	-
Vision								
Yes	2(100)	2(100)	2(100)	2(100)	2(100)	2(100)	2(100)	2(100)
No	-	-	-	-	-	-	-	-
Attention								
Yes	1(100)	1(100)	1(100)	1(100)	1(100)	1(100)	1(100)	1(100)
No	-	-	-	-	-	-	-	-
Hearing								
Yes	3(100)	3(100)	3(100)	3(100)	3(100)	3(100)	3(100)	3(100)
No	-	-	-	-	-	-	-	-
Autism								
Yes	1(100)	1(100)	1(100)	1(100)	1(100)	1(100)	1(100)	1(100)
No	-	-	-	-	-	-	-	-
Blindness								
Yes		19(100)	-	-	19(100)	19(100)	19(100)	19(100)
No	19(100)	-	19(100)	19(100)	-	-	-	-

Source: Fieldwork, April, 2015

Table 4.4 depicts the responses of pupils with disabilities under the study. The table shows that responses were emphatic for pupils with vision impairment, attention deficit, hearing impairment and autism on the appropriate width of approach route, slip resistant approach route surface, an obstruction free circulation route, appropriate width of doors, easy to open door furniture, appropriate width of verandah and slip resistant verandah surface, while for pupils with physical disability, although responses were unanimous on most counts, a majority of 75% confirmed the presence of a level approach route, appropriate surface of approach route and an obstruction free circulation route.

Blind pupils (all pupils at Ghana National basic) confirmed the presence of a wide approach route, appropriate doors and passage ways. However, they complained about the absence of a level approach route, appropriate approach surface and an obstruction free circulation route.

Table 4.5 Responses of pupils on the accessibility of non-inclusive schools

Disability type (%)	Level approach route (%)	Approp. Width of approach route (%)	Slip resistant Approach surface (%)	Obstruction free circulation route (%)	Approp. width of doors (%)	Easy to open door furniture (%)	Approp. width of verandah (%)	Slip resistant verandah surface (%)
Mobility								
Yes	2(66.6)	3(100)	-	2(66.6)	3(100)	3(100)	3(100)	3(100)
No	1(33.3)	-	3(100)	1(33.3)	-	-	-	-
Vision								
Yes	2(100)	2(100)	2(100)	2(100)	2(100)	2(100)	2(100)	2(100)
No	-	-	-	-	-	-	-	-
Attention								
Yes	1(100)	1(100)	1(100)	1(100)	1(100)	1(100)	1(100)	1(100)
No	-	-	-	-	-	-	-	-
Hearing								
Yes	1(50)	2(100)	2(100)	2(100)	2(100)	2(100)	2(100)	2(100)
No	1(50)	-	-	-	-	-	-	-
Autism								
Yes	1(50)	2(100)	2(100)	2(100)	2(100)	2(100)	2(100)	2(100)
No	1(50)	-	-	-	-	-	-	-

Source: Fieldwork, April, 2015

Table 4.5 depicts the responses of pupils with disabilities in the selected non-inclusive schools. The table shows that with the exception of pupils with physical disabilities, pupils responses were emphatic for all the statements except the presence of a level approach while for pupils with physical disabilities, there was a negative response on the presence of a slip resistant approach route and a majority confirmation on the obstruction free circulation route. However, while pupils with vision impairment and attention deficit confirmed

unanimously on the presence of a level approach route, there was a split decision for pupils with hearing impairment and pupils with autism.

Comparatively, the responses of pupils with hearing impairment and attention deficit in both inclusive and non-inclusive schools were unanimous on all statements posed to respondents. Responses of pupils with hearing impairment and autism were consistent in the acceptance of the presence of the indicators except on the level approach route where respondents in inclusive schools agreed to its presence while there was a split (50%) in the response of respondents in the selected non-inclusive schools. However, in the inclusive schools, majority (75% and 100%) of pupils with mobility impairment agreed to the presence of the indicators and in the non-inclusive schools majority (66.6% and 100%) of the respondents with mobility impairment agreed to all indicators except the presence of a slip resistant approach route.

Pupils were interviewed on the barriers posed by the absence of variables such as a level approach route, surface of approach route and an obstruction free circulation route mostly indicated by pupils with blindness and the absence of warning surfaces and signs as indicated by all pupils with disabilities under the study. Table 4.6 highlights these barriers experienced by respondents.

Table 4.6 Barriers faced by pupils with disabilities

Type of disability	Absence of level approach route
Pupils with blindness and pupil with physical disability	<ol style="list-style-type: none"> 1. Dependence on sighted pupils. 2. Exertion of too much energy. 3. Resultant injuries from falls and slips. 4. Delays in arriving at school
Type of disabilities	Absence of appropriate approach route surface
Pupils with blindness and pupil with physical disability	<ol style="list-style-type: none"> 1. Injuries from falls and slips due to soil cover. 2. Erosional changes causing unfamiliarity. 3. Delays smooth movement
Type of disability	Absence of obstruction free circulation route
Pupils with blindness and a pupil with physical disability	<ol style="list-style-type: none"> 1. Frequent bumping into things 2. Frequent falls and injuries 3. Exposure to hazards

Source: Fieldwork, April, 2015

Observation of approach route (slope, width and surface) and circulation route of the inclusive and selected non-inclusive schools

An audit was carried out to ascertain the accessibility of the fourteen (14) schools to allow for the comparison of responses from respondents in order to understand the reasons behind their response. Situations in the school which matched best practices were marked 'very good' while the reverse was marked 'poor'. However, situations which partially fulfilled the best practices were marked 'good'.

Table 4.7 Slope of the approach route of inclusive and non-inclusive schools

	Inclusive schools	Situation	Remarks
1	Pedu 'A'	Level	Very Good
2	Pedu 'B'	Level	Very Good
3	Philip Quacoe boys	Level	Very Good
4	Ghana National basic	Steep slope	Poor
5	Christ Church Anglican	Level	Very Good
6	Aboom Methodist	Steep slope	Poor
7	A.M.E. Zion	Level	Very Good
	Non-inclusive schools	Situation	Remarks
1	St Lawrence catholic Basic	Level	Very Good
2	St Anthony's Anglican Basic	Gentle slope	Good
3	Ayifua St. Mary's Basic	Level	Very Good
4	Kakumdo Basic	Level	Very Good
5	Antem Basic	Level	Very good
6	Efutu Basic	Level	Very Good
7	E.J.P Brown Basic	Steep slope	Poor

Source: Fieldwork, April, 2015

According to international best practices shown in Table 4.3, approach route should be level at the entrance point of the school boundary and should not be a gradient of 1:20 or steeper. The entry points of majority of the schools were not constructed entrances but they were point accepted as entry to the school over the years. Majority of schools (5 each) under both inclusive and non-inclusive schools had a level approach routes between the gradient 1:50 to 1:100. These inclusive schools (Pedu 'A', Pedu 'B', Philip Quacoe Boys, Christ Church Anglican and A.M.E Zion) and selected non-inclusive schools (St Lawrence

Catholic, Ayifua St. Mary's, Kakumdo basic, Antem basic and Efutu basic) due to the level approach route offered an easy access to the school premise especially for pupils with blindness and physical disabilities.

However, St. Anthony's Anglican Basic school had an approximately gentle slope approach route. An approach of gentle slope although offered a slight difficulty in its ascension as compared to a level approach, it also offered a smooth dissension especially for pupils on wheel chair. There were two inclusive schools (Ghana National Basic and Aboom Methodist) with steep slope approach route and E.J.P Brown, the only noninclusive school with a steep approach route. Therefore it was nearly impossible for pupils with physical disabilities and pupils with blindness to ascend and descend smoothly.

Comparatively, the selected non-inclusive schools had a better approach route than the inclusive schools. This should not be the case especially with inclusive school being the appropriate destination for pupils with disabilities. The construction of the route should be guided by the view that pupils with or without disabilities have varied degrees of capabilities



Figure 4.1 Approach (steep slope) route to Ghana National Basic School



Figure 4.2 Approach (Gentle slope) route to St. Anthonys Anglican Basic School

Table 4.8 Width of approach route of inclusive and non-inclusive schools

	Inclusive Schools	Situation	Remarks
1	Pedu 'A'	15 metres	Very Good
2	Pedu 'B'	15 metres	Very Good
3	Philip Quacoe boys	8 metres	Very Good
4	Ghana National basic	5 metres	Very Good
5	Christ Church Anglican	15 metres	Very Good
6	Aboom Methodist	5 metres	Very Good
7	A.M.E. Zion	10 metres	Very Good
	Non-Inclusive Schools	Situation	Remarks
1	St Lawrence catholic Basic	5 metres	Very Good
2	St Anthony's Anglican Basic	10 metres	Very Good
3	Ayifua St. Mary's Basic	5 metres	Very Good
4	Kakumdo Basic	5 metres	Very Good
5	Antem Basic	10 metres	Very Good
6	Efutu Basic	15 metres	Very Good
7	E.J.P Brown Basic	5 metres	Very Good

Source: Fieldwork, April, 2015

According to international best practices shown in Table 4.3, approach route width should be 1800mm which is approximately 2 metres. Again, because majority of the approach route

were not constructed, all the schools exceeded the minimum requirement. The width of the inclusive schools as well as the selected non inclusive schools ranged between 5 to 15metres. These allowed pupils with or without disability to access the school and pass each other in opposite direction. The surface width observed in all the schools could accommodate any form of vehicular and non-vehicular traffic without the creation of diversions.

Table 4.9 The nature of approach route surface of inclusive and non-inclusive schools

	Inclusive Schools	Situation	Remarks
1	Pedu 'A'	Grass and sand	Poor
2	Pedu 'B'	Grass and sand	Poor
3	Philip Quacoe boys	Sandy	Poor
4	Ghana National basic	Gravel and clay	Poor
5	Christ Church Anglican	Grass and sand	Poor
6	Aboom Methodist	Gravel and sand	Poor
7	A.M.E. Zion	Sandy	Poor
	Non-Inclusive Schools	Situation	Remarks
1	St Lawrence catholic Basic	Sand	Poor
2	St Anthony's Anglican Basic	Gravel and sand	Poor
3	Ayifua St. Mary's Basic	Grass and sand	Poor
4	Kakumdo Basic	Sand	Poor
5	Antem Basic	Sand	Poor
6	Efutu Basic	Grass and sand	Poor
7	E.J.P Brown Basic	Gravel and sand	Poor

Source: Fieldwork, April, 2015

According to international best practices shown in Table 4.3, approach route surface should be firm and slip resistant. Gravels and loose sand are materials to avoid because they hinder the movement of pupils with disabilities. The surface materials of the approach routes of the inclusive as well as the selected non inclusive schools comprised basically of grass, sand and gravels which were highly inappropriate. Gravel or grass surfaces blended with sand in all cases.

Observation revealed that, during the dry season, the surfaces were very firm but revealed the stony part of the surface which caused falls and slips to pupils with and without disabilities especially on steep slopes like that which is found at Ghana National Basic, Aboom Methodist and E.J.P Brown. The dust from the sandy surfaces was a constraint to

pupils with or without disabilities especially pupils with vision impairments. However, in the raining season, the movement of rain water made grass surfaces slippery for it users even though (grass surface) it has the ability to prevent erosion. The sandy surfaces, on the other hand allows for erosion. Where sandy surfaces blend with gravels, erosion only succeed in exposing the gravels which makes it slippery and risky. Where sand dominate, erosion leaves the surface undulating which hampers movement especially pupils on wheel chair. An eroded surface also changes the nature of the surfaces making it unfamiliar to pupils with blindness whose adaptation to their environment is dependent on their familiarity of their environment. It is however without a doubt the nature of approach route surface was poor in all the schools under the study.

Table 4.10 Nature of circulation route of inclusive and non-inclusive schools

	Inclusive Schools	Situation	Remarks
1	Pedu 'A'	Obstruction free circulation route	Very good
2	Pedu 'B'	Obstruction free circulation route	Very good
3	Philip Quacoe boys	Obstruction free circulation route	Very good
4	Ghana National basic	Obstructions	Poor
5	Christ Church Anglican	Obstruction free circulation route	Very good
6	Aboom Methodist	Obstruction free circulation route	Very good
7	A.M.E. Zion	Obstruction free circulation route	Very good
	Non-Inclusive Schools	Situation	Remarks
1	St Lawrence catholic Basic	Obstructions	Poor
2	St Anthony's Anglican Basic	Obstruction free circulation route	Very good
3	Ayifua St. Mary's Basic	Obstructions	Poor
4	Kakumdo Basic	Obstruction free circulation route	Very good
5	Antem Basic	Obstruction free circulation route	Very good
6	Efutu Basic	Obstruction free circulation route	Very good
7	E.J.P Brown Basic	Obstruction free circulation route	Very good

Source: Fieldwork, April, 2015

Table 4.10 shows that out of the fourteen (14) schools under study, three (3) schools (Ghana National basic, St. Lawrence Catholic basic and Ayifua St. Mary's Anglican basic had obstructed circulation route which created a barrier in the exploration of the physical environment. The circulation route of Ghana National basic was obstructed by tree branches. For a school dominated by pupils with blindness, the extension of tree branches across the circulation route is a potential hazard for pupils with blindness.

