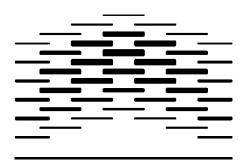
# [Worlanyo, Cornelius Kwaku]

[Inclusion of the Visually Impaired in Secondary Education in Ghana]



OSLO AND AKERSHUS UNIVERSITY COLLEGE OF APPLIED SCIENCES

Thesis submitted in partial fulfilment of the requirements for the degree Master of Multicultural and International Education (MIE)

[November, 2012]

Master in Multicultural and International Education Faculty of Education Oslo and Akershus University College of Applied Sciences

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#### Abstract

This study focuses on inclusive education for visually impaired and sighted students in a boarding institution in a secondary school in the southern part of Ghana. The study has been investigating two research questions namely; (a) Are the visually impaired students given any support during instructional hours? And (b) how do the non-visually impaired students relate with their visually impaired counterparts in terms of assistance given to them both in and outside the classroom? The objectives of the study are to explore the kind of support and teaching methods used by the teachers of the visually impaired during instructional hours and the second is to investigate the kind of attitudes and relationships that exist between the non-visually impaired students and their visually impaired counterparts in the school. The study focused on when the two groups of students (the sighted and the visually impaired) are taught in the same classroom where they share same facilities both in the classroom and their student houses of residence.

The research strategy that underpins the study is the qualitative methodology based on interpretivist epistemological assumptions. This was deemed appropriate because the study seeks to understand the social world through the lenses of the participants by examining and interpreting it (Bryman, 2008) since reality lies with the people and the sociology of knowledge must first of all concern itself with what people perceive as reality in their everyday lives (Berger & Luckmann, 1967). In addition the study engaged in an ontological position of constructionism which emphasizes that social phenomena and realities are produced and achieved through a constant state of interaction and revision which is an on-going process. The study tried to understand and explain how the visually impaired students are included in secondary education through interaction with the research participants and the application of qualitative methods such as observations and interviews which aimed at triangulation. The findings are analysed employing mixed approach of interpretation and narrative analysis through close examination and constructing of themes as well as patterns used to describe and explain the phenomena studied (Gall, Gall, & Borg, 2009).

Findings from the study confirmed that educational materials for the visually impaired were either not available or are in short supply in the school as a result both the students and the school are left

struggling with the few materials they have to give true inclusive education to the visually impaired students. I argue that inclusive education is not just the integration of persons with special educational needs in the mainstream schools for them to be taught alongside the regular students, but requires that they be provided sufficient materials and support in order to remove the barriers militating against their full inclusion (Jonhsen & Skjørten; Terzi, 2010). The study underscores the need as captured in the "difference principle" (Rawls, 1999, p. 72) to spend more resources on the least advantaged in the society that is the visually impaired students, in order to balance the scale which always favours the advantaged in the society. In view of this, disparities in the provision of educational materials as discovered by the study between the sighted and the visually impaired students in the school can only be warranted under the precepts of justice given that education has the capability of enhancing the future chances of the individual (Rawls, 1999; Sen, 2009; Terzi, 2010). The study further points to the need for sighted students to relate to and assist the visually impaired students, not only in the classroom, but also in other spheres of school life since people around the individual have a role to play (Vygotsky, 1978) and thus sensitization through education on regular basis could be used to achieve this.

Finally, the study calls on future researchers to consider looking into ways that teachers could be prepared adequately with skills and information through workshops and in-service training for inclusive education programmes as well as policy directions and political will towards inclusive education.

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#### **Abbreviations and Acronyms**

BECE Basic Education Certificate Examination

BSA British Sociological Association

CBR Community Based Rehabilitation

EFA Education For All

ESPR Education Sector Performance Report

FB Friends of the Blind

GES Ghana Education Service

GSFP Ghana Schools Feeding Programme

GWCL Ghana Water Company Limited

HiOA Oslo and Akershus University College of Applied Sciences

HIV Human Immunodeficiency Virus

ICT Information Computer Technology

JAWS Job Access With Speech

LPG Liquefied Petroleum Gas

MC Master of Ceremony

MKO More Knowledgeable Order

MoE Ministry of Education

NGOs Non-Governmental Organizations

OECD Organization for Economic Cooperation and Development

POD Prefects On Duty

PRSP Poverty Reduction Strategy Paper

PTA Parents Teacher Association

RME Religious and Moral Education

SNE Special Needs Education

SpED Special Education Division

UBE Universal Basic Education

UN United Nations

UNESCO United Nations Educational, Scientific and Cultural Organization

WAEC West African Examinations Council

WASSCE West African Senior Schools Certificate Examination

ZPD Zone of Proximal Development

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#### **CHAPTER ONE: CONTEXTUAL OVERVIEW**

#### 1.1 Introduction

Education is imperative for both individuals and societies and research has shown that education is also important in bringing about improvement in the lives of people and their communities (Carm, Mageli, Berryman, & Smith, 2003). Education according to (Terzi, 2010) "is crucial for people's well-being and plays a substantial role for the promotion of ... the individuals to participate effectively in society" (p. 152). Again, one major role of education as argued by Freire (1996) and Vandeyar (2003) is its liberations role. Thus, it is clear that education is very essential in the life of the individual as it has the potential of securing a better life for him/her. This implies that when people are given the right training and tools through education irrespective of their physical status, they become empowered and can live dignified lives and contribute their quota to developing their societies and the nation at large. Nonetheless, Ocloo (2002) observes that in many communities in the world today obstacles exist which alienate persons with disabilities, gender, ethnic and linguistic minorities and hamper their development. This results in creating difficulties for their peaceful existence and living or in some cases denying them their fundamental human rights and freedoms such as education. Since the study was carried out in a secondary school which runs inclusive education programme exclusively for the sighted and the visually impaired, the thesis will be presented mainly from the perspective of visual impairment. Thus, issues pertaining to their academic, social and support services will be highlighted in close association with the concepts of inclusive education.

Before presenting the specific objectives it is important to present the rational for studying inclusive education. With this I attempt to give reasons and explanations as to why I have chosen to write my thesis in the area of inclusive education. Following this are the objectives of the study and the research questions that will serve to guide the study. The chapter further presents the background of the study from a global perspective, followed by a discussion of special education provision in Ghana. Finally, the chapter closes with a road map of how the thesis is organized.

### 1.2 Rational for studying inclusive education

Inclusive education as the name implies can be said to be a type of education that involve all groups in the society, especially the marginalized, minority groups and persons with disabilities. Inclusive education became a key issue and concept in the Education For All (EFA) policy programme at the conference in Jomtien, Thailand in 1990. Education For All (EFA) is a basic human right recognized by Article 26 of the United Nations Universal Declaration on Human Rights in 1948 at the General Assembly (UN, 1948). In the same perspective, the Convention on the Rights of the Child (UN, 1989) guarantees the right of every child to free compulsory primary education without discrimination of any kind. This suggests that, the fundamental reason for having inclusive education is to provide education for all regardless of their physical condition. To this end "inclusive education aims at reinstating the voices of disabled people and disabled children into territories where they have been historically excluded" (Amstrong et al., 2000 cited in Terzi, 2010, p. 71). Furthermore, inclusive education will give some kind of platform to special needs people's association and identified them as part of a new social order and movement whose agenda and aim is that diversity should be appreciated, respected, embraced and in-cooperated into the larger society (Johnsen & Skjørten, 2001). During the segregated phase of education Barton (1998 cited in Terzi 2010, p. 67) argues that "children were assessed by clinically based procedure and medically categorized." This introduces the discriminatory category of normal and abnormal labels where pupils identified as abnormal were placed in segregated schools with a special education curriculum. Medically assessing children and placing them in their assumed correct groups is still very relevant in today's education context, however, the notion of inclusivity is a radical one premised on the point of considering the welfare of all citizens and placing them at the centre of education irrespective of their physical conditions. Inclusion in education can be seen as a process which basically challenges the existing practices of segregated education where persons with disabilities are housed separately and educated. Rather than in a broader contest of general education in which children of all categories are taught in the same school and classroom where they share resources together.

Inclusive education as a matter of human rights is central to the debate on inclusion (Terzi, 2010). Thus the concept of inclusive education can be seen and regarded as a political issue since all citizens including persons with disabilities deserve a place and space in participatory democracy. Therefore, by right of citizenship, special needs children also deserve the right to be taught in the same school and class and also to enjoy the good things that "normal" children enjoy where exclusionary barriers be removed. Terzi (2010) argues along this line when she states:

These positions in inclusive education insist on the fundamental importance of understanding

human rights in their precise political dimension, thus related to specific historical and social situation experienced by disabled people and children. In highlighting the concrete 'situatedness' of human right issues, these sociological perspectives express their rejection of an obscure rhetoric of rights, voided of political content and, therefore, unable in itself to bring about the essential changes required by inclusion (p. 72).

Following from the above excerpt the political rejection and rhetoric leading to the lack of bringing about desired changes in the inclusive process for example, lack of educational materials for the special need learners can no longer be tolerated. The concept of inclusive education and its connection to the idea of inclusive society, which demands full participation and equal recognition of all people and groups in the society, have shaped societal perception and orientation of what inclusive education is about. To this end Riddell, (2002) argues as cited in (Terzi, 2010) that:

The educational provision for children with disabilities and special educational needs is a key area not just for those involved in it, students, parents and professionals, but also for all those interested in the field of education more broadly conceived, as well as for society as a whole (p. 15).

In this regard the concept of inclusive education should be embraced by the society and rights of persons labelled as different are critically looked into. Thus, inclusive education can therefore be considered as the only avenue and platform through which persons with special needs including the visually impaired will have the opportunity to sit in the same class and learn alongside their sighted peers and equally take part in all educational activities. Nonetheless, meeting the goals of inclusive education as noted in the EFA Global Monitoring Report (2005) can be very daunting. This is based on the fact that adapting school curricular, getting the appropriate teaching and learning materials as well as teacher training are some of the pivotal issues that will lead to giving meaningful and quality inclusive education for all.

Despite the right to education by all persons as captured in the article 26 of the United Nations Universal Declaration of Human Right, review of international developments since the 1990 Jomtien World Conference on Education For All (EFA) revealed that persons with disabilities continue to be the most excluded group of people from education even though, special needs education has been part of the education for all policy (Potts, 2003). This position was further highlighted by Marks and Clapham (2005) when they contend that education is one of the fields in which persons with disability have been

discriminated against over the years. I maintain that addressing the issues involved in inclusive education does not only lie in bringing persons with educational needs into the mainstream schools but their materials be provided for. It is against this backdrop the rational of this research therefore is to explore how the visually impaired as a subset of special needs people are included in secondary education in Ghana after passing their Basic Education Certificate Examination (BECE) from various schools for the blind across the country. The objectives behind the rational are stated below.

## 1.3 Objectives of the study

The objectives of the study are:

- > To explore the kind of support and teaching methods used by the teachers of the visually impaired during instructional hours.
- > To explore the kind of attitudes and relationships the non-visually impaired students have with the visually impaired counterparts in the school.

After stating the objectives, I now consider the questions that will guide the project. The study seeks to answer two main research questions which are:

- Are visually impaired students given any support during instructional hours?
- ➤ How do the non-visually impaired students relate with their visually impaired counterparts in terms of assistance giving to them both in and outside the classroom?

#### 1.4 Significance of the study

Discussions in world education forums and conferences are some of the global efforts that are being made to bring to the barest minimum discrimination against the physically challenged in the educational sectors throughout the world. It is envisaged and believed that the findings will be a contribution to the on-going discussions about the situations and inclusion of special needs students in the mainstream schools. Furthermore, upon the completion of this research project, it will become an important document which will provide insight into the experiences of the visually impaired students in inclusive secondary educational institutions in Ghana and perhaps other parts of Africa. Finally, it will increase and widen the researcher's scope and horizon of understanding concerning some of the

perceptions and challenges of inclusive education in developing countries.

### 1.5 Background of the study - inclusive education in a global perspective

The concept of inclusion is currently shaping the educational debate locally and internationally especially in relation to persons with disability and special educational needs (Terzi, 2010). It is therefore not surprising that the concept has gained attention in the world today in the arena of education. The idea of inclusion in education has developed over the years with changes in the provision of special education. Terzi (2010) explores among other things that change in the concept:

Has taken place in three main phases: from initial perspectives that sought to educate children with disabilities and special educational needs in segregated institutions, through to integrationist phase, which supported the education of these children in mainstream schools, until the more recent emergence of policies of inclusive education (p. 64).

Inferring from the above quote the concept of inclusion as we see today has undergone evolution from segregation through integration and now inclusion alongside theoretical shifts and practices. As noted by Ainscow (1999) in his study "the historical legacy of separate special schools – a feature common to developed and developing countries, which refer to the initial provision, often organized by religious or philanthropic bodies, and subsequently expanded by national systems of public education" (p. 180) has been challenged gradually based on human rights issues. The system of segregated schooling was also criticized and questioned on the grounds of morality since it was considered morally wrong to separate a group of children labelled as "different". To this end, many who are concerned such as parents, teachers and politically conscious people, according to Johnsen and Skjørten (2001) began:

To fight for the rights of all children in general and for the rights of children and adults with impairment in particular. One of the main aims was to achieve the right to develop in an environment common to all. This was the start of the reform towards "normalization" eventually leading toward the process of inclusion (p. 26).

In this regard Terzi (2010, p. 19) citing (Ainscow, 1999; Rouse & Florian, 1997) observed that "in the last decade, however, the concept of inclusion has consistently replaced integration which, in turn, has been seen as limited and unsatisfactory". The inclusion of persons with impairments in learning at ordinary or regular schools and classrooms has therefore become part of a global human rights movement. The concept and philosophy of inclusive education gained international attention from the 1990s at a conference in Jomtien, Thailand (UNESCO, 1990). The United Nations in partnership with

the World Bank and other donor agencies came out with "Education For All" (EFA) policy programme to deal with a number of challenging issues regarding education in developing countries (UNESCO, 1990). However, EFA Global Monitoring Report, 2005 noted among other things that:

Meeting the needs of *learners with disabilities* is particularly challenging, given the unresolved debate between proponents of a strong inclusive approach and those who argue for special needs provision. Each type requires learner-specific responses, whether in mainstream or special schools. ... Studies in both Organisation for Economic Cooperation and Development (OECD) and non - OECD countries indicate that students with disabilities achieve better school results in inclusive settings (UNESCO, 2005, p. 145 emphasis original).

Nevertheless, the challenge of ensuring that inclusive education is of good quality can be very expensive for adapting curricular, training of teachers and developing appropriate teaching and learning materials, not the least in low- income countries.