Ayifua St. Mary's Anglican basic was located adjacent to a saw mill and carpentry shops. Obstructions were created by the piling of wood, machines, vehicles and finished furniture which were arranged and displayed on the circulation route. The encroachment of the circulation route restricted the movement as well as put in danger pupils with or without disabilities. It is therefore important that this situation is corrected to allow pupils to adequately explore and familiarize themselves with the physical environment.

The approach route at St. Lawrence Catholic was highly obstructed. At the time of the observation, construction works were ongoing at the school. Although, pupils without disabilities were able to maneuver their way out, it was practically dangerous for pupils with disabilities especially pupils with physical disability. The circulation route was occupied with heaps of sand, stones, iron rods, wood and blocks. The presence of this on the physical environment without considering the danger it posed to pupils was most careless and insensitive.

Comparatively, the seven inclusive schools had an appropriate circulation route than the selected non inclusive schools. However, the circulation route should be given the necessary attention, as this enables pupils to familiarize as well as participate in school activities. To avoid confining pupils to the classroom in the fear of endangering themselves, the necessary modifications or reconstructions must be expedited with urgency.



Figure 4.3 An obstructed circulation route at St Lawrence Basic

Observation of classroom door (width and opening furniture) and verandah (width and surface)

According to international best practices Width of a single leaf door should be 750mm straight-on. In the case of all fourteen (14) schools, the schools all had a standard door width of 750mm. The presence of double doors in all the schools was a plus as it facilitated the easy movement of persons with wheelchair. Additionally, all the schools had classrooms with doors on both sides of the room. This was a very good feature across all the schools as it might be of immense importance in the case of an emergency evacuation. This feature should be maintained as it ensures the accessibility of classrooms which are an integral part of the school system.

According to Table 4.3, door fitted opening furniture should be opened with one hand using a closed fist and should contrast visually with surface of door and not cold to touch. Contrastingly, the door fitted opening furniture of all the fourteen (14) schools were a mixture of pad locks and sash locks. Pad locks are highly inappropriate for classrooms as it is difficult to open and close and practically impossible to open with one hand using a closed fist. This demands a lot of effort especially for pupils with disabilities or weakness in the hand. The sash locks also require some arm strength to operate making it difficult as well. In terms of this indicator in aiding accessibility, the two school types under the study have failed and therefore require immediate attention. An improvement will be a total replacement of the locks with easy to operate locks for all pupils.

International best practices shown in Table 4.3 passage ways or veranda must have an unobstructed width of at least 1200mm or approximately 1.2 metres. In all of the schools under study, some of the school blocks had verandas on both sides with a width of 1.2 metres with the rest being single verandas or no veranda at all. Some schools like Ayifua St. Mary's Anglican Basic and St. Lawrence Catholic (inclusive schools) had one out of three and two out of three blocks respectively without any veranda. St. Anthony's basic, E.J.P Brown, Antem Basic, Pedu 'b' (non-inclusive schools), Christ Church Anglican, Philip Quacoe Boys and Ghana National basic (inclusive schools) had all of it school blocks having verandahs on both sides. This situation was however encouraging as it reduced human traffic. The remaining schools had a blend of single and double verandas. However, all the verandas had obstructions from opened windows which reduced the width of 1200mm. The open wooden windows served as hazard for users of the veranda especially when pupils must pass each other.

According to international best practices shown in Table 4.3, the surface of the verandah floor should be firm and slip resistant. This means that the floors should help to avoid slips and falls. However, all the schools had smooth verandah surfaces which were dangerous for all pupils especially when floors were wet or had traces of sand particles. This was very unfortunate as this puts the lives of pupils especially pupils with disabilities in danger. The consistency of this situation in all the schools under the study compels the conclusion that this was the usual surfacing style of most basic schools. If this is the case, government must review its designs and initiate measures to remedy this situation before we succeed in excluding the vulnerable groups from our school system.

General remarks

In general blind pupils and pupils with physical disabilities constituted the majority and were the only group with reservations on most of the indicators. Pupils insisted that the nature (gradient) of approach route, the nature of approach route surface and the nature of circulation route created some barriers which hindered the accessibility of their schools. To ensure that pupils with disabilities do not become dependent and also end the occurrence of injuries to pupils' especially blind pupils and pupils with physical disabilities measures should be put in place.

However, it was observed that both inclusive and non-inclusive schools under the study had appropriate width of approach route as well as doors. Majority of the schools also had level approach route and an obstruction free circulation route. Contrastingly, all the schools had inappropriate approach route surface, door furniture, door width and verandah surface. The barriers that is associated with this situation, requires the urgent attention of relevant stakeholders in fixing this problem.

4.3.2 Sanitation and safety (Toilet facility and Fire safety)

Suitable toilet facilities (sanitary accommodation) with the consideration of sex, age and disability is essential in ensuring the comfort of pupils with or without disabilities. Additionally, the safety of pupils in terms of fire is important especially with emphasis on the prevention, detection and evacuation of pupils. The study sort to assess the presence or absence of these facilities and the barriers posed to pupils with disabilities.

For the sake of this exercise, the following safety and sanitation requirements were assessed.

1. Suitability of toilet facility
2. Privacy of toilet facility
3. Location of facility
4. Suitable space within the facility
5. Support system
6. Hand washing facility
7. The presence of a fire extinguisher
8. Early warning by an automatic detection and warning system
9. Means of escape

Table 4.11 Sanitation and safety standards

Indicators	Definition	Best Practices	Purpose
Suitability of toilet facility	The installation of an appropriate toilet facility.	WC is the suitable toilet facility	To ensure the safety and easy use of facility
Privacy of toilet facility	The toilet facility should ensure the protection of the privacy of users	Separate facility for boys and girls or if not separate, it can be locked from within	Ensure that occupants use facility in comfort and no disturbance
Location of facility	Direct route and an obstruction free travel distance	Travel distance not more than 40metres	To ensure that pupils do encounter and delays in accessing facility
Suitable space within the facility	The width of the cubicle	1.5metres to 2metres	To ensure comfort and easy turning
Support system	The installation of systems that support the access and use of the facility	Horizontal support rail on the wall adjacent to the WC	To aid the movement and use of facility by pupils.
Hand washing facility	The provision of a hand washing system	A hand washing basin with a standing height	To improve hygiene of pupils
The presence of a fire extinguisher	The installation of a fire extinguisher	Installation of an extinguisher at vantage points	To aid in combating fires
Early warning by an automatic detection and warning system	The installation of fire detection or warning system	Provisions for early fire warning	To detect and inform pupils about a fire outbreak
Means of escape plan	guidelines to aid in the escape of pupils	Guidance to the means of escape in the event of fire	To direct pupils on the appropriate means of escape

Source: The School premises (England) Regulation (2012, No. 1943)

With reference to table 4.11, respondents were asked to tick ‘Yes’ or ‘No’ to 9 (nine) statements on the provisions of sanitation and safety of the 2 (two) school types under study.

Table 4.12 Sanitation and safety of the physical environment of inclusive schools

Disability Type	Suitable toilet (%)	Privacy of toilet (%)	Travel distance (%)	Cubicle space (%)	Rail support (%)	Hand washing (%)	Fire extinguisher (%)	Detection system (%)	Escape plan (%)
Mobility									
Yes	1(25)	1(25)	2(50)	2(50)	-	-	-	-	-
No	3(75)	3(75)	2(50)	2(50)	4(100)	4(100)	4(100)	4(100)	4(100)
Vision									
Yes	-	1(50)	1(50)	-	-	-	-	-	-
No	2(100)	1(50)	1(50)	2(100)	2(100)	2(100)	2(100)	2(100)	2(100)
Attention									
Yes	-	-	-	-	-	-	-	-	-
No	1(100)	1(100)	1(100)	1(100)	1(100)	1(100)	1(100)	1(100)	1(100)
Hearing									
Yes	1(33.3)	1(33.3)	2(66.6)	1(33.3)	-	-	-	-	-
No	2(66.6)	2(66.6)	1(33.3)	2(66.6)	3(100)	3(100)	3(100)	3(100)	3(100)
Autism									
Yes	-	-	-	-	-	-	-	-	-
No	1(100)	1(100)	1(100)	1(100)	1(100)	1(100)	1(100)	1(100)	1(100)
Blindness									
Yes	-	-	-	-	-	-	-	-	-
No	19(100)	19(100)	19(100)	19(100)	19(100)	19(100)	19(100)	19(100)	19(100)

Source: Fieldwork, April, 2015

The table 4.12 shows a unanimous confirmation by all respondents on the lack of rail support and cubicle space and the absence of hand washing facility, fire extinguisher, fire detection and warning system and an escape plan in all the seven (7) inclusive schools.

Pupils with autism, attention deficit and blindness unanimously indicated ‘no’ to all nine (9) statements. There was however, a split decision for pupils with physical disability and vision impairment on travel distance and cubicle space as well as the privacy and travel distance respectively.

Table 4.13 Sanitation and safety of the physical environment of non-inclusive schools

Disability Type	Suitable toilet	Privacy of toilet	Travel distance	Cubicle space	Hand Rail	Hand washing	Fire exting	Detectio n system	Escap e plan
Mobility									
Yes	-	1(33.3)	1(33.3)	-	-	-	-	-	-
No	3(100)	2(66.6)	2(66.6)	3(100)	3(100)	3(100)	3(100)	3(100)	3(100)
Vision									
Yes	-	-	-	-	-	-	-	-	-
No	2(100)	2(100)	2(100)	2(100)	2(100)	2(100)	2(100)	2(100)	2(100)
Attention									
Yes	-	-	-	-	-	-	-	-	-
No	1(100)	1(100)	1(100)	1(100)	1(100)	1(100)	1(100)	1(100)	1(100)
Hearing									
Yes	1(50)	2(100)	1(50)	1(50)	-	-	-	-	-
No	1(50)	-	1(50)	1(50)	2(100)	2(100)	2(100)	2(100)	2(100)
Autism									
Yes	-	1(50)	-	1(50)	-	-	-	-	-
No	2(100)	1(50)	2(100)	1(50)	2(100)	2(100)	2(100)	2(100)	2(100)

Source: Fieldwork, April, 2015

The table 4.13 depicts a unanimous confirmation of the absence of rail support, hand washing facility, fire extinguisher, fire detection system and an escape plan by all pupils in the selected non-inclusive. Additionally, pupils with vision impairment and attention deficit unanimously indicated 'no' to all the statements posed to them. There was also a split decision amongst pupils with hearing impairment on a suitable toilet facility, travel distance and cubicle space and for autistic pupils on privacy of the facility and cubicle space.

Respondents were interviewed to ascertain whether or not the absence of any of the indicators posed any barriers to them. While some respondents had qualms about the absence of some of the facilities, others had qualms about the absence of all the indicators. Below is the response of pupils as shown in Table 4.14.

Table 4.14 Barriers posed by the absence of the sanitation and safety requirements

Type of disability	Absence of WC
All disabilities	1.Problems of hygiene 2.Presents danger 3.Disomfort 4.Dependence on sighted pupils
Type of disability	Lack of privacy
All disabilities	1.Discomfort
Type of disability	Long travel distance
All disabilities	1.Fatigue 2.Discomfort 3.Delays in arriving at facility on time
Type of disability	Inappropriate cubicle space
All disabilities	1.Discomfort 2.difficulty in the circulation of air making the cubicle hot and smelly 3.difficulty in turning
Type of disability	Absence of hand rails
Pupils with physical disabilities	1.No support in the use of facility 2. Very dangerous and risky
Type of disability	Absence of hand washing facility
All disabilities	1. problem of hygiene 2. spread of cholera
Type of disability	Absence of fire extinguisher
All disabilities	Danger to pupils during a fire outbreak
Type of disability	Absence of fire detection system
All disabilities	No notification of fire for decision making
Type of disability	Absence of guidelines for escape
All disabilities	Confusion in times of a fire outbreak a to what to do

Source: Fieldwork, 2015

Observation of toilet facility (type, privacy and width), travel distance and hand washing facility of the inclusive and selected non-inclusive schools

Observation of the study areas was to ascertain at first hand the sanitation and safety of the fourteen (14) schools under the study. The observation on the other hand, was to allow for the comparison of responses from respondents in order to understand the reasons behind their response.

Table 4.15 Presence of an appropriate toilet facility in inclusive and non inclusive schools

	Inclusive schools	Situation	Remarks
1	1.Pedu 'A'	Pit latrine	Poor

2	2.Pedu 'B'	Pit latrine	Poor
3	3. Philip Quacoe boys	Pit latrine	Poor
4	4. Ghana National basic	Pit latrine	Poor
5	5. Christ Church Anglican	Pit latrine	Poor
6	6. Aboom Methodist	WC	Very good
7	7. A.M.E. Zion	Pit latrine	Poor
	Non-inclusive schools	Situation	Remarks
1	1.St Lawrence catholic Basic	No toilet facility	Poor
2	2.St Anthony's Anglican Basic	Pit latrine	Poor
3	3.Ayifua St. Mary's Basic	Pit latrine	Poor
4	4.Kakumdo Basic	WC	Very good
5	5.Antem Basic	Pit latrine	Poor
6	6.Efutu Basic	Pit latrine	Poor
7	7.E.J.P Brown Basic	Pit latrine	Poor

Source: Fieldwork, 2015

The appropriate toilet facility is the WC installed toilet facility. The table depicts that all the inclusive schools had pit latrines with the exception of Aboom Methodist basic which had a 6 cubicle toilet facility constructed by an N.G.O with installed WC in all of the cubicles. In the non-inclusive schools also, Kakumdo Basic was the only school with WC facility while the rest had pit latrines. St. Lawrence Catholic Basic, had no toilet facility on the school premise, rather pupils used a public toilet near the school and paid. Comparatively, the inclusive schools are well off than the selected non-inclusive schools in terms of the presence of a WC, although the situation was generally poor in all the two school types. The pit latrines presented a whole range of barriers to pupils especially pupils with vision/blind limitations. They include the following

Table 4.16 Barriers posed by pit latrines

Barriers posed by pit latrines	
1	The pits have a diameter of 30cm and therefore no pupil can fall into it, however, a pupil with blindness can slip and have a leg enter the pit.
2	The diameter of the pit forces pupils in the lower classes (basic 1-3) and some of disability, who for the fear of falling into the pit to defecate within the cubicle instead of defecating into the pit. This is not hygienic and pupils with vision impairment can step into the fecal matter.
3	The pits are uncovered and therefore attract houseflies. The stench from the pit is also unpleasant and uncomfortable.
4	The fear of stepping into the fecal matter or falling into the pit has forced pupils with vision and physical disabilities to find other alternatives.

Source: Fieldwork, April, 2015

Due to the seriousness of the situation observed in the schools, stakeholders must take the necessary steps to remedy the situation.



Figure 4.4 Pit Latrine at Ghana National Basic



Figure 4.5 Water closet at Aboom Methodist Basic

Table 4.17 The toilet facility and the assurance of the privacy of pupils

	Inclusive schools	Situation	Remarks
1	Pedu 'A'	Separate but no inside locks	Good
2	Pedu 'B'	Separate but no inside locks	Good
3	Philip Quacoe boys -	Separate but broken doors	Poor
4	Ghana National basic	Separate and with inside locks	Very good
5	Christ Church Anglican	Separate and with inside locks	Very good
6	Aboom Methodist	Separate and with inside locks	Very good
7	A.M.E. Zion	Separate but no inside locks	Good
	Non-inclusive schools	Situation	Remarks
1	St Lawrence catholic Basic	Separate without doors (public toilet)	Poor
2	St Anthony's Anglican Basic	Separate but broken doors	Poor
3	Ayifua St. Mary's Basic	Separate and with inside locks	Very good
4	Kakumdo Basic	Separate and with inside locks	Very good
5	Antem Basic	Separate but no inside locks	Good
6	Efutu Basic	Separate but two pits in a cubicle	Poor
7	E.J.P Brown Basic	Separate and with inside locks	Very good

Source: Fieldwork, April, 2015

As far as possible, there should be a separate facility for boys and girls or if not separate, it can be locked from within. The table 4.25 indicates that all the schools under the study had separate toilet facilities for boys and girls or sections dedicated boys or girls only. This in essence ensured some form of privacy. However, in some inclusive schools (Ghana National Basic, Christ Church Anglican and Aboom Methodist) enhanced the privacy of pupils when using the facilities by providing inside locks while some schools (Pedu ‘a’, Pedu ‘b’ and A.M.E. Zion) had no inside locks. Philip Quacoe Boys on the hand had broken doors, therefore failing to ensure the privacy of pupils.

In the non- inclusive schools, .E.J.P Brown Basic, Kakumdo Basic and Ayifua St. Mary’s Basic ensured the privacy of it pupils by providing separate facilities for boys and girls and in addition had inside locks that pupils used the facility without interferences. Efutu basic on the other hand had two pits in a cubicle breaching the privacy of pupils. The pupils of St. Lawrence had no facility in the school and therefor used a public facility with no doors. However, construction of new classroom blocks on the school premise had provisions of toilet facilities which when completed will alleviate this current problem. Comparatively, the inclusive schools had toilet facilities that ensured the privacy of it pupils than in the non-inclusive schools.



Figure 4.6 Broken doors to toilet facility at St Anthonys Basic

Table 4.18 Travel distance of toilet facility from the farthest classroom.

	Inclusive schools	Situation	Remarks
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1	1.Pedu 'A'	100metres from farthest classroom	Poor
2	2.Pedu 'B'	80metres from farthest classroom	Poor
3	3. Philip Quacoe boys	40 metres from farthest classroom	Very good
4	4. Ghana National basic	30 metres from farthest classroom	Very good
5	5. Christ Church Anglican	40 metres from farthest classroom	Very good
6	6. Aboom Methodist	30 metres from farthest classroom	Very good
7	7. A.M.E. Zion	40 metres from farthest classroom	Very good
	Non-inclusive schools	Situation	Remarks
1	1.St Lawrence catholic Basic	80 metres to public toilet	Poor
2	2.St Anthony's Anglican Basic	50 metres from farthest classroom	Poor
3	3.Ayifua St. Mary's Basic	40 metres from farthest classroom	Very good
4	4.Kakumdo Basic	20 metres from farthest classroom	Very good
5	5.Antem Basic	30 metres from farthest classroom	Very good
6	6.Efutu Basic	70 metres from farthest classroom	Poor
7	7.E.J.P Brown Basic	40 metres from farthest classroom	Very good

Source: Fieldwork, April, 2015

As far possible, the travel distance from a classroom to a toilet facility should not be more than 40metres. The table shows that, all the seven (7) inclusive schools had travel distances of 30 to 40 metres, from the farthest classroom to the toilet facility while two (Pedu 'a' and Pedu 'b') had travel distances exceeding (100 and 80 metres respectively) the required travel distance. In the non inclusive schools, however, three (3) schools, St. Lawrence, St. Anthonys and Efutu Basic had travel distances 50metres, 70metres and 80metres respectively. Comparatively, the inclusive schools have better travel distance than the non inclusive school. However, these outrageous distances present a lot of difficulties for pupils especially pupils with physical disabilitys who require a great deal of effort covering these distances. The travel distances beyond 40metres will:

1. Require pupils (physical disabilitys) to use a great deal of effort to make the distance.
2. Delay pupils with disabilities in their quest to use the facility and sometimes result in prematurely defecating on themselves before reaching the facility.

To rectify this situation and ensure that pupils will not have to cover such long distances, each block should have a toilet facility. It was clear that due to the presence of pit latrines, schools which had very vast school lands located the toilet facility to prevent the stench from

coming close to the classroom area. If the toilet facilities are converted to WCs, the facility can be situated amidst the classroom blocks.

Table 4.19 Width of toilet cubicles in inclusive and non inclusive schools

	Inclusive schools	Situation	Remarks
1	Pedu 'A'	1metre	Poor
2	Pedu 'B'	1metre	Poor
3	Philip Quacoe boys	1metre	Poor
4	Ghana National basic	1.1metre	Poor
5	Christ Church Anglican	1.2metre	Poor
6	Aboom Methodist	1.2metres	Poor
7	A.M.E. Zion	1.3metres	Poor
	Non-inclusive schools	Situation	Remarks
1	St Lawrence catholic Basic	1metre	Poor
2	St Anthony's Anglican Basic	1.2metres	Poor
3	Ayifua St. Mary's Basic	1.2metres	Poor
4	Kakumdo Basic	1.2metres	Poor
5	Antem Basic	1metre	Poor
6	6.Efutu Basic	1metre	Poor
7	7.E.J.P Brown Basic	1.2metres	Poor

Source: Fieldwork, April, 2015

As far as possible, the width of toilet cubicles should be between 1.5metres and 2metres. The table depicts that none of the schools met the requirement. The schools had cubicle width ranging between 1metre and 1.3metres. The non-inclusive schools also could not meet this requirement as the width of the cubicles ranged between 1metre and 1.2metres. The inability of the schools to meet this requirement presents a great barrier to pupils with or without disabilities. Pupils with disabilities will

1. Make it difficult for pupils with wheelchair to turn and move within the cubicle.
2. Cause a lot of discomfort for pupil's mobility aids.

The best way out of this, is to construct a new facility with the standards incorporated into the design. The expansion of the width, although a step in the right direction, will only succeed in reducing the number of cubicles.

Table 4.20 Hand washing system for toilet facilities in inclusive and non- inclusive schools

	Inclusive schools	Situation	Remarks
1	Pedu 'A'	No hand washing basin	Poor
2	Pedu 'B'	No hand washing basin	Poor
3	Philip Quacoe boys	No hand washing basin	Poor
4	Ghana National basic	No hand washing basin	Poor
5	Christ Church Anglican	No hand washing basin	Poor
6	Aboom Methodist	Sink with tap water	Very good
7	A.M.E. Zion	No hand washing basin	Poor
	Non-inclusive schools	Situation	Remarks
1	St Lawrence catholic Basic	No hand washing basin	Poor
2	St Anthony's Anglican Basic	No hand washing basin	Poor
3	Ayifua St. Mary's Basic	No hand washing basin	Poor
4	Kakumdo Basic	Sink with tap water	Very good
5	Antem Basic	No hand washing basin	Poor
6	Efutu Basic	No hand washing basin	Poor
7	E.J.P Brown Basic	No hand washing basin	Poor

Source: Fieldwork, April, 2015

The presence of hand washing system is a very important feature in ensuring hygiene and the avoidance of the spread of cholera. As far as possible, every toilet facility should have a hand washing basin of standing height for the use of pupils immediately after accessing a toilet facility. The table shows that of all the inclusive schools, it was only Aboom Methodist which had a hand washing sink with reliable running water for the use of pupils. In the non inclusive schools, however, it was only, kakumdo basic which had a hand washing basin (sink) with running water and stand by poly tank for the use of pupils. The presence of this in only two schools out of the fourteen schools is shocking and very disturbing.

Observation of hand rails and fire safety systems

As far as possible, the toilet cubicles should have horizontal support rails. The table depicts that none of the schools met the requirement. The schools had no horizontal support rails. The non- inclusive schools also could not meet this requirement as none of it had any horizontal support rails. The inability of the schools to meet this requirement presents a great barrier to pupils with disabilities especially pupil with blindness, wheel chair, prams or weakness in the arm or one side of the body. These pupils require some form of support in

order to use the WC. The absence of this support system means 1. Pupils will find it difficult sitting on the WC and also lifting themselves up.

2. Pupils will find it difficult to move around.

The presence of a fire extinguisher is to aid pupils to fight fire in the event of a minor fire outbreak within the school. As far as possible each school should have a fire extinguisher. The case was very gloomy in all the fourteen schools as none of them had an installed extinguisher in the event of fire. Clearly, this is very shocking especially for Pedu 'A' and Pedu 'B' which were located adjacent to the Central Regional Fire Service Station. This means in the event of minor fires, the lives of pupils especially pupils with disabilities will be in great danger. The installation of fire extinguisher should be made a vital aspect of the basic school facilities.

The presence of a fire detection and warning system is to warn pupils of fire in the event of a minor fire outbreak within the school. As far as possible each school should have a fire detection and warning system. The case was again very gloomy in all the fourteen schools as none of them had any form of fire detection or warning system. Clearly, this is very shocking especially for Pedu 'A' and Pedu 'B' which are located adjacent to the Central Regional Fire Service Station. This means in the event of minor fires, the lives of pupils especially pupils with disabilities such as hearing or vision impairment will be in great danger. The installation of fire warning system should be made a vital aspect of the basic school facilities as this will inform pupils before the fire gets out of hand.

As far as possible, schools should have an escape or evacuation plan or guides to assist pupils to know how to react, which routes to use and how to avoid any risk in the case of a fire outbreak. Unfortunately, none of the fourteen schools had any escape plan or guidelines posted for pupils to know what to do when fire breaks out. The consistency of this situation in all of the schools is an indication that this has not been an issue of relevance to the basic school physical planning system.

General remarks

Generally, all the pupils with one disability or the other had some reservations about all the statements. The absence of some of the indicators created one form of barrier for pupils

with disabilities. Reservations by majority of respondents on all the statements is a matter of urgent concern. Pupils also stated that the absence of these indicators created discomfort, delays, risks and unhygienic conditions and prescribed solutions.

On the other hand, it was observed that majority of the indicators were absent in the schools under the study. The appropriate width of toilet cubicle, hand rail, fire extinguisher, detection and alarm system as well as an escape plan were all missing in all the schools. An appropriate toilet facility and hand washing facility were only present in two (2) schools, Aboom Methodist and Kakumdo Basic. This situation was very shocking as it puts pupils with disabilities in a very uncompromising situation. However, majority of the schools had an appropriate travel distance as well as a facility that ensured the privacy of its occupants. This is very encouraging as it ensured the creation of an inclusive environment for pupils with or without disabilities.

4.4 Performance of teachers handling pupils with disabilities

Hardman et al (2002) posit that it is essential that the skill set and knowledge needed by teachers in dealing with the special needs of children with disabilities be accorded the needed seriousness. For this reason, the nature of teacher development and performance has become a matter of concern (Whitworth, 2001). There has therefore been the need for a thorough re-examination, communication and understanding of the importance of the special role of teachers in the inclusive educational set up. This section of the study was to appraise the performance of teachers handling pupils with disabilities. This exercise will serve as a means of promoting teacher development and also identify areas where support is needed.

To do this appraisal, the following standards of the teaching profession were looked at.