A follow up of the Jomtien conference was the 1994 UNESCO conference on inclusive education in Salamanca, Spain where the subject was given a more vivid focus and understanding owning to the fact that the right of every child to basic education irrespective of their handicap conditions was highlighted (UNESCO, 1994). The Salamanca conference in 1994 and the Dakar world education forum in 2000 led to the policy statement that proposed the development of schools with an inclusive orientation as the most effective means of combating discriminatory attitudes towards persons with disability. Provision of effective education for the majority of children, and ultimately improving the cost-effectiveness of the entire educational system are some of the highlights from the conference (UNESCO, 1994). I argue that proper implementation and impact of the outcome of these world conferences on the individual countries, especially the developing ones, need to be followed up as a means of evaluating the effectiveness of such forums and conferences. In line with the argument, studies such as this kind may also add to the knowledge of the reality on the ground.

Having discussed the background of this project from the global point of view, I now turn my attention to special education in Ghana.

#### 1.6 Special education in Ghana

Special education entails education of special needs children in the category of the visually impaired, the hearing impaired and the mentally challenged. In Ghana, inclusive education is seen and understood

as the process in which children with and without disabilities, Human Immunodeficiency Virus (HIV) status from diverse backgrounds and abilities learn together in the same classroom; interact socially with each other within the regular school setting (Gadagbui, 2008). This then implies that inclusive education is a practice and an on-going process where all children regardless of their physical and learning abilities are educated in the mainstream schools. One main legislative instrument is the 1992 Forth Republican Constitution of Ghana which has acknowledged and recommends the right to education by all persons. Thus, article 25(a) of the constitution states; "all persons shall have the right to educational opportunities and facilities and with the view of achieving the full realization of this right, basic education shall be free, compulsory and available to all" (The Constitution of Ghana, 1992). In line with the provision in the 1992 constitution and also in order to achieve full inclusion, the government of Ghana has promulgated Act 2006 where provision is made for the education of children with special educational needs (Gyimah & Vanderpure, 2009). Article 20 of the act states that:

A person responsible for admission into a school or other institution of learning shall not refuse to give admission to a person with disability on account of the disability unless the person with disability has been assessed by the Ministry responsible for Education in collaboration with the Ministries responsible for Health and Social Welfare to be a person who clearly requires being in a special school for children or persons with disability (Act 2006 cited in Gyimah & Vanderpure, 2009, p. 4).

By this all schools are mandated under the act to enrol children with disabilities unless otherwise specified. In order to realize this vision of inclusion, Gyimah and Vanderpure (2009) point out that the government under the direction of Special Education Division (SpED) of the Ministry of Education has embarked on pilot projects in selected districts and regions throughout the country. Nevertheless, prior to the introduction of formal education, traditional education and care for the disabled was the responsibility of the family. According to Avoke, Hayford, Ocloo, and Ihenacho (1998) due to ignorance and lack of education, some of the disabled children were ostracised, had their lives terminated at infancy or were even left in the forest with the belief that they are the manifestation of the gods. Arguing along the same perspective Johnsen and Skjørten (2001) also noted among other things that:

Lack of knowledge about and therefore fear of the nature and causes of impairment developed all kinds of beliefs and superstitions. Basically there are no differences between cultures of the North, South, East and West. A common belief for example was and at times still is that a mother giving birth to a child with impairment is being punished because of her or her ancestors' sin. Getting a child with impairment is for psychological, cultural, social and practical reasons difficult. Meaning well, parents were often advised to forget their child and

give birth to another. Children with impairment were also hidden away in locked rooms, left in the fields or forest to either survive or die. At times they were given to other people or to charitable societies (Johnsen & Skjørten, 2001, p. 24).

Inferring from the above citation, the point to consider here is that, since the causes of disabilities are not known to the people due to lack of education and scientific proof at the time, giving birth to such children were attributed to various causes for example, the parents had offended the gods or had broken a taboo and as a result had been punished by the gods. Emphasizing on how persons with disabilities were regarded in the early days, Rsthtein (1997 cited in Avoke et al. 1998, p. 58) noted that, persons with disabilities are considered as "strange individuals with human aberrations possessed with demons and full of bad omen". It therefore suggests based on the above discussions that education of those who are physically challenged in one way or the other were not given the needed priority the world over.

In Ghana for example, special education can be traced back to 1945, one hundred years after the beginning of the colonial period and the introduction of formal education(Victor & Anson-Yevu, 1988). Despite the early introduction of special education Kuyini (2010) states that one of the aspects of Ghana's educational system that is hardly talked about is the education of persons with special needs. According to Kuyini (2010), Ghana along with other countries such as Nigeria, and the Gambia, were participants at the Salamanca conference and pledged to set in motion mechanisms for creating an inclusive education system as a means of improving upon what first began with experiments of integration in the 1970s. This was followed by the establishment of Community Based Rehabilitation (CBR) programmes for persons with disabilities in 1992, upon the recommendation of the UNESCO Consultation on Special Education. As part of the CBR agenda, inclusive education was piloted in some selected districts in Ghana including the district where the research was conducted.

Prior to the introduction of formal education, traditional education and care for the disabled was the responsibility of the family in connection with local beliefs, customs and religious practices. After the introduction of formal special education in 1945, the education of special needs children became the shared responsibility of the state and the missions instead of the family. This led to the establishment of the first special school by the Basel missionaries in Akropong-Akuapem in the eastern region of Ghana, the goal here was to educate the few visually impaired and other categories of special needs children at the time. According to Victor and Anson-Yevu (1988) after three years, a second special school was established in 1948 at Wa to serve the northern sector of the country. They explained further that the establishment of the second special school was a joint venture by the Presbyterian and the Methodist

churches and therefore the school was under their management. These schools trained individuals in literacy and numeracy as well as skills such as doormat and basket weaving in order to equip them with some basic skills with which they could earn a living. This type of training continued until 1957 when Ghana attained its independence from the British and assumed full responsibility of educating all children including those with special educational needs. The first post-independence policy and act of parliament which sought to provide comprehensive and equal access to education for all persons was the Education Act in 1961 (Agbenyega & Deku, 2011). This marked a watershed in the educational provision of persons with disabilities, training and rehabilitation in Ghana with regards to their marginalization, segregation and inequality in the Ghanaian society and schools. After independence, successive governments have pursued various educational policies for example free compulsory Universal Basic Education (UBE) programme in 1996, Capitation Grant in 2004, Ghana Schools Feeding Programme (GSFP) in 2005 and distribution of free school uniform and exercise books to deprived communities in 2010, all aimed at expanding access for disadvantaged groups and limiting exclusion from quality education. In an effort to improve upon the provision of special education, a department of special education under the Faculty of Specialized Professional Studies at the University of Education, Winneba in the central region of Ghana, was established to train professional special educators to strengthen the frontiers of inclusive education throughout the country as spelt out in the Salamanca Statement in Spain and also in the 1992 Constitution of Ghana. This can be seen as a step in the right direction since a shortage of trained teachers, inappropriate teaching techniques and aids, discriminatory classroom practices and inadequate physical access can diminish opportunities for the special needs learners.

There were further developments and establishment of more special schools for other categories of disability in different parts of the country for instance; Mampong-Akuapem Special School for the Deaf, Dzorwulu Special School for Mentally Handicapped and New Horizon Special School both in Accra. Others are Three-Town Special School for the Hearing/Mentally challenged in Aveyime-Battor in the Volta region, Garden City Special School in Asokore-Mampong, Ashanti, Volta School for the Deaf in Hohoe and others.

In 1970, a special education unit was established under the Ministry of Education to help shape and structure the content and administration of special education in Ghana (Victor & Anson-Yevu 1988). Reiterating further Victor and Anson-Yevu (1988) maintain that the restructuring of the general curriculum included screening processes with multi-disciplinary assessment and evaluation where all

special schools were to follow the curricular of the ordinary schools in modification to suit the type of handicapping condition. Other aspects of the restructuring brought on board the integration and inclusive system after the old (segregated) system was lambasted as an enforcement of traditional education and separation of the physically challenged from their communities. Nonetheless, there are still some challenges that are hindering the smooth implementation, provision and running of special education in Ghana. For instance "Special Education Division (SpED) of the Ghana Education Service (GES) is one of the ten divisions of the GES, it receives only less than 1% of GES government's total budgetary allocation" (Ministry of Education, 2010, p. 38).

In the next section I outline how the thesis is organized to bring the chapter to an end.

## 1.7 Organization of the thesis

The study is organized into six chapters. Chapter one has set out the agenda and tone for the study by presenting the introduction which gives a roadmap for what the chapter contains. The rational for doing my project in inclusive education was highlighted which was followed by the objectives and the research questions. The significance of this study after a successful completion was illuminated which was then followed by the background of the study. The chapter also contained a historical exploration of the genesis of special education in Ghana.

Chapter two presents a literature review and conceptual framework to the study which has to do with inclusion of the visually impaired in secondary education. Vygotsky's theory of cognitive development and Rawls's theory of social justice is used to explain the concepts in regards to the study.

In chapter three, the methods employed in gathering data for the study take a centre stage. The chapter gives information on the choice of research design, access to the research area, sample and how the participants were selected for the study. Also contained in the chapter are issues such as data collection methods and analysis, ethics in research and reflexivity. The concluding part provides information on validity and reliability as well as challenges encountered during the study.

Chapter four concerns itself with the findings from the fieldwork. Here findings as a result of the observation and interviews of research participants are presented. Quotes from some selected interviews are used as a means of presenting clear picture of what transpired in the field.

In chapter five, analysis and discussion of the findings are highlighted. Pivotal in the discussions of the findings is the support given to the visually impaired during instructional hours, and how the sighted students relate with the visually impaired in various aspects of school life in an inclusive setting such as the boarding house. This is done by relating the findings to the theories that are outlined in chapter two in an attempt to answer the research questions.

Finally, summary and conclusion of the findings of the research and commendations for future researchers on the concept of inclusion of the visually impaired in secondary education are featured in chapter six.

#### CHAPTER TWO: CONCEPTUAL AND THEORETICAL FRAMEWORK

#### 2.1 Introduction

In chapter one under the section rational of the study, I attempted to argue for the importance of this study. This has paved the way for me at this juncture to review available literature in connection with the topic; inclusion of the visually impaired in secondary education. In order to develop a theoretical framework that will be used to analyse the data, theories will be taken more specifically from Rawls, Sen and Terzi in addition to the general literature that underlie the educational provision for children with special needs.

To set the chapter under way, I will first of all consider inclusive education and its importance. Under this section I will touch briefly on the debate of the concept inclusive education. I will then consider why inclusive education is important and should be pursued. Following this is a section that discusses the concept of visual impairment and its implications in learning situations. Here available literature will be used to explain what the concept of visual impairment is about. I will highlight on the importance of the sense of sight in a world of technology, where the sense of sight plays a monumental role in information accumulation of any kind being it print or electronic. Why the concept of visual impairment cannot be generalized across learners will also be discussed in the section as well as likely implications of the problems of visual impairment in learning situations. Thereafter a discussion on the attitudes and perceptions towards inclusive education will be considered. Global efforts in this regard with particular reference to the EFA Global Monitoring Reports will be used to support my arguments. Further, I will include a section that discusses teacher training for inclusive education. This is deemed essential as teachers can be regarded as having a significant stake in the success or failure of any educational policy since they are the final implementers of policy programmes in education. The learning environment can impact both positively and negatively on the learning outcome, which was acknowledged in the EFA Global Monitoring Report (2010). Thus improving the learning environment as well as strategies used in inclusive classrooms will also be touched on in the chapter.

#### 2.2 Inclusive education

One key concept around which the study revolves is inclusion. In recent years, the concept has attracted attention in the circles of education, both locally and internationally. Nevertheless, literature on

inclusive education implies that there is an on-going debate on the concept which connotes different meanings in different countries and to different people. In her attempt to highlight the debate concerning the diverse meanings and practices of inclusive education Terzi (2010, p. 15) states that inclusive and special education is "characterized by systems of schooling". She maintains that in countries, such as Sweden, Italy and Spain inclusion of all students is within mainstream schools, while in other countries for example, France, Slovenia, Finland, Denmark and Austria, inclusion is done in mainstream schools alongside special schools (Meijer et al., 2003 cited in Terzi, 2010 p. 15). According to Haug (2006) the term inclusion encompasses many issues at different levels ranging from politics, ideology, philosophy and values. By way of inference from the above arguments, I maintain that the concept of inclusive education is therefore open to all kinds of interpretations depending on the point of view under scrutiny by the individual or the lens through which a society looks at the concept. It could mean a place occupied by the child with special needs in the classroom in the mainstream school and or all those concerned to ensure that the process of inclusion works. In relation to this study, the focus is not to go deep into the enigma and complexities surrounding the concept, but to give a brief and general understanding about the concept in connection to this thesis.

With this in mind, international organizations such as UNESCO place great emphasis on the right to education by all persons and hence declared that:

Every child has a fundamental right to education, and must be given the opportunity to achieve and maintain an acceptable level of learning ... those with special educational needs must have access to regular schools which accommodate them within child centred pedagogy capable of meeting these needs (UNESCO, 1994, p. 10).

This in essence implies that every child is qualified to be an equal, valued and regarded member of a school culture irrespective of his/her physical condition. In this regard, inclusion is therefore seen as the means and process of increasing the scope of accessibility and participation of all persons including the marginalized in society as well as those with special educational needs in the school system.

According to Johnsen and Skjørten (2001) inclusive education:

Does not just mean the integration of children and young adults with physical, sensory or intellectual disabilities into ordinary schools or just access to education for excluded learners. Inclusion is a two-way process of increasing participation in learning and identifying and reducing or removing barriers that inhibit learning and participation ... It is a process of addressing and responding to the diversity of needs of all learners and will involve change and modifications in content, approaches, structures and learning strategies (p. 8).

Inclusive education as captured in the above account has moved away from just talking about issues that concern only persons with special needs to a more wide range of understanding things pertaining to increasing accessibility and participation of other marginalized groups in society. These groups include children living in poverty and on the streets, those from ethnic and linguistic minorities, those displaced as a result of political situations in their home countries and those from remote areas who are excluded from education (Johnsen & Skjørten, 2001). On the importance of increasing accessibility and participation, highlights of the EFA Global Monitoring Report (2010) advocates the need to improve affordability for excluded groups by lowering cost and bringing schools closer to the marginalized groups. This is very crucial since distance from facilities and high cost of school fees can be regarded as among the potential barriers to excluding the disadvantaged from education. The concept of inclusive education is considered in this thesis as a move to fight for the marginalized and other vulnerable groups in society as well as persons with disabilities to have access to education where all forms of barriers and considerations along language and ethnic backgrounds do not exist.