1. Commitment to students and student learning
2. Professional practice

The domains had a list of competencies which were posed to pupils with disabilities to ascertain the performance of teachers handling pupils with disabilities. The responses were tabulated and ranked. Teachers were interviewed to help them react to the responses of pupils and some relevant issues about their performance in handling pupils with disabilities.

4.4.1 Commitment to students and student learning

This domain was to ascertain the devotedness and commitment of teachers in the affairs of pupils with disabilities. This was to verify whether or not teachers are sensitive to the plight of pupils with disabilities and treat them equally and with respect. The following competencies were therefore captured under this domain. They include the following.

1. Teachers show commitment to development and well-being of pupils with disabilities
2. Teachers show dedication in the learning and achievement of pupils with disabilities
3. Teachers respect and treat all pupils equally
4. Teachers create an environment that promote participation of pupils with disabilities

The table shows the responses of pupils with disabilities in inclusive schools on teachers' commitment on students and student learning.

Table 4.21 The Commitment to students and student learning in inclusive schools

Disability type	Commitment to wellbeing of pupils (%)	Dedication to pupils learning and achievement (%)	Equitable treatment and respect of pupils (%)	Creation of a participatory environment (%)
Mobility				
Yes	2(50)	4 (100)	2(50)	2(50)
No	2(50)	-	2(50)	2(50)
Vision				
Yes	2(100)	2(100)	2(100)	2(100)
No	-	-	-	-
Attention				
Yes	-	-	-	1(100)
No	1(100)	1(100)	1(100)	-
Hearing				
Yes	4(100)	4(100)	4(100)	4(100)
No	-	-	-	-
Autism				
Yes	-	1(100)	-	-
No	1(100)	-	1(100)	1(100)
Blindness				
Yes	19 (100)	19(100)	-	-
No	-	-	19(100)	19(100)

Source: Fieldwork, April, 2015

Pupils with vision and hearing impairments unanimously confirmed that teachers showed commitment and dedication to the wellbeing and learning achievements of pupils as well as equitable treatment and the creation of a participatory environment for pupils with disabilities. Pupils with attention deficit disagreed to all the statements except the creation

of a participatory environment for pupils while autistic pupils disagreed on all count except teacher dedication to pupils learning and achievements. Pupils with blindness unanimously agreed to teacher commitment and dedication to pupils' wellbeing and achievement and disagreed to the equitable treatment of pupils and the creation of a participatory environment for pupils with disabilities. Pupils with physical disabilities had a split decision on all count except teacher dedication to pupils' achievement where they unanimously agreed.

Table 4.22 The Commitment to students and student learning in non-inclusive schools

Disability type	Commitment to wellbeing of pupils (%)	Dedication to pupils learning and achievement (%)	Equitable treatment and respect of pupils (%)	Creation of a participatory environment (%)
Mobility				
Yes	3(100)	3(100)	1(33.3)	1(33.3)
No	-	-	2(66.6)	2(66.6)
Vision				
Yes	2(100)	2(100)	2(100)	2(100)
No	-	-	-	-
Attention				
Yes	1(100)	1(100)	1(100)	1(100)
No	-	-	-	-
Hearing				
Yes	2(100)	2(100)	1(50)	2(100)
No	-	-	1(50)	-
Autism				
Yes	2(100)	-	2(100)	-
No	-	2(100)	-	2(100)

Source: Fieldwork, April, 2015

The table depicts a unanimous agreement by pupils with physical disabilities and hearing impairment to teacher commitment and dedication to the wellbeing and learning achievements of pupils except autistic pupils who disagreed to teacher dedication to pupils learning and achievement. However, pupils with vision impairment and attention deficit agreed to all four statements. Autistic pupils also unanimously agreed to teacher commitment to wellbeing of pupils and the equitable treatment of pupils and disagreed to the dedication of teachers to pupils learning achievements and the creation of a participatory environment for pupils with disabilities.

Table 4.23 Comparison of response between pupils in inclusive and non-inclusive schools

Disability type	Commitment to wellbeing of pupils	Dedication to pupils learning and achievement	Equitable treatment and respect of pupils	Creation of a participatory environment
Inclusive (N=31)				
Yes	17(55)	30(97)	8(26)	9(29)
No	14(45)	1(3)	23(74)	22(71)
Non inclusive (N=10)				
Yes	10(100)	8(80)	7(70)	6(60)
No	-	2(20)	3(30)	4(40)

Source: Fieldwork, April, 2015

In the inclusive schools, the table depicts that a majority of pupils (54.8% and 96.8%) responded ‘Yes’ to the statement on teacher commitment to pupils wellbeing and teacher dedication to the learning achievements of pupils while a majority of pupils (71% and 74.2%) responded ‘No’ to the statement that teachers treat pupils equally and are able to create a participatory environment for pupils with disabilities. However, in the noninclusive schools, a majority of pupils (60 % to 100%) responded ‘Yes’ to all statements.

Comparatively, majority of pupils in both inclusive and non-inclusive schools agreed that teachers showed commitment to pupils’ wellbeing and learning achievements and disagreed on the statement that pupils are treated equally and a participatory environment are created for pupils with disabilities. In general terms, majority of pupils in noninclusive schools agree that teachers handling them are committed to students and student learning while majority of pupils in inclusive schools partially agree. Such responses are shocking, especially in a situation where inclusive schools should be the right place concerned with the learning of pupils with disabilities.

Commitment to the wellbeing of pupils

Pupils with physical disability, attention deficit and autism who claimed that teachers showed the lack of commitment to the wellbeing of pupils in both inclusive and noninclusive schools were interviewed to allow pupils to elaborate on the reasons behind their responses to clarify their claims. Below is the summary of all the reasons stated by pupils in both inclusive and non-inclusive schools on this statement.

Table 4.24 Reasons and barriers faced by pupils with disabilities.

Disability type	Reasons	Effects
Mobility (N=2)	1.Teachers do not understand the nature of pupils disabilities 2.Teachers did not show any sign of care for pupils 3. Teachers treat pupils equally even though pupils had diverse abilities.	1.Pupils feel unwanted 2. Pupils feel neglected
Attention (N=1)	1.teacher constantly insults pupil 2.Pupils are constantly punished by pupils	1. Pupil feel hated by teacher 2. Pupil feel unwanted
Autism (N=1)	1.teacher do not understand pupil 2.pupil not called to partake in discussions	1.pupil feel unwanted 2.pupil with autism feel lower than the other pupils

Source: Fieldwork, April, 2015

To sum up the reasons stated above, a pupil with physical disabilities at St. Anthony's Basic who claimed that teachers are not committed to their wellbeing stated that:

“My teacher may be nice to my other friends but not me. Last term, she made me bring a bucket full of stones to school because I returned from break late. I had to walk around all day for the stones with pain in my leg. I almost stopped school because of that” (Fieldwork, 2015)

Although some teachers are committed to the wellbeing of pupils with disabilities, others have failed in this regard. Measures should be put in place to ensure teachers are concerned with the welfare of pupils regardless of their disabilities. Pupils who claimed that teachers showed lack of commitment to the wellbeing of pupils suggested the following as remedy to the problem.

1. Teachers' should learn more about disabilities from pupils with disabilities to be able to understand their peculiar problems so as to deal with them as individuals.
2. Teachers should pay attention to pupils with disabilities.
3. Tasks should be apportioned based on pupils abilities

Dedication to pupils learning and achievements

A pupil with attention deficit (inclusive school) and two (2) pupils with autism were again interviewed to allow pupils to elaborate on the reasons behind their responses to clarify their claims for the performance of teachers in terms of the dedication to pupils learning and achievement. Below is the summary of all the reasons stated by pupils in both inclusive and non-inclusive schools on this statement.

Table 4.25 Reasons and barriers faced by pupils with disabilities.

Disability type	Reasons	Effects
Attention(N=1)	<ol style="list-style-type: none"> 1. Teachers do not have patience for pupil 2. Teachers do not ask for feedback from pupils 3. Teachers use harsh words on pupils for their failures. 	<ol style="list-style-type: none"> 1. pupils feel unworthy
Autism (N=2)	<ol style="list-style-type: none"> 1. teachers do not understand pupils 2. teachers teach so many things at the same time 3. teachers do not motivate pupils for progress 	<ol style="list-style-type: none"> 1. peoples feel unappreciated 2. pupils feel unmotivated 3. pupils feel inferior

Source: Fieldwork, April, 2015

A pupil with autism at E.J.P Brown in an attempt to clarify his disagreement that teachers showed lack of dedication to pupils learning and achievements indicated that teachers' lacked the understanding for his situation. He stated:

“Any time i act differently, madam rushes to my old school (autism centre) to get help. She sees me as a special case and so most of the time she does not mind whatever I do. One time she was suggesting to my sir at my old place to come for me.”(Fieldwork, 2015)

Pupils suggested that to ensure that teachers are dedicated to the learning achievement of pupils, teachers should:

1. Teachers should tailor amount of work to the abilities of pupils with disabilities
2. Pupils should be rewarded or motivated for progress made
3. Teachers should pay special attention to pupils with disabilities

4. Teacher should cultivate positive attitudes towards pupils with disabilities

Equitable treatment and respect for pupils

Pupils with physical disability (inclusive school and non-inclusive schools), autism (inclusive school), attention deficit (inclusive school), blindness and hearing impairment (non-inclusive school) were interviewed to allow pupils to elaborate on the reasons behind their responses to clarify their claims for the performance of teachers in terms of the equitable treatment and respect of pupils. Below is the summary of all the reasons stated by pupils in both inclusive and non-inclusive schools on this statement.

Table 4.26 Reasons and barriers faced by pupils with disabilities.

Disability type	Reasons	Effects
Attention(N=1)	1.teacher uses harsh words on pupil 2. teacher ignores my questions	1. Pupils feel unworthy 2.pupils feel disrespected
Autism (N=2)	1. pupils are exempted from school activities 2. pupils are treated differently. 3.pupils' absence or lack of understanding is not taken seriously	1.pupils feel lost 2.pupils feel weak and dependent
Mobility (N=4)	1.pupils are called names by teachers' 2.pupils are treated with disgust 3.pupils are exempted from physical education	1.pupils feel lowly 2.pupils feel unworthy 3.pupils feel lowly
Blindness (N=19)	1.pupils are treated as strangers 2.pupils are exempted from physical education. 3.pupils are addressed by their disability 4.teaching strategies are discriminately	1.pupil feel like strangers 2.pupils feel unwanted 3.pupils feel disrespected 4.pupils feel discriminated 5. pupils feel vulnerable
Hearing (N=1)	1.teacher calls pupil names 2.teacher does not speak to the hearing of pupil	1.pupil feel insulted 2.pupil feel discriminated

Source: Fieldwork, April, 2015

A pupil with physical disability at Philip Quacoe Boys indicated that pupils with disabilities have been continuously been discriminated against. He stated:

“Some times my classmates call me ‘Pozo’. I don’t like that name because I know they are laughing at my disability but I cannot report to madam because she also calls me ‘Pozo sometimes.’”(Fieldwork, 2015)

To ensure that pupils are treated as equally and with respect as their counterparts without disabilities, pupils indicated that:

1. Teachers’ should desist from the use of abusive words
2. Teachers’ should not define pupils with their disabilities
3. Teachers’ should encourage pupils to believe in themselves
4. Teachers should discourage the calling of pupils with disabilities by names.

Creation of a participatory environment

Pupils with physical disability (inclusive school and non-inclusive schools), autism (inclusive and non-inclusive school) and blind pupils (inclusive school) were interviewed to allow pupils to elaborate on the reasons behind their responses to clarify their claims for the performance of teachers in terms of the creation of a participatory environment. Below is the summary of all the reasons stated by pupils in both inclusive and non-inclusive schools on this statement.

Table 4.27 Reasons and barriers faced by pupils with disabilities.

Disability type	Reasons	Effects
Mobility (N=4)	1.pupils are exempted from physical education 2.pupils are exempted from extracurricular activities 3.pupils are treated differently 4.pupils are extremely sheltered	1.pupils feel unfit 2.pupils feel unworthy
Autism (N=3)	1.pupils are extremely sheltered. 2. pupils are exempted from extra-curricular activities	1.pupils feel weak 2.pupils feel discriminated
Blindness (N=19)	1.pupils are exempted from sports 2.pupils are exempted from physical tasks.	1.pupils feel unworthy 2.pupils feel unworthy

Source: Fieldwork, April, 2015

A blind pupil at Ghana National basic indicated that teachers have failed to create a participatory environment for pupils with disabilities. He stated:

“At first I used to go out for P.E but I stopped because I was made to believe that some things are not for people like us. When I join them and try to do something, sir tells me to leave before he is blamed for my death” (Fieldwork, 2015)

To make sure pupils with disabilities are allowed to participate in all school activities like their counterparts without disabilities, pupils suggested that:

1. Teachers should allow pupils to decide what to participate in.
2. Teachers should involve pupils in all of school and class activities
3. Teachers should consider the strength and weakness of pupils to determine the extent of participation.

General remarks

Responses from pupils indicate that for all the four statements respondents had some qualms about it which created some form of barrier for them. It was observed that for the statements on the commitment to pupils' wellbeing and dedication to pupils learning achievements, it was a minority group which disagreed while for the statements on equal treatment and respect as well as the creation of a participatory environment, it was disagreed by a majority of respondents. This means, the issue of respect, equality and participation is a matter of concern and therefore measures suggested by pupils should be considered.