Inclusive education is an approach to educating persons with special educational needs (disabled students) alongside those without special educational needs (non-disabled students) in the same classroom where they interact socially with one another and share resources together (Gadagbui, 2008). The concept of inclusion on the one hand frowns upon the use of special schools or classrooms to separate learners with disabilities and other marginalized groups from those without disabilities. On the other hand the idea of inclusion aims at removing barriers, for example, inappropriate designed curricular, untrained teachers who cannot work with diverse learners with diverse needs, attitudes towards learners with special needs and even the environment where the learning is to take place (Johnsen & Skjørten, 2001). Some of these barriers militate against full access and participation in education by the marginalized and persons with special needs in society. This therefore suggests that a premium is highly placed upon full participation by learners with disabilities and upon respect for their social, civil, and educational rights. According to UNESCO (1994) inclusive education is a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities. Ainscow and Booth (1998) also describe inclusion as the process of increasing participation of every learner. This therefore means that inclusion reduces exclusion from education and from within education. The concept of inclusive schools is built on the strong philosophical belief that all children are educable no matter what barriers there are to their learning. When given the chance all children can be successful within a shared academic environment where all

learners are offered equal opportunities and support that will allow them to become self-determined, productive, and socially involved citizens. In the next section I now turn my attention to the importance of inclusive education.

#### 2.2.1 Importance of inclusive education

Inclusive education has been identified by international organizations such as UNESCO in its annual EFA Global Monitoring Report (2010) as important and a means of reaching out to the marginalized and other excluded groups in society by improving and increasing their access to education. Increasing and improving access to education by the excluded and other marginalized communities could be done by bringing schools closer to them and also subsidizing cost by their respective governments. Inclusive education therefore can go a long way to affect and change the lives and fortunes of these excluded groups as well as individuals. Inclusion is to value that every child is equal (Thomas & Vaughan, 2003). Maintaining some group of learners in segregated schools just on their physical condition is nothing more than discrimination and cannot be justified on the bases of equity (Dixon & Verenikina, 2007). This implies the recognition of every child as equal and including them in the mainstream class and giving them "fair equality of opportunity" (Rawls, 1999, p. 245). This can psychologically boost their moral which will go a long way to impact positively on their achievement in school and society. Furthermore, inclusion on the one hand will enable children with special needs to learn from their peers faster than would have been in the special schools. On the other hand, their regular peers will learn to appreciate and understand the weaknesses and strengths of the "special" children amongst them better leading to full cooperation with them. According to Gadagbui (2008), research has shown that children learn together, live together, play together and share resources together when the opportunity is given to them. In the same perspective Johnsen and Skjørten (2001) noted that "one of the big disadvantages of segregated education is the isolation and the loss of opportunity of sharing with peers of the same age and learning from one another relevant behaviours and skills" (p. 33). If one big disadvantage of segregated education is what is stated in the above quote, then one can argue that inclusive education will offer the opportunity for children with the same age to share and learn positive behaviours and skills from one another. Adding her voice to the need for inclusive education, Johnsen (2005) argues that, inclusion is a radical reform that encourages an inclusive society in the sense that it attempts to eliminate all forms of discriminatory approaches. This then helps in "maintaining equal opportunities of education for all" (Rawls, 1999, p. 63).

Inclusive education can be cost effective since it is likely to be less costly to establish and run schools which educate all children together than to build two separate schools for specific groups of learners. In other words, there is an economic justification and cost effectiveness in delivering Education For All. Finally and essentially, inclusion generally embraces diversity but speaks against the practice of segregation which can be considered as morally unacceptable. It is therefore "important to acknowledge that a normal society is characterized by its multiplicity and diversity - not by sameness" (Johnsen & Skjørten, 2001, p. 28). The next section discusses the concept of visual impairment.

## 2.3 Understanding the concept of visual impairment

The sense of sight is one of the five senses that humans rely on in their daily activities. Avoke et al., (1998) point out that "the human eye is one of the important senses that is responsible for the greatest amount of sensory input in man" (p. 78). Barraga (1976) also argues that vision provides about 80% of what humans learn and contributes to incidental learning which visually impaired persons lack; this then has a significant impact on their academic achievement. Even though all the senses are important and support each other to ensure holistic functioning of the individual, I argue that a loss of one especially the sense of sight can have serious consequences on the educational pursuit of the individual. Vision therefore serves as the stabiliser, coordinator and the integrator of the activities of other senses (Lowenfeld, 1973). In a study by Befring and Tangen (2008) they noted that we live in a visual world where much of the information of today's technology is acquired through the sense of sight. This then implies that educational implications of good vision are tremendous and cannot be under estimated. Sharing similar sentiments Lowenfeld (1973) underscored the importance of the eye when he mentioned that, the eye can be seen as one of the more important senses on which humans place greater reliance when learning as compared to the other senses combined. Ultimately, the sense of sight plays an influential role in the educational pursuit of the individual. Each visually impaired child who enters an inclusive school presents new challenges and should be considered as unique individual with unique educational needs in the whole school community.

Kirk, Gallagher and Anastasiow (2003) consider visual impairment as a condition which falls within a continuum ranging from mild or low vision to severe eye condition and then blindness. In this perspective, however, visual impairment should therefore be seen as a result of loss of vision rather than an eye disorder. The working definition of visual impairment in this study shall be that of Ocloo (2002) who defined visual impairment as a functional loss of vision to the degree that the individual

needs some additional support in terms of movement, education and other self-help activities.

Assistance to the visually impaired persons and other marginalized groups could help them go far in their educational pursuit. Having examined the concept of visual impairment, in the next section I shall outline some challenges associated with the concept and its implications in learning.

#### 2.3.1 Challenges associated with visual impairment and their implications in learning

As stated in the section above, it is obvious that loss of vision will have serious implications in learning situations of the individual. Seeing is a dynamic process which is personal (Butler & Parr, 1999). This implies that every individual is unique and sees differently depending on the physiology of the person's vision and since every individual is unique, I maintain that visual impairment cannot be generalized. In a study by Ocloo (2002) it was noted that visual impairment varies considerably among persons and any attempt to generalize the condition by teachers in a learning situation will not achieve the needed result. He observed, for example, that some people have myopia, hypermetropia, astigmatism and different visual acuities (angle of vision). Some will perhaps have difficulties in reading print and writing on the chalkboard, accessing information and organizing it or even affecting their mobility. What could be done to help the situation for the visually impaired child to benefit is for their teachers to modify or alter the learning situation to their advantage. Educational adaptation by teachers teaching the visually impaired is advantageous in this context since without it, teachers' effort will not make any meaningful impact but rather confuse the learner that is the visually impaired children (Pratt & Swann, 2003).

Another challenge and possible implication in learning posed by the concept of visual impairment is what Hardman and Stensel (2009) referred to as language and speech development. According to them, children with visual impairment lack the ability to visualize and associate words with objects. This then affects their language and speech acquisition and development which will be a challenge in terms of academic work. Arguing along the same line Ocloo (2002), contends that some of the visual problems are congenital while others are post-genital. On the one hand he explained that language acquisition among children whose visual conditions are post-genital (after birth) is better as compared to those whose conditions are congenital (from birth). According to him the former may be well grown enough, have acquired good language skills and good visual memories before the onset of the problem. On the other hand he maintained that language acquisition among children whose conditions are congenital is poorer since they have to learn language acquisition skills from the scratch and have no visual

memories to rely on.

Closely linked to language and speech development is slow concept formation among most visually impaired learners. Befring and Tangen (2008) maintain that the sense of sight forms the basis for social, motor and cognitive development in children. Expanding further Befring and Tangen (2008) also argue that it is easier to capture children's attention through visual media such as pictures and diagrams than through verbal means. Eye to eye contact with the child alongside voice coordination is very important in concept formation (Smith, Cowie, & Blades, 2011). This implies that a child having problems with the sense of sight will have some challenges with concept formation which is very necessary in academic work. The resulting effect and implication in learning on the child according to Sommer, Pramling Samuelsson and Hundeide (2010) and Lowenfeld (1973) is a possible slow concept formation, slow speed of work and difficulties in orientation and mobility. These positions are further emphasized by Ocloo (2002) when he argues that regular classroom teachers usually express concern about inclusive education with regards to time spent on each special needs child and their slow pace of understanding a concept. This will then call for tolerance and patience by teachers in handling a visually impaired child who is slow in accomplishing a given task. When it becomes obvious that a special need learner is slow in completing tasks, Lewis and Doorlag (2010) suggested an Individualized Education Plan (IEP) for the learner where the teacher helps monitors and pays particular attention to the learner's progress of work. The above suggestion by Lewis and Doorlag (2010) is in support and in line with this thesis adoption of Ocloo's (2002) definition of visual impairment which is premised on giving additional support to the child. Having discussed some challenges associated with visual impairment and their possible implications in learning situations, I now turn my attention to attitudes and perceptions towards inclusive education.

## 2.4 Attitudes and perceptions towards inclusive education

During the last decade Johnsen and Skjørten (2001) observed that many changes had been experienced in the field of educating persons with special needs and other marginalized groups in the society. They noted that what brought about these changes were a result of the acknowledgement and understanding of diversity. In a further explanation, Johnsen and Skjørten (2001) mention that the changes include awareness creation, attitude, methodology, access and availability and use of related concepts. Attitudes and perceptions towards inclusive education vary among individuals, communities and nations. Reynolds and Fletcher-Janzen (2004) consider attitudes as learned beliefs that develop over time, and

from experiences with others which has to do with the individual's intuitive understanding, construction and way of reacting towards an idea or a concept and in this context inclusive education.

Internationally, the Salamanca Statement and Framework of Action on Special Needs UNESCO (1994) have emphasized the need for the education of all children. Even though, there are international and national efforts in fighting for the right of persons with disabilities, for example, to be enrolled in schools, highlights of the EFA Global Monitoring Report (2010) paints a worrisome picture of the state of the situation when it revealed that:

There are an estimated 150 million children in the world with disabilities, about four-fifths of them in the developing countries. Millions more live with disabled parents or relatives. Beyond their immediate health-related effects, physical and mental impairment carry a stigma that often leads to exclusion from society and school. ... Children with impairment that effect the capacity to communicate, and more severe impairments overall, typically have the most limited opportunities for education, especially in the poorest countries (UNESCO, 2010, p. 27).

The report among other things noted that the education system and classroom experience can play a role in counteracting institutionalized discrimination, stigmatization and neglect within the classroom, the local community and the home (UNESCO, 2010). I argue by way of inference from the above account that negative perceptions around the world towards persons with disabilities has been a barrier to inclusion and is thwarting international efforts in the provision of inclusive education. Whilst efforts are being made internationally, nationally and locally towards practical inclusion Johnsen and Skjørten (2001) mentioned that "throughout the ages individuals and groups who are different were and still are rejected by the society in all countries" (p. 23). The above quote buttresses the negative perceptions that society still have when dealing with persons who are physically challenge in one way or the other. Johnsen and Skjørten (2001) further observed that "still in many countries only 50-60% of children without impairment and 2-3% of children of impairment are in school" (p. 28). Again we can see from the quote of Johnsen and Skjørten (2001) that though there have been some notable changes over the years shifting from segregation towards inclusion of individuals and groups who are different in one way or the other in our societies, attitudinal change for full acceptance and inclusion still remain a big challenge. Differences in perception and attitude towards inclusive education as well as difficulties in embracing inclusion were noted by the highlights of the EFA Global Monitoring Reports (2010). The report states that:

Equal opportunity to learn is no less a human right than equal entitlement to be in school

regardless of parental income, gender, language or ethnicity. However, in many countries large disparities in learning achievement exist and are heavily influenced by the type of school students attend and their family backgrounds. Differences between schools play a critical role in the level of equity within education systems. In many developing countries, education systems are often marked by large variations across schools in class size, availability of books and teaching and learning materials, teacher and school building standards. Improving school quality and narrowing differences between schools will reduce inequality in students' performance (UNESCO, 2010, p. 19).

From the extract above it is obvious that disparities and barriers still exist to the extent that school one attends is based on parental income and family backgrounds. This then means that children from poor family backgrounds and some linguistic or ethnic affiliations will not be able to attend certain schools in some communities due to societal attitudes. Inequalities in education systems in some developing countries, marked by large variations across schools in terms of class size, availability of books, quality teachers and dilapidated school buildings as captured in the above quote are notable hindrances towards inclusive education.

In a different perspective, unfriendly infrastructural designs in many schools in developing countries tend to compound easy access for learners with special needs in inclusive schools. This assertion Ocloo et al., (2002) concur with when they commented that architecture barriers, erection of staircases instead of ramps for wheelchairs users, absence of and malfunctioning elevators pose a lot of challenges to the disabled in their effort to using most of the existing structures in the schools. Moving away from difficulties in relation to accessibility by persons with disability lie inequalities, discrimination and stigmatization along language and ethnic affiliations this can further disadvantage students with special needs. Highlights of the EFA Global Monitoring Report (2010) recognized among other things certain areas to focus on to make inclusion more holistic. In the report it was mentioned that "failure to address inequalities, stigmatization and discrimination linked to wealth, gender, ethnicity, language, location and disability is holding back the progress towards Education For All" (UNESCO, 2010, p. 5). The meaning underlying the above quote can be explained as if differences within societies are not addressed along the lines mentioned in the above quote for example; discrimination along ethnic and language affiliations then efforts towards inclusive education will be a mirage. A study conducted by Ocloo (2002) on attitudes among students in inclusive schools revealed that there is frequent teasing along ethnic lines among the visual and non-visually impaired students to the extent that the visually impaired students from certain ethnic backgrounds feel insecure in the presence of some of their sighted peers.

In another development Avoke et al., (1998) assert that attitudes towards persons with disabilities have not changed considerably since pre-Christian times. It is therefore not uncommon when the physically challenged are discriminated against in their job placement. Reiterating further Avoke et al., (1998) observed that attitudes towards work capabilities of the physically challenged has been very dismal such that employers are frequently suspicious of the work ethics of these persons. In spite of what many of them are capable of doing, the streets have become their safe haven. Within inclusive schools teachers can play a vital role as they are seen as the final implementers of whatever policy or programmes that is being put into operation in the schools. Training of teachers for inclusive education is my next point of focus.