It was also realized that majority of pupils who disagreed to any of the four (4) statements were respondents from inclusive schools. This finding is however, shocking and shameful because inclusive schools should be the citadel for equal and quality education for pupils with disabilities. The attention of authorities should be drawn to this development.

Again, it was evident in the responses of pupils that for all the four (4) statements, at least a pupil with autism responded negatively while at least a pupil with physical disability responded negatively to three (3) statements. Blind pupils on the other hand unanimously responded negatively to two statements. The case of pupils with autism should be taken seriously although they are not that many under this study.

The difficulties and barriers expressed by pupils were generally emotional. The sense of unworthiness, unappreciated, unfit and inferiority complex were common as effect as a result of the poor performance of teachers handling pupils with disabilities in the area of commitment to students and student learning. These effects if not well handled might be a reason for the drop out of pupils with disabilities as asserted by Holler (2005). Teachers must endeavor to show much more concern to the wellbeing, respect and achievement of pupils with disabilities.

4.4.2 Professional Practice

This domain seeks to assess the extent to which teachers are able to establish a connection between their professional knowledge and practice. It is also to ascertain the level of teachers' understanding of the curriculum, theories, research and policies and the use of resources, technology and assessment in responding to the special needs of pupils with disabilities. The following competencies were therefore captured under this domain. They include the following.

1. teachers effectively communicate with pupils with disabilities
2. Teachers regularly assess the progress of pupils with disabilities and report to pupils and their parents
3. Teachers adapt their teaching practices to the needs of pupils with disabilities.
4. Teachers apply appropriate technology in teaching pupils with disabilities.

Table takes a look at the general response of pupils with disabilities in both inclusive and non-inclusive school on the professional practice of teachers handling pupils with disabilities.

Table 4.28 General response of pupils with disabilities in inclusive schools

Disability type	Effective communication (%)	Assessment and report of progress (%)	Adaptation to needs of pupils (%)	Appropriate technology in teaching (%)
Mobility				
Yes	4(100)	4(100)	3(75)	-
No	-	-	1(25)	4(100)

Vision				
Yes	2(100)	2(100)	2(100)	-
No	-	-	-	2(100)
Attention				
Yes	1(100)	1(100)	-	-
No	-	-	1(100)	1(100)
Hearing				
Yes	4(100)	4(100)	4(100)	-
No	-	-	-	4(100)
Autism				
Yes	-	1(100)	-	-
No	1(100)	-	1(100)	1(100)
Blindness				
Yes	7(36.8)	19(100)	-	-
No	12(63)	-	19(100)	19(100)

Source: Fieldwork, April, 2015

The table is a reflection of the responses of pupils with disabilities in the inclusive schools. The table shows a unanimous agreement by respondents to the statement that teachers effectively communicate to pupils with disabilities. On the statement that teachers assess pupils with disabilities and report to pupils and parents, pupils unanimously responded 'Yes'. Again, pupils with disabilities under the study, all responded negatively to the statement that teachers apply the appropriate in the teaching of pupils with disabilities.

Table 4.29 General response of pupils with disabilities in non-inclusive schools

Disability type	Effective communication (%)	Assessment and report of progress (%)	Adaptation to needs of pupils (%)	Appropriate technology in teaching (%)
Mobility				
Yes	3(100)	3(100)	2(66.6)	1(33.3)
No	-	-	1(33.3)	2(66.6)
Vision				

Yes	2(100)	2(100)	2(100)	-
No	-	-	-	2(100)
Attention				
Yes	-	1(100)	-	-
No	1(100)	-	1(100)	1(100)
Hearing				
Yes	2(100)	2(100)	1(50)	-
No	-	-	1(50)	2(100)
Autism				
Yes	-	2(100)	-	-
No	2(100)	-	2(100)	2(100)

Source: Fieldwork, April, 2015

The table depicts the responses of pupils with disabilities in the selected non-inclusive schools. Pupils with physical disability, vision and hearing impairment unanimously responded 'Yes' to the statement that teachers effectively communicate to pupils with disabilities while pupils with attention deficit and autism unanimously responded 'No' to the statement. All pupils with disabilities in the non-inclusive schools agreed that teachers assessed and reported the progress of pupils to pupils and parents. Again, all pupils with disabilities as well as a majority of pupils with physical disability responded negatively to the statement that teachers applied the appropriate technology in the teaching of pupils with disabilities.

Table 4.30 Comparative responses of pupils in inclusive and non-inclusive schools

Disability type	Effective communication (%)	Assessment and report of progress (%)	Adaptation to needs of pupils (%)	Appropriate technology in teaching (%)
Inclusive (N=31)				
Yes	18(58)	31(100)	9(29)	-
No	13(42)	-	22(71)	31(100)
Non-inclusive (N=10)				
Yes	7(70)	10(100)	5(50)	1(10)
No	3(30)	-	5(50)	9(90)

Source: Fieldwork, April, 2015

In the inclusive schools, the table depicts that majority of the pupils ((8.1% and 100%) responded 'Yes' to the statements that teachers communicate effectively as well as assess and report the progress of pupils while a majority of 71% and 100% disagree to the statement that teachers adapt teaching to the needs of the pupil as well as applying appropriate technology to the teaching of pupils with disabilities. In the non-inclusive schools, majority (70% and 100%) of pupils with disabilities responded 'Yes' to the statements that teachers communicate effectively as well as assess and report the progress of pupils while a majority of 90% disagreed to the statement that teachers apply the appropriate technology to the teaching of pupils with disabilities. A split decision was recorded for the statement that teachers adapt their teaching to the needs of pupils.

Comparatively, majority of pupils in both inclusive and non-inclusive schools agreed to the statements that teachers communicate effectively as well as assess and report the progress of pupils and disagreed to the statement that teachers apply the appropriate technology in the teaching of pupils with disabilities. However, while pupils in the inclusive schools responded 'No' to the statement that teachers adapt teaching to the needs of pupils. According to respondents, teachers handling pupils with disabilities in noninclusive schools are better than teachers in inclusive schools in terms of the professional practice of the teaching field.

Effective communication

Pupils with autism in both inclusive and non-inclusive schools as well as pupils with blindness who claimed that teachers fail to effectively communicate to pupils in both inclusive and non-inclusive schools were interviewed to allow pupils to elaborate on the reasons behind their responses to clarify their claims. Below is the summary of all the reasons stated by pupils in both inclusive and non-inclusive schools.

Table 4.31 Response of pupils' with disabilities on effective communication of teachers

Disability type	Reasons	Effects
Autism (N=3)	1. teachers talk a lot 2. teachers fail to speak in ways we understand	1. difficulty in understanding 2. difficulty in following what is been taught

Blind (N=12)	1.teachers teach in ways we don't understand 2.taechers consistently use visual examples 3.teachers lack the skill to communicate 4. pupils assume the intent of what teachers say	1.difficulty in understanding 2.pupils get confused 3.pupil's understanding is generally based on assumptions 4.pupils require much effort to understand the simplest things.
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Source: Fieldwork, April, 2015

The capture the sentiments of respondents under the study on the ineffective communication of teachers and the barriers it imposes on pupils, a pupil from Ghana National basic stated:

“Because I cannot see, many times I wait for the teachers to say what they are teaching in a way that I can imagine it that way it appears real like I am seeing it, but it doesn't come. They say so much which might benefit our sighted friends yet i only understand little.” (Fieldwork, 2015)

The pupils also had these suggestions for teachers as a means of remedying the situation

1. Teachers should constantly require feedback from pupils as a means of ascertaining if communication has been effective.
2. Teachers must understand the nature of the disability of pupils in order to identify an appropriate communication strategy.
3. Teacher should pay special attention to pupils in order to observe any signs destruction and lack of understanding.
4. Teachers should apply activity based methods in teaching.

Adaptation to the needs of pupils

A section of pupils with disabilities under this study except pupils with vision impairment in both .inclusive and the selected non-inclusive schools claimed that teachers failed to adapt their teaching methods and strategies to the needs of pupils with disabilities in both inclusive and non-inclusive schools. Pupils were interviewed to allow them to elaborate on the reasons behind their responses to clarify their claims. Below is the summary of all the reasons stated by pupils in both inclusive and non-inclusive schools.

Table 4.32 Response of pupils on teacher adaptation to the needs of pupils

Disability type	Reasons	Effects
Mobility (N=2)	1.pupils are forced to do exactly what everybody else is doing. 2.nature of sporting activities are not modified for our sake	1.pupils' morale to compete is curtailed 2.pupils are made to feel unfit to compete 3.nature of games discriminate pupils
Attention (N=2)	1.teachers style of teaching makes it difficult for pupils to catch up 2.teachers teach as though they do not understand us.	1.pupils feel like they are part of the class 2.pupils require a lot of effort to catch up with the rest of the class
Autism (N=3)	1.teachers do not understand pupils 2.teachers do not pay pupils any special attention 3.pupils are not treated differently	1.pupils feel confused 2.pupils find it difficult to understand class work 3.school work becomes overwhelming for pupils
Hearing (N=1)	1.teachers speak very fast 2.teachers do not require feedback from pupils	1.pupils must verify from friends to understand 2.pupils are always left behind
Blind (N=19)	1.teachers do not use audio examples 2.teachers do not have the skills for teaching pupils 3.teachers do not pay special attention to pupils 4.teachers use same style for both blind and sighted pupils	1.learning becomes a difficult affair for pupils 2.pupils find it difficult to understand 3.Pupils get confused 4.pupils must always play catch up 5.pupils require a lot of effort to understand simple things

Source: Fieldwork, April, 2015

To offer a picturesque description of the concerns and barriers faced by pupils with disabilities under this study, a blind pupil at Ghana National Basic stated:

“The way teaching is done only benefits sighted pupils. For instance, sometimes we expect that instead of teachers drawing a diagram on the board which we cannot see, rather they will use words to draw it so we can at least imagine it.”

(Fieldwork, 2015)

The following are suggestions offered by pupils with disabilities to help teachers find a way of adapting their teaching to the needs of the people.

1. Teachers must understand the nature of the disability of pupils in order to identify a means of adaptation to suit them.

2. Teachers must identify the different levels of abilities in order to strategize.
3. Teachers must take guidance from pupils with disabilities on what means of teaching suits them

4.4.2.3 Application of appropriate technology

All the respondents in both inclusive and non-inclusive schools unanimously responded

‘No’ to the statement that teachers do not apply the appropriate technology in the teaching of pupils with disabilities. Pupils were asked to assign reasons to their claims and then the barrier it imposes on pupils as well as suggest solutions to this phenomenon. **Table 4.33**

Response of pupils on the application of appropriate technology

Disability type	Reasons	Effects
Mobility (N=6)	1. teachers do not apply any technology	1. it is difficult to participate
Vision (N=4)	1. teachers and the school do not have any technology for helping pupils	1. pupils feel handicapped 2. pupils must strain to participate in class activities
Attention (N=2)	1. teachers do not have any technology	1. class activities become boring
Hearing (N=6)	1. teachers do not use any technology	1. pupils feel handicapped 2. pupils must strain to participate in class activities
Autism (N=3)	1. teachers do not know of any technology	1. class activities become boring
Blind (N=19)	1. teachers do not know any technology 2. teachers do not use any technology	1. learning becomes difficult 2. pupils feel handicapped 3. pupils feel left out

Source: Fieldwork, April, 2015

To capture the concerns of respondents under the study on the ineffective communication of teachers and the barriers it imposes on pupils, a pupil with vision impairment from Pedu ‘A’ indicated that:

“In the mornings i sit in front because the classroom is dark in order to see what madam is writing and in the afternoon I move to the back because too much light brings tears to my eyes. If madam could find a way to control the entry of light, things will be a whole lot better.”(Fieldwork, 2015)

The pupils also had these suggestions for teachers as a means of remedying the situation

1. Teachers should work with the school to acquire materials or teaching aids to help in the teaching of pupils with disabilities.
2. Teachers should work with experts to help develop locally made aids for pupils.

4.4.2.4 General remarks

Responses from pupils indicate that for all the four (4) statements, respondents had some qualms about three (3) which created some form of barrier for them. It was observed that for the statements on the effective communication by teachers, it was a minority group which disagreed while for the statements on adaptation to the needs of pupils as well as the application of appropriate technology, it was disagreed by a majority of respondents. On the issue of assessment and report to pupils and report, pupils had no qualms about it. This means, the issue of adaptation to the needs of pupils as well as the application of appropriate technology is a matter of concern and therefore measures suggested by pupils should be considered. It was also realized that majority of pupils who disagreed to any of the three (3) statements were respondents from inclusive schools. This finding is shocking because inclusive schools should be the centre for equal and quality education for pupils with disabilities. The attention of authorities should be drawn to this development.

Again, it was evident in the responses of pupils that for all the three (3) statements that pupils responded negatively to it, at least a pupil with autism and blindness responded negatively while the rest of pupils responded negatively to two (2) statements. Autistic pupils on the other hand unanimously responded negatively to all three (3) statements. The case of pupils with autism should be taken seriously although they are not that many under this study.

The barriers expressed by pupils were generally related to their academic development. The expression of difficulty in learning, lack of understanding for what is being taught and the sense of being handicapped are sentiments that depicts the difficulties that confront pupils with disabilities in their everyday lives. These barriers if not well handled might result in bad performance of pupils with disabilities and the drop out of pupils with disabilities at the basic school level.

4.4.3 Interview of teachers handling pupils with disabilities

A total of fourteen (14) teachers handling pupils with disabilities were selected from each of the inclusive and non-inclusive schools to ascertain the truism of the response and

opinions shared by pupils with disabilities. According to GES (2012), the development of pre-tertiary teachers should cover the following:

1. Initial Teacher Training Programme
2. Induction and In-Service Training (INSET) programmes (within one year after preservice)
3. In-Service Training (INSET) for updating professional knowledge and skills
4. Upgrading programmes

Additionally, as a means of ensuring quality teacher educators as well as teachers were to be appraised. Based on these requirements as stated within the Pre-tertiary Teacher Professional Development and Management in Ghana policy framework, the developing performance of teachers was assured. Teachers under this study were then interviewed to ascertain if these processes have been dully followed in order to be equipped to handle pupils with or without diabilities.

Initial Teacher Training Programme

Generally, majority of the teachers received an initial teacher training based on approved courses and teaching practice. All courses relevant for the training of teachers are required to meet the standards of professional teaching. This means the initial training of teachers offers the needed foundation for the teaching of pupils with or without disabilities. The indication that all teachers under the study have successfully gone through the initial training of teachers is a plus and brings immense benefit to the profession.

On the other hand, teachers who have gone through the initial teacher training programme had some reservation about their training. Amidst the many positives discussed by respondents, they stated that since trained teachers will eventually be teaching both pupils with and without disabilities, the training programme should be disability sensitive. Teachers also highlighted the need for teaching practice also in special schools to be able to bring to live the theories studied in school. With this in mind, teachers although equipped with the theories and methodology of the teaching practice, are handicapped in the teaching of pupils with disabilities especially with the lack of practical training of teachers. .

Induction and INSET programmes

The induction and INSET programmes are to be organized within the first year for new teachers with a course prescribed by the NTC. The purpose of this programme is to equip new teachers with class management skills, professional standards, regulations surrounding assessments and among others. The programme is also to foster teachercommunity relationship as well as the development of teaching materials.

The responses of teachers indicated that neither the district nor the school had conducted such training programmes for it teachers. This is a big blow to the development of teachers. Teachers therefore do not have any orientation to the teaching practice which is different from what they have learnt in school. Teachers are not informed of the challenges, code of conduct and the standards of the teaching practice. This presents a barrier to teachers especially in the handling of pupils with disabilities. Table 4.25 below summarizes the response of teachers.

Table 4.34 Induction and INSET programmes

School of teachers	Induction and INSET	Reservations
Inclusive schools		
1.Pedu 'A'	Not conducted	Lacked the professional entry to work
2.Pedu 'B'	Not conducted	No introduction to the rudiment of the practice of teaching
3. Philip Quacoe boys	Not conducted	No education on the expectations and challenges of the profession
4. Ghana National basic	Not conducted	No education on the code of conduct of teachers
5. Christ Church Anglican	Not conducted	Lacked the professional entry to work
6. Aboom Methodist	Not conducted	No introduction to the standards of the practice
7. A.M.E. Zion	Not conducted	No orientation on the shift from training to practice
Non-inclusive schools		
1.St Lawrence catholic Basic	Not conducted	No orientations to the opportunities as well as hurdles of the practice
2.St Anthony's Anglican Basic	Not conducted	No introduction on the ins and outs of the profession
3.Ayifua St. Mary's Basic	Not conducted	Lacked the professional entry to work
4.Kakumdo Basic	Not conducted	No education on the expectations and challenges of the profession
5.Antem Basic	Not conducted	No orientation on community and school relationship
6.Efutu Basic	Not conducted	Lacked the professional entry to work
7.E.J.P Brown Basic	Not conducted	No introduction to the standards of the practice

Source: Fieldwork, April, 2015

INSET for updating professional knowledge and skills

The In-service Education and Training of teachers is to improve the skills as well as promote the capacity of teachers. The training also ensures the collaboration of teachers in solving community based issues especially when the INSET has a district and cluster dimension to it. The lack of this training programme as captured by teachers deprives teachers of the opportunity to learn from the experience of other teachers as well as the introduction to new approaches and trends in the teaching of pupils with or without disabilities. If we want to bring our teachers to the level where they are equipped to handle pupils with disabilities, INSET is essential and must be enforced. Table 4.26 below summarizes the response of teachers.

Table 4.35 INSET for updating professional knowledge and skills

School of teachers	INSET for updating professional knowledge and skills	Reservations
Inclusive schools		
1.Pedu ‘A’	Not conducted	Retards the development of teachers
2.Pedu ‘B’	Not conducted	Teachers are denied new trends of teaching
3. Philip Quacoe boys	Not conducted	Teachers are deprived of the necessary improvement needed
4. Ghana National basic	Not conducted	disallows teachers in the learning of new practices
5. Christ Church Anglican	Not conducted	Teachers get stuck in the old ways of doing things
6. Aboom Methodist	Not conducted	Retards the development of teachers
7. A.M.E. Zion	Not conducted	Teachers denied the opportunity of seeking answers to issues
Non-inclusive schools		
1.St Lawrence catholic Basic	Not conducted	Opportunity to learn from the experience of others
2.St Anthony’s Anglican Basic	Not conducted	It hinders capacity development
3.Ayifua St. Mary’s Basic	Not conducted	Retards the development of teachers
4.Kakumdo Basic	Not conducted	It limits the learning of some success stories
5.Antem Basic	Not conducted	Deprives teachers of the acquisition of certain skills
6.Efutu Basic	Not conducted	
7.E.J.P Brown Basic	Not conducted	Retards the development of teachers

Source: Fieldwork, April, 2015

Upgrading programmes

The opportunity for teachers to upgrade themselves is a plus to the development and management of teachers. The indication that the teachers under this study had all gone through sandwich or distance education programmes to upgrade themselves was a step in the right direction as this will serve as an alternative means of enriching the knowledge and skills of teachers.

For the development of any educational system the education of teachers should be of prime concern. Therefore, the educational upgrade of teachers will equip teachers to respond to the changing demands of education. The sandwich and distant nature of the programme will also allow teachers not to vacate their positions but juggle between teaching and upgrading themselves.

Teacher Appraisal

The teacher performance appraisal is a means of promoting teacher development. The continuous administration of appraisals is an effective tool for encouraging the learning and growth of teachers. Ultimately, appraisal presents an opportunity for the provision of support for teachers who need it. To discover that teachers both new and old are not appraised cripples the quest to developing teachers because performance appraisal is a means of establishing quality assurance. Table 4.32 below summarizes the response of teachers.

Table 4.36 Teacher Appraisal

School of teachers	Teacher Appraisal	Reservations
Inclusive schools		
1.Pedu 'A'	Not conducted	No means of knowing shortcomings
2.Pedu 'B'	Not conducted	Limits the knowing of good teachers and those who need help
3. Philip Quacoe boys	Not conducted	Hinder the means of assessing teacher performance
4. Ghana National basic	Not conducted	Means of ensuring quality teaching
5. Christ Church Anglican	Not conducted	No means of knowing weakness
6. Aboom Methodist	Not conducted	Identify opportunities for capacity building
7. A.M.E. Zion	Not conducted	Difficulty in seeking help
Non-inclusive schools		
1.St Lawrence catholic Basic	Not conducted	Deprives opportunity for support
2.St Anthony's Anglican Basic	Not conducted	Means of ensuring quality teaching
3.Ayifua St. Mary's Basic	Not conducted	Hinders the measure of accountability
4.Kakumdo Basic	Not conducted	It encourages professional learning and growth
5.Antem Basic	Not conducted	limits the means of offering help
6.Efutu Basic	Not conducted	Promotes teacher development

7.E.J.P Brown Basic	Not conducted	Hinder the means of assessing teacher performance
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Source: Fieldwork, April, 2015

General remarks

For the advancement of any educational system it is important that the role of teachers is treated with much importance. The Pre-tertiary Teacher Professional Development and Management is Ghana's commitment to meeting the international provisions of the teaching profession. However, the inability of the districts and schools as well as the appropriate institutions to diligently implement the provisions of the policy is a set back to the development of teachers. The inability to conduct INSET and appraisals might be a reason for the many barriers encountered by pupils with disabilities in relation to the performance of teachers. If we must create an inclusive society through education, then the performance of teachers and how that relates to the development of pupils must be made paramount.

The reservations espoused by teachers on the initial training of teachers, the INSET and teacher appraisal should be treated with the necessary urgency. Teachers have indicated that lack of teacher appraisal has limited teachers in their professional development as well as opportunity for support. The lack of INSET also hinders the sharing of experience and the updating of professional knowledge. To ensure the total development of teachers the NTC which is mandated to set up a framework for the appraisal of teachers and the districts as well as schools which are charged to conduct INSET should expedite the process to remedying the situation.

4.4.4 The importance of Inclusive education

To ascertain whether or not pupils with disabilities supported or felt that inclusive education was necessary and not a forced policy on pupils with disabilities, respondents were asked to indicate whether or not inclusive education was 'important or 'not important. Table presents the results of responses by pupils with disabilities in both inclusive and non-inclusive schools.

It is clear from the table that pupils with disabilities in both inclusive and non-inclusive schools agreed to the importance of inclusive education and therefore unanimously declared its importance. This means that children with disabilities agree that inclusive education is the

answer to the years of discrimination in their quest to enjoy full and equal education as their counterparts without disabilities. Pupils remarked that although inclusive education creates work for teachers and stress for pupils with disabilities, it creates an opportunity for pupils with or without disabilities to co-exist, facilitate the promotion of friendship and prepare pupils with disabilities for community living. A pupil at Ghana National Basic stated this to show his support for inclusive education.

'Sometimes, it is hard to be here and being called names or struggling to do what sighted pupils do easily. But for me, to know that I am better than half of my classmates who can see is what urges me on because when we were in the blind school, there was no motivation for being better'.

General remarks

Inclusive Education is essentially about acceptance of diversity not only with reference to children with disabilities but all children. This means that education should be available to every child of school going age without any discrimination. This does not imply mere integration but rather the acceptance and adaptability to the special needs and diversity of children with disability. This is inextricably linked to the quality of education. Quality of education in this case refers to the general school environment, which encapsulate the physical environment, the teaching staff and a curricular that responds to the needs of the special child.

Unfortunately, the comparative studies of both inclusive and non-inclusive schools have revealed that the inclusive schools have not been able to help pupils with disabilities achieve education for all. Teachers are not equipped to handle pupils with disabilities and therefore considered themselves inadequately equipped to handle these pupils. The environment has not gone through any modifications or changes as required by the standards of inclusive education, thereby forcing pupils to adapt to the physical environment. The perception however is clear that inclusive education is the way to go but for schools to adapt and effectively implement Inclusive Education, policies and school culture must change and should carry along parents, teachers, community and Government as a whole.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Chapter four presented the analysis and discussion of the data collected on the barriers faced by pupils with disabilities in inclusive schools. Questionnaire, interview and observation were employed in assessing the competence of teachers handling pupils with disabilities, the curriculum and the physical environment for inclusive education as well as the perception of pupils with disabilities on inclusive education and whether or not it posed a barrier to inclusive education.

This final chapter presents the summary of findings of the study. Based on the findings made conclusions were drawn on the nature of the curriculum, the physical environment, the competence of teachers handling pupils with disabilities and the perception of pupils with disabilities on inclusive education. The chapter concludes with recommendations to help check the barriers faced by pupils with disabilities.

5.2 Summary of findings

After careful analysis of data gathered in inclusive and non-inclusive schools during the study, the following findings were made on the physical environment, the competence of teachers handling pupils with disabilities and the perception of pupils with disabilities on inclusive education.

5.2.1 *The Physical Environment*

All the fourteen (14) schools (inclusive and non-inclusive) lacked an appropriate approach route surface, door furniture, veranda width and veranda surface because it lacked an inclusive appeal. Ghana National Basic (inclusive school) and St. Lawrence Catholic, Ayifua St. Marys Anglican and E.J.P. Brown Catholic (non-inclusive) had physical environments which were less accessible in comparison to the other schools because the schools had a steep approach route and an obstructed circulation route. Pupils with blindness and physical disability formed the majority of pupils with qualms about the physical accessibility of their school due to the peculiarity and demands of their disability.

Majority of the schools (inclusive and non-inclusive) had toilet facilities which ensured the privacy of its occupant as well as an appropriate travel distance to the facility. All fourteen (14) schools lacked hand rails within their toilet cubicles and an appropriate fire safety system. Aboom Methodist (inclusive school) and Kakumdo Basic (non-inclusive school) performed creditably well while Philip Quacoe Boys, Pedu 'A', Pedu 'B' (noninclusive schools) and Efutu Basic performed poorly in comparison to the other schools.

5.1.2 The performance of teacher handling pupils with disabilities

Majority of pupils with disabilities (inclusive schools) were in agreement to the commitment of teachers to student wellbeing and dedication to student learning achievements and disagreed that teachers showed respect and created a participatory environment for pupils with disabilities. Majority of pupils with disabilities (non-inclusive schools) agreed to all four statements that teachers showed commitment to students and student learning. Pupils with autism, attention deficit and physical disabilities had reservations about most of the indicators.