## 2.5 Teacher training for inclusive education

The teacher's role in an implementation of education policies over the years cannot be undermined. It is against this framework that the highlights of the EFA Global Monitoring Report (2010) underscore the importance of teachers in education when it states that "teachers are the single most important education resource in any country. In many countries, shortages of trained teachers remain a major barrier to achieving Education For All goals, especially among marginalized groups" (UNESCO, 2010, p. 20). Based on this quote one can therefore argue that inadequate number of teachers, insufficient training coupled with poor working conditions and low remunerations can hamper the campaign of effective inclusive education. Teachers endowed with skills through training for which they could rely on to make modifications in class such that every child's need is met will go a long way to make education in inclusive class meaningful to all. Johnsen and Skjørten (2001) stressed the need for training teachers and guiding them in their work since they may not be able to handle all situations effectively and professionally in an inclusive school. They noted among other things that:

It is important to realize that teachers can usually make educational adjustments when they have developed holistic child-centred educational views and skills. But they may also need to have some training methods and techniques that it is necessary to implement. However one cannot expect that class teachers will be able to meet all challenges. ... Trying out different methodologies showed that difficulties in learning to read, write and calculate could be helped by changing teaching and learning methods. They may at times need specialized advice and guidance. Such guidance must be given by teachers who have the expertise based on *practice* combined with *research-based* knowledge (Johnsen & Skjørten, 2001, pp. 27-34 emphasis original).

Grounded on the above quote, it is imperative for teachers to have some skills which they can use when handling diverse learners in their classrooms. They also need assistance and guidance from more experienced professionals. The teacher's role can be seen as a facilitator, mentor, a role model, planner, information provider and assessor of his children (Huttly, Sweet, & Taylor, 2002). If teachers can be seen as playing such vital roles in the schools, then their training in special skills is of great essence in educating learners in general and special needs children in particular. This implies that teacher education or training programmes need to be innovative and infused with pragmatic changes necessary to prepare teachers well enough to take up the task of educating diverse learners in the inclusive schools. It is against this setting that Johnsen and Skjørten (2001) suggested a curriculum revision and training programmes for teachers that will be flexible enough to meet the needs of different learners in the schools.

In his assessment of teachers in the skills of handling special needs children in some schools in Ghana Ocloo (2002) observed that a large proportion of teachers are not professionally trained and do not have any relevant working knowledge in special education to effectively handle these category of learners. The above statement resonates with Best's (1991) earlier notification when he stresses that, due to insufficient practical training, many teachers do not recognize the potential of using simple local materials available such as rattles, xylophones and cymbals at their disposal in training the sense of hearing of the visually impaired students at low cost hence misunderstanding of some concepts by these special needs children which affect their performance. When the teacher is trained with requisite skills, the learning environments also need to be altered to suit teaching and learning. The next section therefore discusses the learning environment.

## 2.6 Improving the learning environment

The surroundings in any learning situation can impact on one's achievement either positively or negatively. Adjusting the learning environment to suit the learners need and ability as well as removing barriers that militate against inclusive education is of prime concern for international organization such as UNESCO. This was captured in the highlights of the EFA Global Monitoring Report (2010) which states "one of the most important requirements for sustained improvement in education quality is an improved learning environment" (p. 20). Improved learning environment has the capability of sending a positive signal to the learners and could boost their psychological feelings to learning. In a situation where barriers such as poor sanitation, small classroom space with poor ventilation, leaking roofs,

absence of teaching and learning materials, untrained teachers and bad weather disrupting classes during raining seasons can send negative signals, demotivate learners and negatively impact on their achievement in school. The need to adapt the learning environment for the benefit of learners was highlighted by Johnsen and Skjørten, (2001) when they assert that:

Environmental adaptation can be very important for the provision of learner-friendly or learning-promoting environment ... it is a matter of awareness about the different needs of learners and knowledge about how to fulfil these through environment adjustment. It can therefore be wise to start with environmental adaptation within the premises of the schools where much can be done with relatively few resources (p. 46).

Inferring from the above citation it is clear that learner's immediate environment that is the school premises and home can be adapted or adjusted in relation to the individual child's needs and also in consideration of all the other learners' need in the school. Unadjusted learning environments can be problematic to all learners but it will increase the difficulties for learners with special needs. In this regard I argue that skilled teachers and parents can co-operate with each other in a way such that the school environment will have some resemblance of the home environment in terms of resources. This will make the child to have some cultural integration and continuity between the home and school environment (Darnell & Hoem, 1996). This has the potential of facilitating the child's progress and success in school. Highlights of the EFA Global Monitoring Report (2010) identified among other things deployment of skilled teachers equitably, financial and learning support to disadvantaged schools, provision of intercultural and bilingual education as some of the means of improving the learning environment. The point at play here is that provision of financial and learning support to upgrade disadvantaged schools can help improve the learning environment. On the other hand equitable distribution of well trained teachers, putting up measures to check inappropriate teaching techniques and discriminatory classroom practices can make education meaningful to the special needs in society and strengthen the frontiers of inclusive education. Making inclusive education all inclusive where the marginalized, fully benefit will be a two way affair in view of this thesis based on the on-going discussions. One way will be to help the disadvantaged in society to access education at low cost and the other way is to make them stay and enjoy the benefit of the schools since it can transform their lives. If the non-disabled children can be made to access schools with ease and enjoy its benefit to the fullest then, provision should also be made for their physically challenged counterpart also in the mainstream schools. To this end, Rawls (1999) argues that "those with similar abilities and skills should have similar life chances" (p. 63). Thus, opportunity should be given to children of the same age

group irrespective of their physical conditions on equal basis to explore their life chances. Terzi (2010) considers this as "equal opportunities for fundamental educational functionings be provided at levels necessary to individuals for an effective participation in society" (p. 163). When this is done I maintain will set the threshold for building capabilities in all groups of learners.

Some strategies or techniques used in inclusive classrooms could also be helpful in the inclusion process this forms the basis for the discussion in the next section.

## 2.7 Strategies used in inclusive classrooms

Learning in recent years has been child centred and the teacher-learner and learner-learner relationships are very crucial in any teaching and learning situation. Vygotsky's (1978) social development theory recognizes the learning context in which learners play active role in the learning process. The teacher and the learners collaborate with each other's effort to the benefit of the latter. To this end the teacher's role as a facilitator during lessons, moving about, guiding and assisting children during group activities, encouraging weak ones, establishing good relationship among the learners as some of the approaches used in an inclusive classroom is a step in the right direction (Michalellis, 2010). The teacher's ability to manage diverse groups of learners in class could be done through the use of strategies such as peer tutoring/support, role playing and mobility training.

## 2.7.1 Peer tutoring/support

Peer tutoring/support is a strategy used in an inclusive class where by teachers assign a task to a capable peer to assist a fellow peer who has some difficulties in a given task. It is observed that "interaction with peers is one of the most important sociocultural conditions for development and socialization among children with disabilities" (Vygotsky, 1993 as cited in Rodina, 2007, p. 15). In line with these using peers by teachers to help their colleagues in class and other learning related activities is not a new thing but needed in order to achieve equal and full participation in education. In the Salamanca Statement and Framework for Action on Special Needs Education (1994) it was recognize that "achieving equal and full participation required a concerted effort not only by teachers and school staff, but also by peers and parents" (UNESCO, 1994, p. 11). This help build social relationships, self confidence among the various groups of children as they share knowledge and learn to cooperate with each other (Undvari-Soilner & Thousand 1995, cited in Igune, 2009, p. 36). Other teaching strategies

such as role playing and mobility skills are sometimes used concurrently. These are touched on very briefly in the following section.

## 2.7.2 Role playing and mobility training

Role playing refers to the teacher assigning roles to the individual learners to perform while he/she monitors and guides the child. This helps in building self confidence in the child and offers the teacher the opportunity to attend to the child on one-on-one basis. By so doing the teacher identifies the strength and weaknesses in the child. Based on this the teacher then develops some individual plan for the child concerned. Training in mobility skills is also very important especially for the blind child in an inclusive school as this helps the child to move purposefully in class and the school environment (Hill & Ponder, 1976). Thus mobility/self-help skills and training will promote self-esteem and self-confidence in the child as he/she moves about doing things on his/her own always rather being helped. In a situation where there is nobody to help, the child cannot move about and let alone doing something on his/her own.

Having discussed the issues pertaining to some strategies used in inclusive classrooms found in the literature, I now turn my attention to the theories that underpin this study.

#### 2.8 Theories

One key aspect of a social research in for example, a qualitative study such as this one is the theory on which it is based. Theory can be explained in simple term as a set of principles on which an activity is based (Wehmeier, McIntosh, & Turnbull, 1997). The theoretical traditions and frameworks on which this study is based are that of the Russian psychologist Lev Semyonovich Vygotsky considered as a pioneer of theories on cognitive development and the distributive aspect of John Rawls's theory of social justice.

## 2.8.1 Vygotsky's theory

In his work "Mind in Society" Vygotsky (1978) states that "human beings come into this world attain consciousness and development throughout their lives in relationship with others" (Vygotsky, 1978 cited in Michalellis, 2010, p. 18). The meaning behind the above citation can be interpreted as we

become who we are as a result of our association with others especially with those around us. Connecting this to the research questions which are based on the relationship between the sighted and the visually impaired as well as the support given to the visually impaired learners during lessons, it is quite evident that Vygotsky's assertion as cited above resonates with what the study seeks to find answers to. Vygotsky (1978) agues among other things that the mind cannot be understood in isolation of the surroundings and in this context the mind represents the visually impaired child and the surroundings are the kind of relationship, support and encouragement given to that child by those around him. According to Vygotsky (1978) someone who has a better understanding or ability level More Knowledgeable Order (MKO) than the learner in regards to a specific assignment could assist the learner. The (MKO) in this context are those who are close to the child for example the parents, teachers and even peers. In another development he believes that there is a relationship between development, learning and surroundings that is why he emphasized on the point that children learn through their interactions with the social world that is things, objects and people close to them. Vygotsky (1978) prioritizes the connection between people and their sociocultural environment. According to him the environment has a bearing on the cognitive and physical development of the individual. In a further explanation Vygotsky (1978) argues that humans use instruments that develop from a culture such as speech to mediate their social environment. Since the visually impaired child lacks one of the senses that contribute significantly in a learning situation, possibly resulting in slow speech and concept formation, it is very essential to encourage the special needs child through the use of cultural tools, for example, the local language when there is the need to help the child in inclusive classrooms. This can be done through peer support and interaction which possibly will help develop self-help skills in the child needed in any learning situation. Children are vulnerable and thus need help and support as well as require decisions on their best interest by people close to them and government. Terzi (2010) underscores the importance of people close to children making good choices on their behalf when she states that:

Children's status require adults to protect their interests and meet their needs ... For instance, children cannot choose not to be educated and cannot choose among educational functioning and capabilities. In this case, the parent or guardian, as well as the state for certain capabilities, exercise the actual choice for the child (Terzi, 2010, pp. 154-155).

From the citation it is well-defined that children are defenceless and require parental protection in their upbringing and decision making. Good collaboration between parents and school authorities in a well-functioning education system will be in the best interest of the child.

Vygotsky (1978) noted that learning occurs in zones which he called the Zone of Proximal Development (ZPD). According to him this is the length of time it takes a child to perform a given task under his/her peers or adults collaboration. Rodina (2007) reasoned that "through interaction, children can extend their 'internal' limitations and thus exceed their zone of proximal development" (p. 15). This then indicates that interaction help and support from teachers, parents and peers are required for the visually impaired child to progress in school. However, one should be cognizant of the fact that learning takes place in zones and so patience and time is needed for the child to master a given assignment. Again this also means that everyone is unique and thus progresses at a particular pace. Encouragement from people close to the child is vital in this context. To this end (Vygotsky, 1993) emphasized the importance of social aspects in the upbringing of children with special needs. Thus, the child "finds the material to build the inner functions which are realized during the process of compensatory [collective] development" (Vygotsky, 1993, p. 127 as cited in Rodina, 2007, p. 15). If we become what we are as a result of our association with others and the environment, according to Vygotsky (1978), then it is paramount that these special needs children as well as the marginalized are assisted in inclusive schools to become useful citizens in their societies and nations at large.

The following section discusses Rawls's theory of social justice where I focus on the equal provision of educational resources on the grounds of fairness and equality.

#### 2.8.2 Rawls's theory

I begin this section with a quote from Terzi (2010) in which she maintains that "the idea of educational equality is fundamentally grounded in the egalitarian principle that social and institutional arrangement should be designed to give equal consideration to all" (p. 143). Again educational equality is enshrined in EFA policy programme to deal with inequalities in education provision (UNESCO,1990). Educational equality can be considered as engraved in a theory that views equality in terms of coequal opportunities and on the grounds of fair distribution of resources as a cardinal element of social justice. On the issues of equality, Sen (2009) contends that:

It is not surprising that equality figures prominently in the contributions of political philosophers who would usually be seen as 'egalitarian', and in American usage as 'liberal', for example John Rawls ... What is more significant is that equality is demanded in some basic form even by those who are typically seen as having disputed the case of equality' and

expressed scepticism about the central importance of 'distributive justice'. ... Equality was not only among the foremost revolutionary demands in the eighteenth-century Europe and America; there has also been an extraordinary consensus on its importance in the post-Enlightenment world (p. 291).

Thus the demand for equality by the less privileged in society and egalitarians in one way or the other in any sphere of human endeavour sterns down from history and can therefore be seen as prerequisite for a just and unified society. John Rawls's "theory is one of the leading examples of liberal egalitarian theories of justice" (Brighouse, 2001 cited in Terzi, 2010 p. 10). In his book "A Theory of Justice" Rawls (1999) argues that:

Deep inequalities not only are they pervasive, but they affect '[people's]' initial chances in life; ... it is these inequalities, presumably inevitable in the basic structures of any society, to which the principles of social justice must in the first instance apply. The justice of a social scheme depends essentially on how fundamental rights and duties are assigned ... in the various sectors of society (p. 7).

Inferring from the above quote Rawls (1999) was not only speaking against differences in the societies, but condemns how this will impact negatively on the chances of survival of the disadvantage and in this context persons with disabilities and the marginalized in our societies. Rawls's theory of justice specifies two rudimentary principles. The first is known as "Liberty Principle" under which everyone has the right to enjoy equal basic liberties and the second known as "social and economic inequalities" (Rawls, 1999, p. 53). The second is in two sections but for the purpose of this study I will consider the second part of the second principle which Rawls (1999, p. 68) referred to as the 'difference principle.' According to him inequalities are only permissible under the precepts of justice. This implies that for differences to exist in our societies it only has to be justified, accepted and allowed only under the umbrella of justice. It is against this framework that the distributive aspect of the theory of justice highlights how educational resources should and must be distributed fairly and equally to all manner of learners irrespective of their physical conditions. The concept of fairness was explained by Sen (2009) when he states that:

The notion of fairness is taken to be foundational, and is meant to be, in some sense, 'prior' to the development of the principle of justice. I would argue that we have a good reason to be persuaded by Rawls that the pursuit of justice has to be linked to – and in some sense derived from – the idea of fairness. (pp. 53–54).