Majority of pupils with disabilities (inclusive and non-inclusive schools) agreed that teachers effectively communicated with pupils and then assessed and reported the progress of pupils. On the other hand, majority of pupils disagreed that teachers used the appropriate technology in teaching pupils with disabilities. On the adaptation to the needs of pupils with disabilities, majority of pupils in inclusive schools disagreed while for pupils in non-inclusive schools there was split decision. At least a pupil from each of the disability types under the study had some reservations about each of the indicators on the professional practice of teachers.

5.2.3 The importance of inclusive education

Pupils with disabilities in both inclusive and the selected non-inclusive schools agreed to the importance of inclusive education. Pupils also acknowledged the fact that schools have failed to adapt and effectively implement inclusive education policies and school culture.

5.3 Conclusion

Based on the findings of the study, the following conclusions were drawn:

The physical environments of all the schools were partially accessible. Both inclusive and non-inclusive schools were at par in terms of ensuring physical accessibility to pupils with disabilities. The physical environment of all the schools do not offer fire safety and sanitation to pupils with disabilities, however, the sanitation and fire safety systems of inclusive schools were slightly better than the facilities in non-inclusive schools.

Teachers handling pupils with disabilities in non-inclusive schools perform well than teachers in inclusive schools in terms of the professional practice of the teaching field. Again, teachers handling pupils in non-inclusive schools are committed to students and student learning than teachers handling pupils in inclusive schools. Teachers in noninclusive perform well with pupils with disabilities.

Inclusive education is the best educational system for educating pupils with disabilities. Although, inclusive education creates work for teachers and stress for pupils with disabilities, it creates an opportunity for pupils with or without disabilities to co-exist, facilitate the promotion of friendship and prepare pupils with disabilities for community living.

5.4 Recommendations

The physical environments of inclusive schools need to undergo serious modification in order to provide universal access to pupils with disabilities. In the short term, schools must expedite process of clearing circulation routes, fix broken doors and locks and also place basins with running water and soap near toilet facilities. Alternative approach routes should be created purposely to ease the difficulties of using a steep approach route by pupils with disabilities. The district education office should play a supervisory role in making sure that the process duly executed.

In the long term, Government must begin the process of establishing a school premise regulation to augment the provisions within the Persons with Disabilities Act (2006) which only admonishes owners and occupiers of any public place to make public places accessible. The regulations should affect both new and existing school building with specifications on

materials and facilities covering areas such as fire, ventilation, acoustics, toilet facilities, seating arrangements, warning signs and among other. The Ghana Education service as well as disability organizations should be allowed to participate in this process.

To improve the performance of teachers to better handle pupils with disabilities, heads of schools should in the short term seek certification from the National Teaching Council to appraise the performance of both old and new teachers. Heads should present summative report to teachers as a way of identifying opportunities for the support and growth teachers. The result of this appraisal should form the basis for in-service training and workshops for teachers. this activities could be funded by Parent-Teacher Association.

In the long term, the National Teaching Council whose mandate it is to review the curriculum for Colleges of education should initiate the process of reviewing the curriculum to make practical training of pupils with disabilities an integral part of the teacher education programme to equip would-be teachers with the necessary practical experience to effectively handle pupils with disabilities. Courses should have disability related dimension to allow would-be teachers to adapt theories and teaching methods towards the needs of pupils with disabilities. Short teaching practices at special schools should be added to the teacher training programmes. The Ghana education Service should supervise this process in ensuring the development of teachers and education in general.

Further, the Pre-tertiary Teacher Professional Development and Management policy framework should be religiously implemented. The policy framework upon it introduction was to ensure the preparation of teachers in order to provide quality education for all Ghanaian children. The National Teaching Council was to be established and mandated to set professional standards, employ teachers, provide in-service education and training, appraise teachers, review the professional practice and among others. . If the provisions of the framework are implemented, the vision of the policy framework in ensuring quality education for all including pupils with disabilities will be achieved.

Additionally, to enhance the performance of teachers in the long term, the Ghana Education Service in collaboration with experts should institute an annual screening programme in all basic schools. The screening programme will help to identify pupils with certain disabilities and the extent of the disability. This will help in alleviating the problem of misdiagnosis by teachers and to uncover hidden disabilities.

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REFERENCES

- Adams, R. S. & Biddle, B. J. (1970) *Realities of teaching: Exploration with video tape*.
York: Holt, Rinehart & Winston.
- Ainscow, M., Booth, T., Dyson, A., Farrell, P., Frankham, J., Gallannaugh, F., Howes, A.
& Smith, R. (2006). *Improving schools, developing inclusion*. London: Routledge.
- Ainscow, M. Farrell, P. & Tweddle, D. (2000). Developing policies for inclusive education:
A study of the role of local education authorities. *International Journal of Inclusive
Education*, 4(3), 211 -229.
- Aito, S., D'Andrea, M.D. & Werhagen, W. (2005) Spinal cord injuries due to diving
accidents. *Spinal Cord*, 43(2), 109-116.
- Agbenyega, J. (2007). Examining teachers' concerns and attitudes to inclusive education in
Ghana. *International Journal of whole schooling*, 3(1,) 41-56
- Asch, A. (2001). Disability, bioethics, and human rights. In G.L. Albrecht, K.D. Seelman,
& M. Bury (Eds.). *Handbook of Disability Studies*. Thousand Oaks: Sage
Publications.
- Avoke, M. (2001). Some Historical Perspectives in the Development of Special Education
in Ghana. *European Journal of Special Needs Education*. Vol. 16, No. 1 (2001), pp.
29-40.
- Avoke, K.N & Avoke, K.S (2004). *Inclusive rehabilitation and transition services in special
education*. Odenton. Maryland: Akpang Inc.
- Avramidis, E., Buylis, P., & Burden, R. (2000). A survey into mainstream teachers' attitudes
towards the inclusion of children with special educational needs in the ordinary
school in one local education authority. *Educational Psychology*, 20(2), pp. 191-
212.

- Barton, L. & Armstrong, F. (2001). Disability, education, and inclusion' In G. L. Albrecht, K.D. Seelman, & M. Bury (Eds.), *Handbook of Disability Studies*, Thousand Oaks: Sage Publications.
- Bax, M. (1998). 'Models and need [editorial]' *Developmental Medicine and Child Neurology*, 40, 507.
- Bickenbach J.E. et al. (1982). Models of disablement, universalism and the international classification of impairments, disabilities and handicaps. *Social Science & Medicine*, 1999, 48:1173-1187.
- Blanton, L. & Pugach, M. (2007). *Collaborative programs in general and special teacher education*. Washington, DC: Council of Chief State School Officers.
- Booth, T., Ainscow, M., Black-Hawkins, K., & Shaw, L. (2000). *Index for inclusion*. Bristol: Centre for Studies in Inclusive Education.
- Booth, T. and Ainscow, M. (2002). *The Index for Inclusion*. Bristol, Centre for Studies on Inclusive Education.
- Brett, J. (2002). The experience of disability from the perspective of parents of children with profound impairment: Is it time for an alternative model of disability *Disability & Society*, 17(7), 825-843.
- Bryman, A. (2008). *Social Research Methods*. New York: Oxford University Press, Inc. .
- Cohen, L., Morrison, L., Manim, K. (2004). *Research methods in education*. Accra: City Publishers
- Commonwealth Human Rights Initiative (CHRI) (2007). *The Simplified Version of Disability Rights in Ghana*. Accra: CHRI, Africa.

- Crow, L.. (1996). *Including all our lives; Renewing the Social Model of Disability*, London: Women's Press.
- Damiano, D.L. & Abel, M.F. (1998). Functional outcomes of strength training in spastic cerebral palsy. *Archives of Physical Medicine and Rehabilitation*, 79, 119-125.
- Despouy, L. (1991). Human Rights and Disability. United Nations. E/CN.4/Sub.2/1991/31.
- Doyle, W. (1986) 'Classroom organization and management' In M. C. Wittrock (Ed.) *Handbook of research on teaching* (3rded.) (pp. 392-431). New York: MacMillan.
- Drake, R.F. (2001) 'Welfare states and disabled people' In G.L. Albrecht, K.D. Seelman, & M. Bury (Eds.), *Handbook of Disability Studies* (pp. 418-440). Thousand Oaks: Sage Publications.
- Du Pont (1993). *Equal to the Task II: 1990 Du Pont Survey of Employment of People with Disabilities*. Wilmington: Du Pont de Nemours and Company.
- Eileen, C.W. (1999). *Preparing new teachers for inclusive schools and classrooms*. Retrieved July 20, 2009 from <http://www.interscience.wiley.com>
- Filmer, D. (2008). Disability, poverty, and schooling in developing countries: Results from 14 household surveys. *The World Bank Economic Review*, 22:141-163
- Ferguson D. L. (2008). International trends in inclusive education: the continuing challenge to teach one and everyone. *European Journal of Special Needs Education*, 23:109-120.
- Forlin C, Lian M.G.J, eds. (2008). *Reform, inclusion and teacher education: toward a new era of special education in the Asia Pacific Region*. London: Routledge.
- Fougeyrollas, P., & Beaugard, L. (2001). An interactive person-environment social creation. In G.L. Albrecht, K.D. Seelman, & M. Bury (Eds.), *Handbook of Disability Studies* (pp. 161-189). Thousand Oaks: Sage Publications.

- Fulcher, G. (1989). *Disabling Policies: A comparative approach to education policy and disability*. East Sussex: Falmer Press
- Gadagbui, G. (1998). *Education in Ghana and special needs children*. Accra: City publishers.
- Ghana Education Service (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: GES.
- Ghana Education Service (2012). *Pre-Tertiary Teacher Professional Development and Management in Ghana: Policy Framework*. Accra: GES
- Ghana Statistical Service (2012). *2010 Population and Housing Census: Summary of Reports of Final Results*. Accra: GSS
- Golder, G., Norwich, B. & Bayliss, P. (2005). Preparing teachers to teach pupils with special educational needs in more inclusive schools: evaluating a PGCE development, *British Journal of Special Education*, 32 (2), 92–99.
- Gregory, R.J. (1997). Models of disability: Definitions as power [comment]. *Disability and Rehabilitation*, 19, 487-489.
- Groce, N.E. (2003). HIV/AIDS and people with disability, *The Lancet*, 361(9367), 1401-1402.
- Groce, N.E. (2004). Adolescents and youth with disability: Issues and Challenges, *Asia Pacific Disability Rehabilitation Journal*, 15(2), 13- 32.

- Haln, H. (1986). *On Equal terms: working with Disabled people*, Oxford: Butterworth-Heinemann.
- Hardman, M. I., Drew, C. L., & Egan, M. W. (2002). *Human exceptionality*. Boston, MA: Library of Congress Cataloguing in Publication Data.
- Heiman, T. (2002). Parents of children with disabilities: Resilience, coping, and future expectations. *Journal of Developmental and Physical Disabilities*, 14(2), 159-171.
- Hocog, R. I. & Qualey M.A. (2008). *Research review of inclusive for inclusive practices*. US Department of Education, Office of Educational Research and Improvement.
- Hollar, D. (2005). Risk behaviors for varying categories of Disability in NELS: 88. *The Journal of School Health*, 75(9), 350-359.
- Hughes, B., & Patterson, K. (1997). The social model of disability and the disappearing body: Towards sociology of impairment. *Disability & Society*, 12(3), 325-340.
- Ihenacho, I.J., & Osuorji, P.I. (2006). The Child with learning disabilities and inclusive education. *African Journal of Special Education Needs*, 4 (2), 197-204
- Imrie, R. (1997) 'Rethinking the relationships between disability, rehabilitation, and society'. *Disability and Rehabilitation*, 19(7), 263-271.
- Inclusion International. (2006). *Hear our voices: A global report - People with an intellectual disability & their families speak out on poverty and exclusion*. Retrieved June 9, 2009, from http://www.ii.tomekklas.com/site_uploads
- International Labour Organization.(2002). Information Note.ILO/Japan Technical Consultation Meeting on Vocational Training and Employment of People with Disabilities in Asia and the Pacific. Bangkok. Retrieved 14-16 January 2003.

Available at: <http://www.ilo.org/public/english/region/asro/bangkok/ability/background.htm>

Jenkins SP, Rigg J. A. (2003). *Disability and disadvantage: selection, onset and duration effects*. London, Centre for Analysis of Social Exclusion, London School of Economics, (CASEpaper 74).

Kerlings, F. N. (1971). *Behavioural research: A conceptual approach*. New York: Holt Rinehart and Winston.

Kvale, S. & Brinkman, S (2009). *Interviews: Learning the Craft of Qualitative Research Interviewing*. London: SAGE Publications

Lee R. (2003). The demographic transition: three centuries of fundamental change. *The Journal of Economic Perspectives*, 17:167-190. doi:10.1257/089533003772034943.

Lindsay, G. (2003). Inclusive education: A critical perspective. *British Journal of Special Education*. 30 (1), 3-12

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/inclusiveeducation-and-effectiveclassroom-practice/IECP-Literature-Review.pdf>

Mittler, P. (2000). *Working towards inclusive education*. London: David Fulton Publishers.

Michailakis, D. (1997). *Government Action on Disability Policy: A Global Survey*. Commissioned by the Office of the United National Special Rapporteur on Disability. Also, *Government Implementation of the Standard Rules as seen by Member Organizations of Disabled Peoples' International-DPI*. www.independentliving.org/standardrules

National Network for Child Care (1998). *Caring for Children With Special Needs*. website at: <http://www.nncc.org>

- Obeng, C. (2007). Teachers' views on the teaching of children with disabilities in Ghanaian classrooms. *International Journal of special education*, 22(1), 96-102.
- Office of the United Nations High Commissioner for Human Rights. (1960). Convention Against Discrimination in Education. Retrieved from <http://www.ohchr.org/english/law/education.htm>
- Okyere, B. A., & Adams, J.S. (2003). *Introduction on special education: An African perspective*. Legon-Accra: Ghana Adwinsa Publications (Gh) Ltd.
- Oppenheim, A. N. (1992). *Questionnaire design and attitude measurement*. London: Heinemann Educational Books.
- Pearson, S. (2005). A politically correct phrase to replace terms such as disabled. A study of the views of students entering a secondary PGCE course. *Support for learning*, 20 (1), 17-21
- Peters, S. (2003) *Inclusive education: Achieving education for all by including those with disabilities and special education needs*. Washington, DC: Disability Group, World Bank.
- 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://www.gslis.utexas.edu/~ssoy/usesusers/1391d1b.htm>
- Roggero, P., Tarricone, R., Nicoli, M., & Mangiaterra, V. (2005) *Employment & Youth with Disabilities: Sharing Knowledge and Practices*. Washington, D.C.: World Bank.
- Sandkull, O. (2005). *Strengthening inclusive education by applying a rights based*. Bangkok: UNESCO

- Sapon-Shevin M. (1992) 'Inclusive thinking about inclusive schools' In R. Villa, J. Thousand, W. S. Stainback (Eds.) *Restructuring for caring and effective education* (35-46). Baltimore: Paul H. Brookes.
- Sarantakos, S. (1998). *Social research* (3rded.). NY Hound mills, Palgrave: Macmillan.
- Saunders P. (2006). *The costs of disability and incidence of poverty*. Sydney, Social Policy Research Centre, University of New SouthWales,
- Sayed Y, Akyeampong, K. and Ampiah, J.G. (2000). Partnership and Participation in Whole School Development in Ghana. *Education through Partnership* 4(2),40-51.
- Sebba, J., Ainscow, M. 1996. International Developments in Inclusive schooling: mapping the issues. *Cambridge Journal of Education*, 26:5-18.
- Shea, T. m. & Bauer, A. M. (1994) *Learners with disabilities. A social systems perspective of special education*. Wisconsin: Brown and Benchmark.
- Skipper, S. (2006). *Conceptual framework for effective inclusive schools*. Boston: International Co.
- Smith, R. M., Neisworth, J. T., & Green, J.G. (1978). *Evaluating educational environments*. Columbus: Merrill/Prentice.
- Stainback, S., & Stainback, W. (1996). *Controversial issues confronting special education: Divergent perspective*. Boston: Allyn and Bacon.
- Subban, P. & Sharma, U. (2006). Primary teachers' perception of inclusive education in Victoria, Australia. *International journal of special education*, 21(1), 42-52.
- Swain, J., & French, S. (2000). Towards an affirmation model of disability'. *Disability & Society*, 15 (4), 569-582.

Thousand, J., & Villa, R., (1989). Enhancing success in heterogeneous schools: The power of partnership. *Teacher Education and Special Education*, 11, 144-153.

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

Tsagli, C. (1998). *Persons with disabilities in Ghana in the next century*. National delegates' conference on persons with disabilities, November 23-24, UCEW, Ghana.

United Nations(1975). *Declaration on the rights of disabled persons* .Geneva: Office of the United Nations High Commissioner for Human Rights.

UNESCO (1994a). *The Salamanca statement and framework for action on special needs education*. Paris: UNESCO.

UNESCO (2000a). *The Dakar framework for action*.Paris: UNESCO.

UNESCO (2000) '*Inclusive education and education for all: A challenge and a vision*'.Paris: UNESCO.

United Nations Enable(1982). World Programme of Action Concerning Disabled Persons. Retrieved from <http://www.un.org/esa/socdev/enable/diswpa00.htm>

United Nations Enable. (1993). The Standard Rules on the Equalization of Opportunities for Persons with Disabilities. Retrieved from <http://www.un.org/esa/socdev/enable/dissre00.htm>.

UNESCO (2009). *Policy Guidelines for Inclusion in Education*. Retrieved from: <http://unesdoc.unesco.org/images/0017/001778/177849e.pdf> (Retrieved on 201108-20)

Whitworth, J. (2001). *A model for inclusive teacher preparation*. Abilene, Texas: Department of Education, Abilene Christian education.

Wade, B. & Moore, M (1992). *Patterns of Educational Integration: International Perspectives on Mainstreaming Children with Special Educational Needs*. United Kingdom: Cambridge University Press

Will, M. (1986). Educating students with learning problems: A shared responsibility. *Exceptional Children*, 52, 405-411.

Winzer, M. (2005). *Children with exceptionalities in Canadian classrooms*. Toronto: Prentice hall Inc.

Winzer, M., Rowgow, S. & David, C. (1987). *Exceptional Children in Canada* Scarborough, Ontario: Prentice hall

World Bank (2003). *The World Bank and disability in SouthAsia: A portfolio review*. Washington, DC: Author.

Yekple, E.Y. & Avoke, M. (2006). Improving inclusive education at basic school level in Ghana. *Africa Journal of Special Education Needs*, 4 (2), 239-249

Zadeck, S., & Scott-Parker, S. (2003). *Unlocking Potential: The New Disability Business Case*. London: Employers' Forum on Disability.

8. The nature of verandah floors are appropriate for pupils with disabilities		
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II. Sanitation and fire safety of the physical environment

STATEMENTS	Yes	No
1. The toilet facility in the school is appropriate for pupils with disabilities		
2. The toilet facility ensures the privacy of pupils with disabilities		
3. The travel distance to toilet facility is appropriate for pupils with disabilities		
4. The space within the toilet facility is appropriate for pupils with disabilities		
5. The toilet facility have hand rails for pupils with disabilities		
6. The toilet facilities have hand washing systems		
7. The school has fire extinguishers at vantage points		
8. The school has fire detection and warning systems		
9. The school have a posted fire evacuation plan		

SECTION C: Performance of teachers handling pupils with disabilities

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

I. Commitment to students and student learning

STATEMENTS	Yes	No
1. Teachers show commitment to development and well-being of pupils with disabilities		
2. Teachers show dedication in the learning and achievement of pupils with disabilities		
3. Teachers respect and treat all pupils equally		
4. Teachers show dedication in the learning and achievement of pupils with disabilities		

II. Professional practice

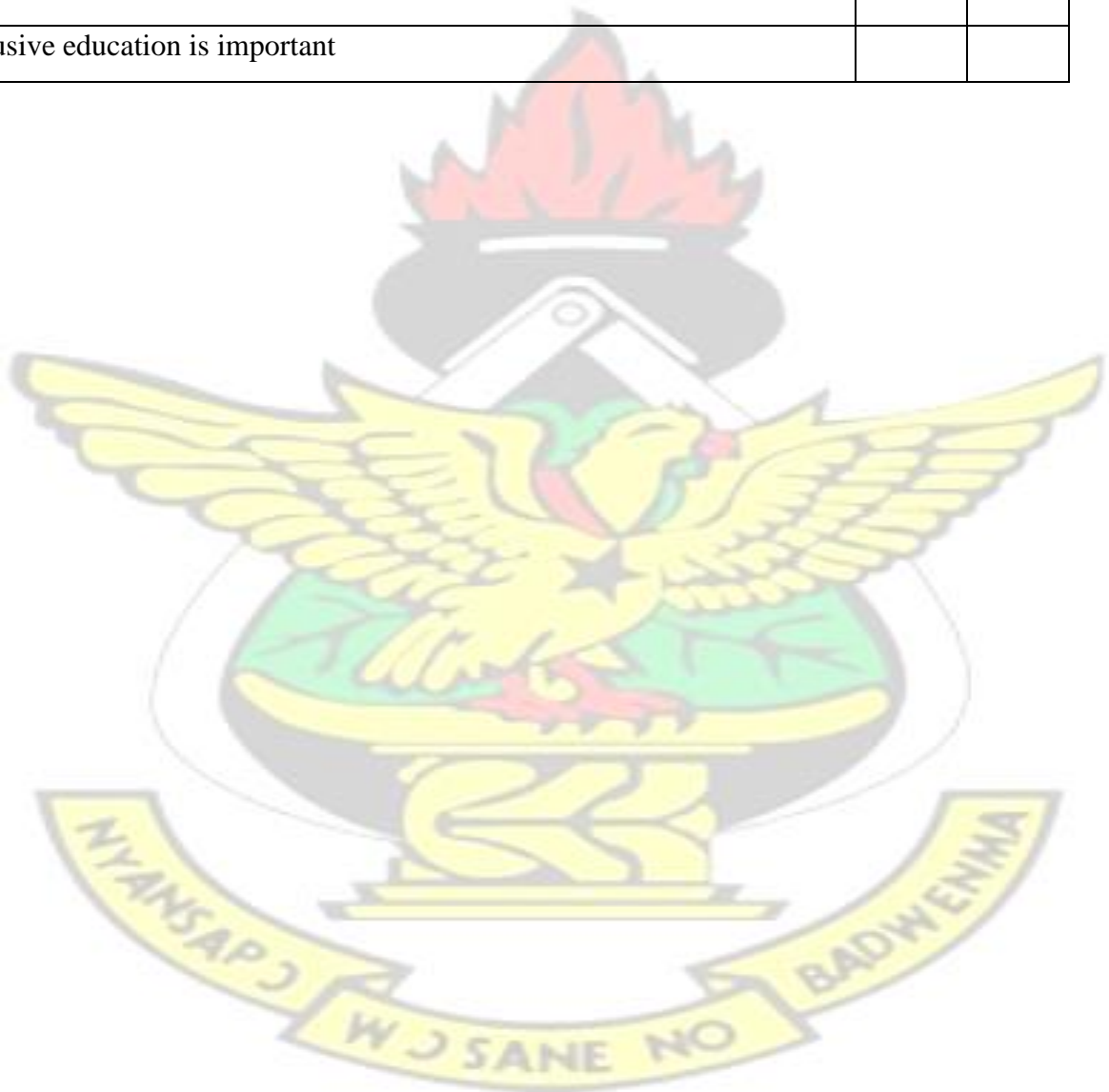
STATEMENTS	Yes	No
1. Teachers effectively communicate with pupils with disabilities		
2. Teachers regularly assess the progress of pupils with disabilities and report to pupils and their parents		

3. Teachers adapt their teaching practices to the needs of pupils with disabilities.		
4. Teachers apply appropriate technology in teaching pupils with disabilities.		

SECTION C: The importance of inclusive education

Instruction: Indicate with a tick (✓) in the appropriate box on the importance of inclusive education. The response options for this section are 2 (two) namely, (Y) Yes and (N) No.

Statement	Yes	No
Inclusive education is important		



APPENDIX 2: OBSERVATION GUIDE FOR THE PHYSICAL ENVIRONMENT

Name _____ of _____
 school.....

A. Accessibility of physical environment

Indicators	Situation	Remarks
1. The gradient of the approach route		
2. The width of approach route		
3. The nature of approach route surface		
4. The nature of circulation route		
5. The width of classroom doors		
6. The opening furniture of classroom doors		
7. The width of verandah		
8. The nature of verandah floors		

B. Sanitation and safety of physical environment

Indicators	Situation	Remarks
1. Type of toilet facility in the school		
2. The toilet facility ensures the privacy of pupils with disabilities		
3. The travel distance to toilet facility		
4. The width of the toilet facility		
5. The presence of hand rails		
6. The presence and nature of hand washing systems		
7. The presence of fire extinguishers at vantage points		
8. The presence of fire detection and warning systems		
9. The presence of posted fire evacuation plan		

APPENDIX 3: INTERVIEW GUIDE FOR PUPILS WITH DISABILITIES

A. Accessibility of physical environment

1. Barriers created by indicators which respondents disagreed to
2. The effects of the these barriers on the pupil
3. Measures suggested by pupils to remedy the situation

B. Sanitation and Safety of the physical environment

1. Barriers created by indicators which respondents disagreed to
2. The effects of the these barriers on the pupil
3. Measures suggested by pupils to remedy the situation

C. Teacher commitment to students and student learning

1. Barriers created by indicators which respondents disagreed to
2. The effects of the these barriers on the pupil
3. Measures suggested by pupils to remedy the situation

D. Professional practice of teachers

1. Barriers created by indicators which respondents disagreed to
2. The effects of the these barriers on the pupil
3. Measures suggested by pupils to remedy the situation

E. The importance of inclusive education

1. Why is inclusive education important?

APPENDIX 4: INTERVIEW GUIDE FOR TEACHERS

A. Have teacher successfully completed any of the following

1. Initial Teacher Training Programme
2. Induction and INSET programmes (within one year after pre-service)
3. INSET for updating professional knowledge and skills
4. Upgrading programmes

B. Do teachers have any reservations about any of the completed indicators above?

C. Are there any barriers created by indicators which respondents disagreed to? D. Are there any effects of the these barriers on the performance of teachers?

D. Are there measures to remedy the situation?