The concept of fairness and just distribution of educational resources and opportunities when offered to

persons with special educational needs in an effective functioning education system could turn fortunes of the less privileged around and enhance the process of inclusion. To this end Terzi (2010) argues among other things that "from the conception of disabilities and special educational needs ... necessary and legitimate educational resources have to be devoted to children designated as having disabilities and special educational needs" (pp. 163–164). When persons with special educational needs are assisted and their resources provided equitably as argued by Rawls in his theory of justice then efforts by the international organizations such as UNESCO and individual nations will go a long way to strengthen and expand the frontiers of inclusive education.

### 2.9 Summary

The concept of inclusion is practice differently in different countries depending on how it is interpreted but with one objective thus making Education For All a reality. To this end efforts are being made both internationally and locally to include the marginalized and other disadvantage groups in education. The concept of inclusive education is identified as one of the means of bridging the gap of inequalities in education provision throughout the world. The argument is that it helps to build a unified society as it disapproves on the practice of preferential treatment of some group of people in society based on their ethnic, cultural, linguistic and family backgrounds to the demerit of others.

The five senses that humans have coordinate each other's activity to the total functioning of the individual. It is no doubt that loss of one such as the sense of sight will affect the individual to some extent as far education is concerned since we live in a world of technology in which there is an extensive reliance on the sense of sight for information. Visual impairment cannot be generalized among persons since each individual is unique. To these end teachers as educators are advised not to generalize the condition in their teaching expeditions. Any attempt to do so will result in creating confusion among their students (Ocloo, 2002).

Societal attitudes with regard to inclusion from the discussion veered largely towards the negative side of the scale; nonetheless, efforts are being made which are yielding positive dividends premised on the recognition of diversity according to Johnsen and Skjørten (2001). Training of human beings such as teachers to effectively handle the diverse learners that the inclusive schools present was emphasized in the chapter. This is due to the fact that the teacher's role in any education policy implementation process cannot be underestimated. It was noted among other things that their ability to adapt, alter and

modify the learning environment to the merit of the individual child in collaboration with other players in education for example, parents and learners will positively impact on the outcome of learning process and strengthen the provision of inclusive education.

To conclude the chapter it will be more meaningful as argued in Vygotsky's theory of cognitive development to assist the physically challenged especially by the people close to them for example, parents, teachers and peers to gradually overcome their zone of proximal development (difficulties in performing a given task) in their daily lives.

On the other hand, educational resources needed by the less privileged in the schools should be provided as a matter fair distribution and equity. Equal educational opportunities should also be given to all the category of learners as demonstrated in Rwals's theory of justice. Since under the 'difference principle' according to Rawls (1999, p. 245) inequality can only be permitted under the dictums of justice.

#### **CHAPTER THREE: RESEARCH METHODOLOGY**

#### 3.1 Introduction

This chapter presents the approaches used by the researcher in gathering data to find answers to the issue under study which has to do with the inclusion of the visually impaired in secondary education in Ghana. The chapter commences with an explanation of the main research methodology or strategy that underpins this project. Under this section I will discuss the choice of research methodology and ontological positions I have employed in the study. This section will be followed by a brief description of the research site and how access was gained to the site. Research tools used in sampling participants as well as the sample size involved in the study will also be discussed. Following that will be a discussion on the methods used to collect data. In the section I will explain how each of the methods was used in order to collect rich data for the study. Furthermore, I also discuss how I have chosen to analyse the data collected, this will be linked to the section that focuses on the steps taken by the researcher to ensure validity and reliability of the whole process. How reflexive I was during the study will be discussed which will then be followed by ethical issues considered during the study. The chapter will be concluded with a discussion on challenges encountered during this research project.

### 3.2 Research strategy

Social research necessarily involves making choices with regards to the most suitable method to be used that will enable the researcher to collect rich data to answer the research questions. A research method is defined as "simply a technique for collecting data. It can involve a specific instrument, such as self-completion questionnaire or a structured interview schedule, or participant observation whereby the researcher listens to or watches others" (Bryman, 2008, p. 31). Harms-Ringdahl (2001) also defines a research method as a plan for an investigation while Kvale and Brinkmann (2009, p. 82), adopting the simple Greek definition, see it as a "way to a goal". Whether it is a technique for data collection, a plan for investigation or "way to a goal" all involve inherent ontological and epistemological assumptions. For the purposes of this study, I have engaged in the ontological position of constructionism which asserts that "social phenomena and their meaning are continually being accomplished by social order" (Bryman, 2008, p. 19). This implies that, social phenomena and realities are produced and achieved through a constant state of interaction and revision. Again the researcher's version or account of the social world (reality) can only be regarded a as construction rather than what is definitive. This is in

contrasts with what pertains in quantitative research which is based on objectivist ontological position which asserts that, social phenomena and their meanings have an existence that is independent of social actors (Bryman, 2008). This means that the social categories that we use in everyday discourse are separate from their actors, portraying reality as external and thus research is driven by theory. Constructionism however, impresses upon the social researcher to consider that social reality is an ongoing process being accomplished by the social actors rather than reality being seen as external. Since this study is aimed at constructing knowledge, I have sought to understand and explain how the visually impaired are included in secondary education since knowledge construction is an on-going process being accomplished by the social actors.

A qualitative research strategy was deemed appropriate in line with the study objectives based on interpretivist epistemological assumptions. Interpretivism according to Bryman (2008) "stresses on the understanding of the social world through an examination of the interpretation of that world by its participants" (p. 366). This is in line with what Berger and Luckmann (1967) state as:

... formulation of reality, whether they be scientific or philosophical or even mythological, do not exhaust what is 'real' for the members of the society. Since this is so, the sociology of knowledge must first of all concern itself with what people "know" as "reality" in their everyday non-or pre theoretical lives (p. 27).

It is in my prime interest as a social researcher to interact with the research participants, understand the world from their perspectives and together we construct knowledge as contained in the above citation since reality lies with the people. Social reality is therefore thought of as not constant but unstable, shifting and subject to the individual's interpretation. In order to understand the social world, I have therefore employed in this research project a philosophical assumption of phenomenology which Bryman (2008) considers as how people understand and construct meaning to concepts and experiences they go through in life. Connecting this study to a phenomenological philosophy points to my interest as a researcher to understanding social phenomena and describe the world as experienced by the research participants rather than my own experience and assumptions since the important reality is what people perceived it to be. Qualitative research methodology mentioned above with regards to interpretivist epistemological assumption, is a research strategy in social science which appreciates the use of words rather than numbers in interpreting and understanding of the social world (Bryman, 2008). This indicates that the researcher listens to the experiences of the research participants analyse them and then constructs knowledge. On the contrary, positivist ontology advocates the application of the

natural sciences to the study of social reality which entails that, only phenomena and hence knowledge confirmed by the senses can be genuinely warranted as knowledge (Bryman, 2008). As a social researcher applying the interpretivist tradition, this offers me the opportunity to observe the research participants in their natural setting that is the inclusive school which is very significant to this study. Gubrium and Holstein (1997) explain naturalism in the qualitative research paradigm as the act that seeks to understand social reality from research participants in their natural habitats. I have therefore taken an empathic position and tried to use underlying epistemological approach of qualitative research as noted in Lofland and Lofland (1995, p. 16) and cited in Bryman (2008, p. 385) which states that "... face-to-face reaction is the fullest condition of participating in the mind of another human being ... to acquire social knowledge." This I was able to do through interaction with the respondents in their natural setting during the field work.

In line with ontological and epistemological assumptions discussed above on knowledge construction, a qualitative research strategy was chosen as the most appropriate research methodology to address the concerns of the research goals. Placing a premium on naturalism, understanding and describing the world from the experiences of the participants' point of view are key preoccupations of qualitative methodology and of this project (Bryman, 2008; Patton, 2002). Having discussed the choice of research strategy used, I now turn my attention to the research site.

### 3.3 The research site and access

The study was conducted in a secondary school that runs an inclusive education programme for the visually impaired and the sighted students in southern part of Ghana. Students graduating from their basic education from schools for the blind in the country continue with their secondary school education in one of the schools where this research was conducted. This school in particular was chosen out of the lot that run inclusive education in the country and as one out of three with visually impaired students in relation to the aims and objectives of the study. The school in which the study was located has a teaching staff of 68 teachers, non-teaching staff of 29 comprising labourers and kitchen staff, and a student population of 1,800 children enrolled into various academic programmes. Of the 1,800 students, 78 are visually impaired comprising 47 girls and 31 boys forming a total of 4.33% of the school's population. The school is a boarding institution with residential facilities for students and bungalows that house some of the teaching staff.

Having spoken about the research site briefly above what then comes to mind is how one was able to gain access to the research site. As argued by Hammersley and Atkinson (2007) gaining access to a research site can be quite complex, difficult and time consuming. This implies that giving the go ahead and acceptance by those whose permission one needs before embarking on study of research can sometimes be challenging if the right means and people are not contacted. It is against this milieu that Cohen, Morrison, and Manion (2007) reiterated the importance of taking into account at the planning stages of a project how access is gained to the institution where a research is to be carried out. Thus, the acceptance by those whose permission is needed in order to carry on with a study is essential.

My first point of contact was the head of the arts department of the school whom I already knew and after explaining why I was there, he took me to the headmaster of the school. There I sought permission from the headmaster as the gatekeeper of the school after further explanations regarding the purpose of the study and series of questions which I answered. The official letter from Oslo and Akershus University College of Applied Sciences (HiOA) introducing me as student and requesting help as well as my student identity card played a significant role in granting permission by the headmaster of the school. Once permission was granted, I then consider the issue of sampling for the study. In the next section I discuss this in detail.

### 3.4 Sampling procedure and sample

Selecting a sample for a study forms an integral part of social research since this has a significant bearing on the final report of the research. Sampling is the technique of carefully selecting one's participants for a study in any research (Bryman, 2008). The sample for this project is the segment of the population that was selected for the study. Since generalization is not a goal of qualitative research as pertains in quantitative research with large sample size which represent the entire population (Bryman, 2008), purposive sampling technique was therefore used to select the sample for this study. The goal of purposive sampling as explained by Bryman (2008) "is to sample cases/participants in a strategic way, so that those sampled are relevant to the research questions that are being posted" (p. 415). This implies that, the researcher needs to be focused and clear minded on what criteria will be relevant for inclusion or exclusion in the selection process. Seeking to identify a small group of information rich participants in order to conduct an in-depth study on the few selected cases was one of the criterions used. This is to ensure that few of the participants selected are part of the inclusive education programme and are visually impaired students as well. The others are to sample teachers who

teach in the inclusive programme, sighted students who live in the same dormitories and also in the same class with the visually impaired students. The reason for using the above criteria in selecting the research participants who are involved in the inclusive programme in one way or other was to give them the opportunity to speak to the issues that the study is about. The above criteria had therefore influenced the researcher's decision to employ purposive sampling in the study. In view of the above explanations, I have carefully selected few respondents with the research questions in mind.

### 3.5 Sample size

The sample in any research, being it qualitative or quantitative, is a segment or subset of the population that is selected to be part of a study. Part of the sample is the teacher I personally know. He was sampled because he has been teaching the visually impaired students for several years, he is also the head of the art department which the visually impaired students belong to and a resource person. He is therefore considered as an information rich individual who will provide relevant information in the interest of the study. Participants consented to be part of the study after the purpose of the project was explained verbally to them and a consent form given in that regard (refer to appendix E for the consent form). Since this project is interested in information rich cases and a small sample size, data was collected from fifteen (15) participants comprising of three (3) teachers, seven (7) visually impaired students and five (5) non-visually impaired students as presented in the table below.

**Table of participants** 

Teachers	Visually impaired students		Non-visually impaired students	
	Boys	Girls	Boys	Girls
X	A	Е	Н	J
Y	В	F	I	K
Z	С	G		L
	D			

For the purposes of confidentiality and also to protect the participants, letters are used to represent the real names of those who took part in the study. Even though the table exhibited the gender of the students' participants, the focus of this study had no bearing on gender.

#### 3.6 Data collection methods

Choosing a suitable method for data collection can be considered as a fundamental thing a researcher has to deeply consider even before planning to undertake a research of any kind. As stated earlier this study is employing qualitative research strategy so, in line with the features of a qualitative research methodology data was collected through the use of observation of participants and semi-structured interviews. As indicated by Hammersley and Atkinson (2007), qualitative research often involves a combination of methods that examine data relating to the same phenomena through the use of various tools such as observation and interviews. More than one data collection method or technique was used in the field since these have the potential of allowing me to collect rich data. Bryman (2008) underscores the importance of using more than one means of collecting data when he reiterated that, no single source of data can offer a holistic understanding of an issue under study. This then implies that, use of various methods to collect data has the capability to build upon the strength of each other hence reducing the possibility of error and inaccurate reportage of field data by the researcher. This practice of using more than one data collection technique according to Bryman (2008) and Patton (2002) is referred to as triangulation in research methods. Besides reducing error in the field report, the different tools used have also enabled me to observe for myself as an outsider and interview the students on their relationship with each other as well as support given to them in the inclusive programme.

In the following section a focus and explanation on how observation was used to collect information in the field is presented.

### 3.6.1 Observation of participants

Observation can be understood as a process and a method of data collection in which the situation of interest is watched and the relevant facts, actions and behaviours are recorded. Since I consider this master thesis as learning process, learning through observation to be complemented thereafter with interviews enabled me to collect the necessary and needed data to answer the research questions.

Observation was therefore chosen as one of the means to collect data because it has the power to enlighten and give clearer picture and first-hand information about situations to the investigator than what people can say. This allowed me to immerse myself in the local setting to understand and contextualize better in order to discover things that might otherwise have been missed if interviews

alone were used to collect data (Denzin & Lincoln, 2011). An observation schedule was therefore prepared beforehand (refer to appendix A). Bryman (2008) gives a highlight of the observation schedule as a device that specifies the categories of behaviour that are to be observed. In line with Bryman's position, considerable time was used in preparing this to ensure that relevant areas of interest, for instance, how the non-visually impaired students relate with visually impaired students in various school gatherings were captured and included. Points captured in the observation schedule ranged from inter-personal relationships between the students, interaction with teachers, classroom organizations, teaching and learning materials and teaching methods. Also included in the observation schedule is the physical layout of the school. Even though it does not correlate with the behaviour pattern as specified by Bryman (2008), it is thus essential for me as a researcher to observe how the physical layout and road network in the school enhance or effect mobility of the visually impaired students. Nonetheless, there were some adjustments in the schedule for observation on the ground (in the school) since the reality lies with the people (Berger & Luckmann, 1967). These areas to a large extent are most of the core points that featured in the interview guides (see to appendices B, C and D) as these two data collection instruments were meant to complement each other according to the researcher's estimation. Direct behavioural observation along some of the above stated lines offered the researcher an explicit opportunity which allowed me to gather information live while taking notice of every bit of action for later scrutiny.

Things noted during the observation periods were factored into the actual interview with the respondents to understand their experiences and reasons for such notifications during observation. It was prudent for me to observe classroom situations on how the teachers communicate with their visually impaired students, teaching strategies, using of teaching and learning materials or otherwise to ensure better understanding of their students. In all, five classroom observations were made in which three lasted between 25minutes to 35 minutes and two lasted for 70 minutes each depending on the duration of the lesson. Observing a class with its related issues such as the atmosphere prevailing during the lesson, teaching method and way of relating to the students as well as interaction between the students coupled with my presence as a stranger in the class generated some tension in the first class I observed. This will be highlighted in the limitations of the study. Having noticed this, I tried as a researcher not to be too overt so as to avoid disrupting the class, but at the same time taking notice of as much information as possible. To avoid the disruption noticed in the earlier lesson observed, I employed a non-participant observation method in the subsequent lessons in which the researcher should play a passive role and encourage an obstructiveness enabling lessons to go on in their natural

classroom settings (Bryman, 2008). I also observed how the sighted students relate with their visually impaired counterparts outside the classroom. Observation also provided me with the opportunity to see learning resources that is teaching and learning materials available in the school. Students' dining sessions for both afternoon and the evening, weekend activities such as Saturday evening entertainment programmes were all observed in order to acquaint myself with what usually goes on in such meetings.

Use of observation as a data collection tool brought on board some challenges in the way some of the teachers and students conducted themselves knowing that they are being observed. I realized that some of them put up false behaviour in line with Merriam's (2009) notification when she writes, participants who know they are being observed would tend to behave in a socially acceptable way and present themselves in a favourable manner. For instance, teachers exaggerated their teaching methodologies knowing that a researcher was there taking notice of every bit of the lesson for which questions are likely to be asked during interviews. Through observation, I was able to complement the information that was gathered in the interviews.

#### 3.6.2 Semi-structured interview

One method commonly used by social researchers is the interview. Since the objectives of the study are to explore support and attitudes among students in the inclusive programme, the interview is considered as one of the means of getting answers to the research questions. This was chosen because reality is in the eyes of the people and through interviews the researcher will be able to access the reality and together with the research participants construct knowledge. Kvale and Brinkmann (2009) furnish us with an ideal definition of qualitative interviewing when they state that it is:

Based on the conversation of daily life and is a professional conversation; it is an inter-view, where knowledge is constructed in an inter-action between the interviewer and the interviewee. An interview is literally an *inter view*, an inter-change of views between two persons conversing about a theme of mutual interest (p. 2 emphasis original).

In a further explanation Mason (2002) maintains that the interview is an exchange of dialogue that involves one-on-one interaction between a researcher and the researched with a prime focus of knowledge construction and reconstruction. Thus, qualitative interviewing offers an informal platform and more open opportunities for both the researcher and the participants to engage in a discussion that is characterized with the use of terms and words that give meaning and interpretation to a situation in

an attempt to construct knowledge. This type of interviewing provides opportunities for probing and follow-up questions. This then helps the researcher to solicit for more specific information based on the aims and objectives for which the interviews are being conducted.

A semi-structured interview guide was prepared based on the research questions and observations done earlier. This enabled me to keep focus on the intended areas of interest during the interview process so as to maximize the use of the interview as part of the data collection toolkit and knowledge construction process. The semi-structured interview guide provided me the opportunity to get rich information through the use of open ended questions which offered the platform for changes to questions and answers from participants. As stated by Kvale and Brinkmann (2009) a semi-structured interview:

Seeks to obtain the descriptions of the life world of the interviewee with respect to interpreting the meaning of the described phenomena; it will have a sequence of themes to be covered, as well as some suggested questions. Yet at the same time there is openness to changes of sequence and forms of questions in order to follow up the specific answers given and the stories told by the subjects (p. 124).

Grounded on the above citation, flexibility was demonstrated during the interview process, but not without challenges as it calls for the researcher's professionalism and ingenuity confirming Kvale and Brinkmann's (2009, p. 17) conception of research interview "as a craft" since it does not follow any laid down rule or specific method. This ensured the flow of the interview process according to the stories told by the interviewees and the direction the interviewer was moderating the interviews.

By the choice of the participants, the interviews were conducted at various locations in the school for example, in the school's resource centre, dining hall, dormitories and classrooms after classes. Interviews were conducted in these places to ensure that participants felt at home since the above mentioned places are their natural surroundings as far as the school is concerned. Interviews lasted between 34 to 49 minutes. I created a friendly and relaxed atmosphere to ease tension and reduce power relations between the researched and the researcher as underscored by Scheyvens and Storey, (2003). In order to achieve this I made the introduction questions very simple, used the first few minutes to introduce myself and the purpose of the study as purely an academic exercise and learning process to the research participants. This was a deliberate ploy by the researcher to make the respondents feel at ease and free to speak to the issues, while I listened without being judgemental and

steered the affairs of the interviews. As a young researcher some of my experiences were inexperience in questioning and the temptation to as it were to suggest words for the interviewees in answering some of the questions, some of the respondents did not answer the questions as it was put calling on me to reframe the question in a different way in order to make them speak to the issues of interest to me. Sometimes I was tempted to interrupt while answers were being given to a question instead of exercising patience to allow the flow of the interview conversation. At other times I allowed for the flow of the conversation and revisited the point of interest. Interviews, however, got better towards the end of the fieldwork when I was becoming more experienced and confident in the field. A voice recorder was used to record the interviews with consent from the interviewees. This was done to enable me to be more focused on the interviews and to avoid taking notes at the same time.

After data had been collected, analysis was what followed. This I now turn my attention to and discussed in the next section of the chapter.

### 3.7 Analysis of data

The first step I took in analysing the data was to compile all the interviews and hand written notes from observations as well as field notes and type them into segments. A segment here implies a unit of text that contained information that can be understood even when taken and read out of context. I strived to adhere to Bryman's (2008) coding scheme on clear instructions which emphasized the point that, "coders should be clear about how to interpret what each dimension is about and what factors to take into account when assigning codes to each category. ... Coders should have little or no discretion in how to allocate codes to units of analysis" (p. 288). For example, some of the themes that emerged were; mobility on campus, water situations and teaching and learning materials. In addition, Patton and Patton (1990) describe the process of data analysis as the organization of what was collected into patterns and categories while looking for relationships and linkages among descriptive dimensions. With this in mind I then developed categories and coded them with clear instructions on how to interpret each code assigned.

Analysis of the collected data was done using mixed approach of interpretation and narrative analysis. Gall, Gall, and Borg (2009) elucidate interpretation analysis as the process of examining field data closely in order to find constructs, themes and patterns that could be used to describe and explain the phenomenon being studied. The phenomenon in this master thesis is the inclusion of the visually

impaired in secondary education. Narrative analysis as stated by Kvale and Brinkmann (2009) focuses on the relationship among students and the kind of support given to the visually impaired students in and outside the classroom. Using this analytic method allowed the experiences of visually impaired students in the inclusive programme to speak for them. I then organized emerging themes into subthemes and categories which enabled me to create a general map of thoughts that provided the basic structure for further analysis and interpretation all in an attempt to establish meaning of the data collected. Quotations from field notes and interviews were also used in the analysis process.

While interpreting the data from the field, I am conscious of my own preconceived opinions and presuppositions that might influence the final outcome of the study. Thus, how reliable and valid the knowledge constructed in this master thesis had been is the point of focus in the next section.

# 3.8 Validity and Reliability

Concepts of validity and reliability are very important in social research. Pervin (1984 as cited in Kyale & Brinkmann 2009, p. 246) noted that, validity pertains to the degree that a method investigates what it is intended to investigate, to "the extent to which our observations indeed reflect the phenomena or variables of interest to us." On the other hand Kvale and Brinkmann (2009) consider reliability as what "pertains to the consistency and trustworthiness of research findings; it is often treated in relation to the issue of whether a finding is reproducible at other times by other researchers" (p. 245). Nevertheless, (Thomas, 2009) advised researchers against placing "too much emphasis on reliability stifling creativity when conducting in-depth interviews" (p. 59). In order to ensure validity of the study in line with the research strategy, such as ontological and epistemological position I have employed in the study, a considerable amount of time was used to prepare an interview guide which contained questions capable of bringing out the relevant information to answer the research questions. By this, the research participants were given ample time to speak to the issues of interest since reality lies with them and the researcher only constructs knowledge by seeing through their mind and eyes. Maxwell (2002) describes descriptive validity as the factual accuracy of the account as reported by the researcher. Silverman (2004) argues for this to be the foundation upon which qualitative research is built which implies that the researcher should endeavour as much as possible to capture what he or she judges to be very important. Since much of the data collected are descriptions of how the visually impaired students are included in secondary education, a voice recorder was used to record the actual interviews. This act enhanced on how credible, valid and reliable the field data was which can greatly influence the final

result of the study. This actually helped to avoid mishearing, inaccurate reporting and misrepresentations of the answers provided by the respondents.

Usage of observations and interviews during data collection was another way of strengthening internal validity and reliability of the data collected for the study. Observation for instance brought on board that sight specific information sifting between what people say and what they do. While interviews and questionnaires can be conducted without direct observation of the social setting, "observations demand to some extent the physical displacement of the social context where the study is to be conducted" (Thomas 2009, p. 60) and in this case the school. This is a necessary condition in naturalism which according to Gubruim and Holstein (1997 cited in Bryman 2008, p. 367) "naturalism seeks to understand the social reality in its own terms; 'as it really is'; provides rich descriptions of people and interaction in a natural setting". Conducting the interviews in the school of the study where the participants live and their preferred places such as classrooms, dormitories and resource centre provided that natural setting which made the interviewees feel at home without any pressure to answer the questions I posed to them.

Researchers concede that they are subject to and engulf with biases and preconceptions that influence research process in various ways hence a reflection over the process. Reflexivity is my next point of consideration in the chapter.

# 3.9 Reflexivity

Bryman (2008) explained reflexivity as "a term used in research methodology to refer to reflectiveness among social researchers about the implications for the knowledge of the social world they generate of their methods, values, biases, decisions, and mere presence in the very situation they investigate" (p. 698). Thus a researcher must be "conscious of the self both as an enquirer and a learner" in the research process (Denzin & Lincoln, 2005, p. 210). This implies that in reflecting the researcher points out the objectivity of the research against his/her inevitable biases, pre conceptions and the role he/she plays during the research process. In other words a researcher enters the field fully conscious of his/her biases and tries to guard against them. The bottom line of the above explanation is that researchers have great roles to play with reference to the knowledge they seek to construct. This promotes self-awareness that participants as a practitioner and researcher is having on the research (Bryman, 2008).

Fieldwork is a very important part in any research and data collected have a high probability of influencing the knowledge produced at the end. It is necessary for me as a researcher to act without personal views, enter the field with clear conscience and remain emotionally detached throughout the process. This I have done through careful examination of the information provided by the research participants. Since reflexivity is spoken of Jankowski (2009) as being of three levels, self that is you, others and the rest of the world, I had to consistently bracket out my views as a special educator and interrogated the extent to which this was implicated in my findings. This I have done by being self-conscious and reflected critically at each stage of the process to ensure that participants' information collected was not misrepresented and distorted so as to avoid biases in reaching conclusions that I do not have clue or support for in my data.

With regards to the teacher I knew who was my first point of contact and later became a participant, I deeply reflected on the information I received from him and critically scrutinize them to sift any resemblance of self out to ensure valid and credible data. Even though in qualitative research, biases are inevitable, one needs to recognize biases and reduce it to the minimum.

Upon reflecting on how I conducted myself as researcher throughout the study period, in the next section the spotlight will be on ethical issues considered during the process.

#### 3.10 Ethical considerations

Ethical issues in relation to undertaking a research in the social sciences have become very important and raise a lot of concern especially when it involves privacy and information security (Kvale & Brinkmann, 2009). It is thus necessary to consider ethical issues from the very start of any investigation until the final report is out. Some philosophers tried to formulate a procedure that would become the basis for a universal consideration of going about ethics in research however, Aristotle (1994 cited in Kvale & Brinkmann 2009) argued that:

What is needed in order to be practically wise in moral matters is not scientific knowledge or ethical principles, but *phronesis* this he explained as "the ability to appraise and act upon particular situations in a way that is conducive to the creditable overall conduct of life" (p. 67 emphasis original).

This implies that, qualitative researchers should cultivate the ability to use their practical wisdom "phronesis" or skills to perceive, judge, contextualize methods of reasoning and give thick or rich ethical descriptions in order to be ethically proficient, rather than follow mechanical universal rules. Seeking consent from the gatekeepers of the research area as well as the respondents is one of the vital ethical considerations in social research.

Ethical considerations play a noteworthy role in research of any kind and the purpose of any investigation should be out of respect and focus on improving upon situations. It is thus necessary to consider ethical issues from the very start of an enquiry. Therefore as part of the ethical consideration in this project, I first of all contacted one teacher who led me to the headmaster of the institution of the study as the gatekeeper of the school where I sought permission to carry out the study. The written letter requesting access and assistance from Oslo and Akershus University College of Applied Sciences (HiOA) and my student identity card played significant role in this regard.

On the issue of seeking for an informed consent from the research participants Kvale and Brinkmann (2009) describe:

Informed consent entails informing the research participants about the overall purpose of the investigation and the main features of the design, as well as of any possible risks and benefits from participation in the research project. Informed consent further involves obtaining the voluntary participation of the people involved, and informing them of their right to withdraw from the study at any time (p. 70).

In a further explanation Bryman (2008) highlights this with a quote from the British Sociological Association (BSA) which states that "as far as possible the participation in a sociological research should be based on the freely given informed consent of those studied" (p. 121). I sought the consent of the participants in line with the above citations as it is my responsibility as social researcher to explain as fully as possible, and in meaningful terms to the participants the purpose of the research. Based on the explanations, the student participants consented verbally while the teachers signed a consent form to be part of this project.

Confidentiality and anonymity was an essential element on the research agenda which was followed throughout the entire research period. Confidentiality here implied that the researcher does neither publicize the raw data gathered nor the identity of the informants. Respect of the rights, dignity and

privacy of those involved in the study was highly respected and followed through. I strived for methodological transparency and sincerity in every step as the study progressed. In order to reduce power relations between the researcher and the researched, I approached each participant with respect and care and have reflected on every step I took.

To conclude the chapter on methodology employed during the project, I now discuss the challenges encountered whilst in the field.

### 3.11 Challenges

Whatever one does in life, there are bound to be challenges and this project is no exception. In the first place, getting sighted students to be part of the study was very challenging due to their sudden withdrawal. This was on the grounds that they were afraid since they cannot guarantee the fact that I was not working for the school administration for which if they say something they might be held responsible. This sudden decision and subsequent withdrawal of these students caused some initial inconvenience but was solved later when new set of sighted students agreed to be part of the study. This was after explanation regarding the purpose of the study and assurance was given that whatever information they give and their identity will not be disclosed to anybody. On the contrary, most of the visually impaired students interviewed were happy that someone from outside the school community had come to listen to their experiences.

Another challenge encountered was cancellation and changing of interview times by participants without prior notification to the meeting time, which was very disappointing since you have to wait for hours to interview the participants or go back and come another time at their convenience. As a result some of the interviews were conducted in the night leaving the researcher no other option than to take the risk of travelling in the night after staying all day in order not to disrupt the schedules of the participants.

The observer paradox highlighted under methodology posed a challenge to me on how to separate the exaggerations from the normal student's behaviour and teaching strategies. Since not too much time was spent on the field to actually get the usual/normal behaviour of both the teachers and the students, I was not able to deal with this to the best of my ability. Time is actually needed in this regard since people cannot pretend for too long. I suggest therefore that future researchers take this up and spend

more time on their participant observations in order to get their normal or true conduct in such situations.						

**CHAPTER FOUR: FINDINGS** 

#### 4.1 Introduction

This chapter presents findings from the study of an inclusive education programme in a secondary school in Ghana. The respondents in this study are students and teachers in an inclusive education programme in a high school. The study preceded under the framework where the visually impaired students are taught in the same classroom with their sighted colleagues and where they use other facilities together in their students' residence, since the school is a boarding institution with residential facilities.

The study aims to find answers to (a) the kind of support/assistance given to the visually impaired students during instructional hours and (b) how the relationship between the visually impaired students and their sighted counterparts are in the school? Findings are presented under five main sections namely; (1) general preparation of the school for the inclusive programme, (2) academic issues (teaching and learning), (3) relationships (experiences of being together), (4) mobility and (5) water situations in the school. The main sections have sub-sections with extracts of selected interviews presented in an attempt to provide an insight and clear detailed account of the findings.

### 4.2 The school

Before presenting the specifics of the findings it is important to present a brief background of the school where the study was carried out. The school was initially established in March, 1957 to educate sighted students in secondary education. However, an inclusive education programme was later introduced in 1970 as an experimental project to provide secondary education for the visually impaired students that successfully completed the junior high schools across the country. Since then, the school has been running the inclusive programme for persons with visual impairments. The school at the time of this study has a teaching staff of 68 and a student population of 1,800 with the visually impaired students numbering 78. The school is a mixed school with boarding facilities where the students live in their houses of residence. The students only travel or go to town under permission from their house masters/mistresses and also go home upon vacation. As part of the school's regulation, parents are allowed to visit their wards during visiting hours on the first Saturday of every month from 2:30 pm to 5:00 pm. There have been some initial preparations towards the implementation and running of the

inclusive programme, these I turn my attention to in the next section.

### 4.3 General preparation of the school towards the inclusive programme

Prior to the introduction and take off of the inclusive programme the school administration made some preparations towards the implementation and running of the programme, since the school was not initially meant for inclusive education from its establishment in March, 1957. For example, reallocation of classrooms, installation of a siren and a plant (generator), education and awareness creation, preparation of staff and building of a resource centre for the visually impaired students.

As part of preparation classrooms were reallocated thus, arts classrooms for the visually impaired students, which were initially at the top floors, were moved to the ground floor for easy accessibility by the visually impaired students since there are no elevators. Classrooms for other subjects such as the sciences for the sighted students were moved from the ground floor to the first, second and third floors. Also a siren was installed to replace a hand bell as means of calling students for school gatherings. It was programmed such that it has different sounds for different occasions for example, morning assembly, dining hall and "lights out", that is when all students are to go to bed and rise the following morning. Students are educated on what a particular sound means. This I was told by teacher Z that it was particularly installed to cater for the visually impaired students who rely significantly on their sense of hearing in order to comply with the messages the hand bell used to communicate. Another important thing that was done is the installation of a generator (plant) to serve as a back-up and alternative source of energy for use by students and the rest of the school community when electricity from the national grid is off. One might question the importance of light to persons with visual impairment who do not rely on light for their studies? The place where the study was carried out is an inclusive school and one should be cognizant of the fact that other sighted and low vision students need the light for their studies and other activities. Besides that the light is also needed for safety and security reasons especially in the night by the whole school community. Education through awareness creation in the school was also done this I now present.

#### 4.3.1 Awareness creation

Freire (1996) contends that education brings about enlightenment. I am of the view that education of the entire school community by the school authority and especially the sighted students on the

potentials and capabilities of the visually impaired as well as how to relate and help them can be crucial to the success of the inclusive programme, since through it they will be enlightened about the programme. It is against this backdrop that Ilon (2002) argues that no educational strategy can be effective and sustainable without taking local contexts into consideration which has to do with materials and human resources. Sharing similar sentiments Tucker, (1999, p. 6) writes "programmes in which recipients are merely objects will always be perceived as alien and will be resisted." It is the view of this study that when the beneficiary community members, thus the school, are involved right from the planning to the implementation stages, there may be the likelihood of feeling of "authorship and ownership" of the programme and the tendency of ensuring the success or its workability will have a high probability than when they feel side-lined in the whole process. It is against this milieu and the willingness of the school administration to bring everyone on board that they erect at the entrance of the school a signpost with the inscription "Drive Carefully, Blind Students are on Campus" warning motorist and people coming to the school. This was done on the one hand as a means of creating awareness and educating strangers and visitors coming to the school especially for the first time according to teacher X and on the other hand as a means of protecting the students in general and the visually impaired ones in particular from careless driving. This serves a vital purpose as it warns drivers about the speed limit in the school compound. One climbs a hill when entering the school so naturally some drivers may want to speed up the hill which can be dangerous for the students especially the visually impaired ones.

A visually impaired student D gave a personal experience to emphasize the importance of the notice at the entrance of the school. According to him one day he was walking on the road and suddenly heard the sound of a vehicle approaching, confused as he was and not knowing exactly what to do he stood still in the middle of the road, but the driver shouted "go to your left" which he did and the driver drove past him at the right. If the driver were to be "speeding having ignored the warning on the signpost it would have been a different story so that notice is really helpful" (Student D) concluded. Teacher Y complained about the way some motorist drive in the school which is of great concern to the school authority even though the signpost is there to create that awareness. He commented "one can just imagine what a visually impaired person who has difficulty in moving about already will do upon hearing the sound of a vehicle approaching" (Teacher Y). According to him, some car owners do packed their vehicles at wrong places instead of the car park which affect visually impaired students when they unknowingly bump into these packed cars. He remarked that "such unfortunate occurrences are not really helping the situation" but the school authorities are taking measures to check such

unpleasant occurrences.

Among the students I found out that awareness creation has not been intensified since it is only done during the school's orientation, organized for new students at the beginning of every academic year. The awareness creation consists of resource persons giving talk on the causes of impairment and how the rest of the students should freely help the visually impaired among them. There was a further corroboration by a sighted student H when he shared his experience. According to him the resource persons gave a talk on possible causes of impairments during last year's orientation in which they emphasized on the non-contagious nature of impairments, thus encouraging sighted students to offer the needed assistance to the visually impaired among them without hesitation. The student added:

After the talk during orientation there had not been any education of how we should relate with and help the visually impaired students in the school. I have never had any close interaction with persons with impairment before coming to meet them here in the school. It is quite difficult for me to open up and willingly help. I believe it is only through regular education that there can be some change (Student H interviewed in July, 2011).

He conversely held the view that fun games, quiz competitions and debates in which visually impaired students are part of the contestants could be used as avenues and thus organized intermittently as part of the awareness creation campaign. He concluded that "visually impaired students had some form of fun games somewhere last term on the school field, but due to lack of education it was poorly publicized and attended by the sighted students" (student H). On the subject of whether the students have some experience with persons with disability before coming to the school, a sighted student J replied on the negative. She then said:

If I had known they are here I will not come to this school because I fear them thinking anyone who associates him/herself with them will also become disabled. We were told all kinds of stories about such people, for example, they have bad spirits and come from wicked family backgrounds and so if you are associating yourself with them they can harm you. These stories really put fear in me but the little education I have that disability is not contagious, come as a result of diseases and accidents and also that one could become disabled at any age through no fault of his or hers has settled my mind and take away that initial fear and impression I have about them (Student J interviewed in July, 2011).

Teacher Z responding to a question on awareness creation among the students said education has usually been incorporated into the general orientation of all fresh students at the beginning of every academic year by the school administration. She enlightened further that:

We talk to students on the causes of disability, for example, before birth that is some people were born disabled, after birth and this can be through diseases and accidents. We explained to them that impairments are not contagious and that they should empathize with the impaired students and help them. We also educate them on superstitious beliefs about impairments that impaired persons are full of bad luck and association with them will affect their lives (Teacher Z interviewed in July, 2011).

Information given to students during the orientation is appropriate, straight forward and touched on the core issues in the opinion of the study participants nonetheless; it shows clearly that such education among the students is not done on a regular basis. Since it appears that it is only through the annual orientation for new students that education of this nature is given. The visually impaired students themselves are encouraged to make friends with the sighted students who they will rely on for help in times of need.

The staff, both the teaching and non-teaching, was taken through an in-service training and workshop by the school management as part of the awareness creation crusade for the smooth take-off and running of the inclusive programme. Teacher X explained that preparation of the staff was necessary to put them in a position where they will be able to help, relate to and handle issues that concern persons with visual impairment in the school.

Preparation of the teaching staff was carried out in a one week in service training course under the theme "educating the special needs child" in which a resource person was invited. All the teaching staff were part of the course since not all of the teachers in the school were trained as special educators. Some of the activities the teachers were taken through according to teacher Y include, helping the visually impaired child in and outside the classroom. In a further explanation he said "some of the teachers were blindfolded while others served as their guide. This particular activity was mounted for the teachers to empathize with the condition of the visually impaired students" (Teacher Y). Teaching methods and skills to be used in class were also part of the training course. The teacher gave a hint that a proposal had been made by the school administration on staff recruitment to the arts department of the school, the subjects the visually impaired students do at the moment, and since no other materials and equipment that will enable them do the sciences in particular are available in the school. According to teacher Y "teachers who were trained as special educators in their first degree will only be considered for appointment." In the department of arts, at the time of this study, not all teachers were trained as special educators. It is deemed necessary that such courses are organized to keep the teachers

abreast with current issues concerning persons with visual impairment in the school.

The non-teaching staff is comprised of labourers and kitchen staff. The labourers are a group of workers that weed the compound and trim the hedges whenever they are bushy, distil chocked gutters, collect firewood with the school truck for the kitchen as a buck-up for use when the Liquefied Petroleum Gas (LPG) runs out. Their kitchen complements include the matrons, kitchen women and the pantry men who prepare food for the students. The pantry men are responsible for serving the food, cleaning the tables and washing of bowls. It was found out that, the non-teaching staff was also taken through in-service training on how to guide and offer assistance to the visually impaired in the school as an initial preparation for the take-off of the programme. However, what is lacking at the moment is the periodic education through awareness creation to ensure that the new members are informed with current issues with regards to the visually impaired in the school. A resource centre was also built to boost teaching and learning in the inclusive programme this I turn my attention to in the next section.

#### 4.3.2 Resource centre

A resource centre in this thesis refers to a learning centre built in 2003 by the school administration for the visually impaired students, as a means of improving their learning conditions in the school. From my observation the centre is situated just few metres from the classroom blocks making accessibility by persons with visual impairment quite easy. The centre has a hall with furniture where the visually impaired students do their private evening studies and write both their internal and external examinations. The only Braille embosser<sup>1</sup> which the school has is in one of the rooms where Braille materials are produced both for lessons and examinations. According to teacher X who doubled as a resource person and a teacher, the embosser breaks down very often due to old age. It is only repaired in Accra the nation's capital which takes a couple of weeks to be brought back. In the absence of the embosser, the teacher remarked "we have an additional work-load with regards to manually preparing some of these Braille materials for students to use during lessons" (Teacher X). A store room, an office for the resource persons and computer laboratory are all part of the centre; nonetheless, I observed that in the computer laboratory, not even a single functional computer is present. In the store room Braille writing machines such as Perkins and Hand frames that belong to the school are kept with Braille papers which are only given out to the students for use during examinations.

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<sup>&</sup>lt;sup>1</sup> Embosser is the machine used to produce and or photocopy (thermo-form) Braille materials for lessons and examinations.

Having discussed the general preparation by the school for the inclusive programme, I now present the findings on teaching and learning in the school.

### 4.4 Academic issues - teaching and learning

Teaching and learning can be said to be the bedrock of educational institutions and the secondary school where the study was conducted is of no exception. Before I present the findings on teaching and learning in the school, I first of all describe the teaching time table to give a clear picture of what goes on in the school as far as managing instructional time is concerned. The school's teaching time table was structured such that, classes begin at 7:50 am every morning and close at 2:00 pm in the afternoon throughout the week. By this eight periods are done daily with one period lasting 40 minutes. There are two breaks for each day, the first one is a 20 minute one from 9:10 am to 9:30 am where students go for their breakfast and the second one lasts for 30 minutes starting from 12:10 pm to 12:40 pm. It was observed that during classes, there is total tranquillity over the whole school atmosphere and scarcely will you see a student outside.

Subjects offered in the school include business, arts and the sciences. These I now consider in the next segment.

# 4.4.1 Subjects taught

Students are admitted into the school to study any subject of their choice, yet, the findings showed that the visually impaired students only do the arts option from the first year to the final year where they write the final West African Secondary Schools Certificate Examinations (WASSCE). The subjects that made up the arts option include English Language, Social Studies, History, Literature, Government, Religious and Moral Education (RME) and one of the three Ghanaian Languages (Twi, Ewe and Ga) taught in the school. This shows that the visually impaired students do not do the science subjects which some of them expressed the desire to do as shown in the response from a visually impaired student D:

Subjects such as Science comprising Biology, Chemistry, Physics, Integrated Science and Mathematics we do not do it. This is not because of our inability sir, but it has to do with

carrying out of experiments, mixing of chemicals, drawing and labelling and reading of diagrams which rely solely on the sense of sight which we lack. In addition I can say facilities such as computers and books on tape that will help us, the visually impaired to do other subjects such as the sciences effectively are not available in the school at the moment (Student D interviewed in July, 2011).

From the perspective of the teachers, teacher Y explained that, some of the visually impaired students are brilliant and could have been enrolled in the science programmes as some of them wanted to, but their condition made it such that they are unable to do it since learning as a whole and doing the sciences in particular rely significantly on the sense of sight, which they are having challenges with. He made the point that "teaching and learning materials and other facilities such as computers, magnification tools and books on tape that could have been used to help them to do other subjects, for example, the sciences effectively and efficiently are not available in the school at the moment" (Teacher Y). He expressed optimism that in the future they will be in position to offer the sciences to all students regardless of their physical conditions as soon as they get the equipment to do such subjects.

Moving away from the subjects the visually impaired students do, I turn my attention to class organization since good class organization can enhance effective teaching. How this is done in the school of the study is presented in the next section.

### 4.4.2 Class organization

Classroom blocks are situated at a particular location not too far from where the school administration is located. Some of the classroom blocks are multiple storey-buildings with doors and louver blades well fixed with light in all the classrooms for students to use especially during evening study times. The physical layouts of the classrooms are like any ordinary class where the furniture is arranged in rows with spaces between each row for easy passage by both students and teachers. Boys and girls are mixed up in the sitting arrangement. Where a student is seated in class can either affect the student positively or negatively in terms of hearing and this could further affect the student's output of work. Premised on the above assertion, a response from sighted student H indicated that a place of sitting in class is the choice of the student but, "teachers have the right to change your place of sitting if it becomes evident that you are sitting close to your friend and have not been paying attention during lessons" (Student H).

In all the classes I visited, I observed that visually impaired students are seated in the front rows.

Attempts to find out why the visually impaired students are sitting in the front rows similar reasons were given. Three visually impaired students D, F and G explained that, they prefer to sit in front of the class in order to avoid moving through a number of desks to the back since they may not know when the class arrangement will be disorganized for group discussion by their sighted mates during evening studies. Since the visually impaired always have their evening studies at the resource centre, they may not know and just bump into the furniture. Another reason given with regards to sitting in front was to enable them hear the teacher clearly and draw his/her attention when faced with some difficulties since the teacher usually stands in front while teaching, sitting close to him/her will help.

One visually impaired student E who sat near the window explained that, she is a low vision student who is placed there by the teacher because she needed enough light to be able to see with her residual vision<sup>2</sup>. When asked whether she can read print with her residual vision, she answered in the affirmative, but added with enough light and only when the font size is magnified using a hand held magnifying glass.

Giving her comments, teacher Z mentioned that she intended to "place the visually impaired students next to a sighted, clever and fast learner so that there will be peer support and assistance from the sighted student since they need to interact with each other by so doing they know each other better" (Teacher Z). Arguing further for her intentions she explained that, it is more time consuming for a teacher to do everything for the visually impaired learner especially when there are many such learners in class and one has to keep to the teaching schedule. She was however quick to add that, "where students are sitting at present was their own choice". Visually impaired students sitting in the front rows is to enable them draw the teacher's attention when in need, they learn mostly through hearing and touching of objects.

Ocloo (2002) contends that teachers at any level of education need some form of preparation before going to class. In this perspective, how teachers in the inclusive programme prepare before going to class is the next stage of my focus in the presentation.

### 4.4.3 Preparation for classes

<sup>&</sup>lt;sup>2</sup> Residual vision is the amount of vision left after a greater percentage has been affected by diseases (Ocloo, 2002).

As a teacher myself, I am aware that teachers do prepare before going to teach a lesson of any kind. On how the teachers in the inclusive education prepare themselves before going to classes, teacher X shared what he does. According to him, he prepares well in advance before going to class considering the group of students he teaches who have different learning abilities. For example; he pre-recorded lessons and also Brailed portions of the passage for the visually impaired students since they do not have Braille textbooks in order to meet his students' expectation. So even if there are no books on tape, teachers attempt to do things to support their students. The teacher explained further when he stated:

Visually impaired learners are special group of students and thus have different learning needs. Those with low vision and can learn just as the sighted students if prints are magnified for them and writings on the chalkboard are boldly written. The other group is the totally blind students, who only learn by hearing and through touching of objects. They use Braille as their only means of written communication. Knowing the challenges and factoring them into the lesson is important to addressing the needs of all categories of my learners (Teacher X interviewed in August, 2011).

Teaching methods used by teachers are not specific for any teaching situation but depends largely on the topic under discussion even in an inclusive school where the study was carried out. In the next section I present findings on teaching methods.

### 4.4.4 Teaching methods

Teaching in this thesis will be considered as the process in which there is an interaction between pupils/students and a teacher who plays a facilitating role in discussing a particular concept or topic. Methods used in teaching a particular topic depend largely on the teacher's strategy and technique, his or her objectives as well as the learning needs of the learners. In view of these I argue that, teaching can be regarded as an act which plays significantly on how the actor (teacher) goes about it with the needs of his/her students in mind.

In relation to teaching methods the focus was on the kind of support given to the visually impaired during instructional hours and how teachers use various methods that encouraged and enabled visually impaired students to actively participate in the lessons and benefit just as their sighted counterparts. I observed that teachers tried to use various teaching techniques and methods such as verbalization, group work and use of real objects sometimes depending upon the topic to help their students understand them in class. These manifests in what teacher Y does during lessons to ensure that both the

visually impaired and the sighted students benefit in class as he explained:

In the first place you as a teacher you have to exercise patience and restraint especially for the visually impaired students since they lack the sense of sight which contributes monumentally in learning. In view of that, I do a lot of verbalization that is I mention new words; spell them out for the visually impaired students to hear while I write boldly on the chalkboard for the low vision and the sighted students (Teacher Y interviewed in August, 2011).

When asked whether he does this all the time he clarified that:

No, sometimes I use real objects depending on the topic, for example, a topic like musical instruments in Religious and Moral Education (RME), I bring various musical instruments such as the flute, xylophone, castanet, atumpani<sup>3</sup> (talking drums) and horns used in traditional festivals and let the visually impaired students feel these objects to have first-hand information about them and also to form a concrete concept of things that we discuss. At other times I organize group discussions among the students which I supervise to explain key concepts and terms to the visually impaired students (Teacher Y interviewed in August, 2011).

From teacher Y's clarification on his teaching methods three different strategies namely; use of real objects, verbalization and group discussions where necessary are sometimes used in his lessons all in an effort to help his students understand him. Prior to the interviews, I observed teacher X during an English comprehension class where he used the group discussion strategy. The students were mixed up in groups thus the visually impaired and the sighted together which caters for all the different groups of learners in his class. A response to a question on what he does to encourage peer support among the students, teacher X explained:

Even though I sometimes supervise group discussions in class, I also give group assignments which demands that the students assign roles to one another in the groups as they work together. This enables them to interact among themselves, help and support each other, they also develop spirit of cooperation and the roles each of them play in the groups help build self-confidence in them. I always make sure that the visually impaired are mixed with the sighted students (Teacher X interviewed in August, 2011).

It appears you spent much time doing all the explanations and supervisions of the groups alone which I think you should use some of the peers as a support to others, I asked as a follow-up question. To this the teacher elucidated:

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<sup>&</sup>lt;sup>3</sup> Atumpani (talking drums) is a set of twin drums played together usually by traditionalist to send messages or call people to the chief's palace especially during emergencies.

Yes I spent much time on the new words and also in monitoring the groups as you have observed. But it's not always I tried to give the opportunity to the students to help each other and play roles as I give them the group assignments. For example, last two weeks we used the whole period doing group presentations in which every member of the group has a task to perform even though the time given to each group was short. This offers them the chance to interact among themselves, develop spirit of self-confidence and collaboration. I know that I cannot do everything for the student that is why I always encourage them to be of assistance to one another (Teacher X interviewed in August, 2011).

A question on how they adapt the learning environment to help the learners, teacher Z remarked "what else can we do, we are doing our best. The materials are not available." Students' perception of the teaching methods forms the basis of the presentation in the subsequent section.

# 4.5 Students perception of teaching methods

How students conceptualized their teachers' teaching strategies showed some discrepancies among the two groups of learners that is the visually impaired and the sighted students. I first present the perspective from the visually impaired students which will then be followed by that of the sighted.

# 4.5.1 Visually impaired students' perception of the teaching methods/strategies

There were diverging views about the teachers' method of teaching from the visually impaired students. While some of the students applauded the efforts being made by their teachers with regards to teaching, others were critical of some of them. On the one hand, two students B and D gave a positive assessment of the teachers' way of teaching. Student D in his comments praised the teachers when he said:

Our teachers exercise patience for us especially when writing notes, they give verbal description of things and use real objects to illustrate points and examples they cite during lessons sometimes to ensure that we understand the concepts. Even in group assignments we are grouped with the sighted students which have been helping us a lot. We learn many things from the sighted students during the group work and discussions (Student D interviewed in August, 2011).

### Student B went on to say that:

Most of our teachers spell out new words to our hearing as they write them on the chalkboard for other students. They try to encourage our peers especially the sighted to give us support by

that we are always grouped together with them since the teacher alone cannot do everything for us (Student B interviewed in August, 2011).

On the other hand, students C and G were critical of their teachers' method of teaching. According to student C:

Some of the teachers, especially the new ones, do not know much about how to teach the visually impaired students. They teach as though they are teaching only the sighted and calling for their attention does not change anything. Using phrases such as 'what does the picture say' or 'can you see the difference on the chalkboard' are sometimes embarrassing to us. This clearly shows that the teacher is only addressing the sighted students. What about us? (Student C interviewed in August, 2011).

Students G also complained bitterly stating that:

Since our mode of writing is slower than that of the sighted students, a little patient and attention given to us, the visually impaired, during the course of teaching and note writing will help a lot. We are different in the way we understand and write I am a slow writer. I don't want to mention names here sir. We are really struggling to cope with our seeing colleagues. Why? The system here favours them in all aspect, for example, they have all their books and we, the visually impaired, do not have any and when you go to class too our expectations are not met. I consider this as a challenge we have to bare and go through the system with (Student G interviewed in August, 2011).

When asked if she had made complaint to the resource persons she said "yes but things have not changed" (Student G). This criticism appears to be frustration that the students have been going through in the school.

### 4.5.2 Sighted students' perception of the teaching methods/strategies

Out of five students interviewed, two gave positive accounts while the rest were critical of the teaching methods. One of the two students who gave positive accounts, students K illuminated that their teachers try to make the lessons simple and concrete through the use of improvised teaching and learning materials as well as using real objects sometimes. Use of teaching and learning materials helps them to have first-hand information and a better understanding of the concepts. Comments by student 'I' suggested that teachers move slowly due to difficulty some of them faced in making the visually impaired students understand a concept at once. He said "I think the teachers are doing their best to help us the students and so they must be applauded" (Student I).

Nonetheless, student H one of the three students who were not satisfied with the teaching methods said:

Teachers have been spending too much time on the visually impaired students resulting in our inability to cover much of the teaching syllabus for the term. Even though we are given quite a number of group assignments in which we have been working together in which we assist the visually impaired students. For instance, spelling every new word and writing them on the chalkboard. Some of these words we can write them ourselves or look for the correct spelling in the dictionary. I think their resource persons should organize remedial classes for them so that we can move a little bit faster (Student H interviewed in July, 2011).

On whether the visually impaired students should not be helped, the student agreed when he stated "the visually impaired students need to be helped and we have been doing this especially during group assignments but there should be other alternatives such as remedial classes by their resource persons" (Student H).

By way of inference from the students' position, some of the teachers spend time trying to make the visually impaired students understand the concepts resulting in the slow coverage of the syllabus (teaching plan). The proposal from the student to use remedial classes as a platform of giving help to the visually impaired students could imply extra work for the resource persons and it also goes against the idea of inclusive education. Resource persons play very important role in the school of study in the next section I focus on them.

#### 4.6 Resource persons

In this study, resource persons are regarded as teachers who were trained as special educators and are put in charge of the resource centre to be directly involved with students who are visually impaired in the school. At the time of this study, there were only three resource persons in charge of 78 visually impaired students in the school. I discovered that as part of their work schedule, the three resource persons transcribe all the work from Braille to print and vice versa of the 78 visually impaired students which include class exercises, assignments, tests and examinations for other teachers who cannot read Braille to be able to mark. It therefore means that if other teachers give assignments, class test and exercises, they first send them to the resource persons who transcribe the work from Braille to print before the other teachers mark. This also implies that, the early release of all results from any written work of the visually impaired students depends on how fast or slow the resource persons are able to

transcribe the Braille into print for the other teachers to mark. In addition the resource persons also produce learning materials for themselves and other teachers for use during lessons. Besides that, they are not detached teachers, but teach other subjects and students in addition to their resource work. In my effort to find how early or promptly the visually impaired students receive their marked scripts, student F stated:

Usually the sighted do receive their work before us. Sometimes when it is kept too long, we do remind the teacher in question and the only excuse they give is we have been given the transcribed version few days ago by your resource persons and it will soon be ready. It's frustrating, just because while the sighted have received theirs long ago and have gone through them we are yet to get ours. You cannot blame the resource persons too; they are really working under pressure because they are not many (Student F interviewed in July, 2011).

An earlier suggestion by a student that remedial classes be organized by the resource persons for the visually impaired students as a means of helping them will therefore mean additional work for them depending on their job description enumerated above as well as student F's account in consideration to their number. Materials used during lessons contribute significantly to the understanding of concepts this I now turn my attention to.

# 4.7 Teaching and learning materials

This study considers teaching and learning materials as educational materials teachers use during lessons to support a specific learning aspect which contribute to the understanding of learners. It is of prime importance for this study to find out the support given to the visually impaired students during lessons. Nonetheless, I discovered that teaching and learning materials for the visually impaired in the school are virtually absent. Teacher Y shared his views on the materials he has been using to teach the visually impaired students in class:

I use cassette recorders to pre-record lessons which I use in literature and English comprehension lessons. I sometimes use real objects depending on the topic and also Braille portions of the passage for the visually impaired students since they do not have textbooks in Braille. This serves as materials they lay their hands on and use during the lesson while their sighted colleagues use their textbooks. Even after the lesson, they can use it and revise on their own since they have the materials with them. You see, I do all these for lack of Braille textbooks, writing materials such as Perkins Braillers and teaching and learning materials. Only few of our students have the Perkins Brailler due to its expensive nature. Such students are the lucky ones whose parents could afford one or were helped by some philanthropist or Non-Governmental Organizations (NGOs). Even though the government provides four of the Perkins

and some packets of Braille sheets every year, they are not enough for the students since most of the Perkins Braillers are broken down. These materials we reserve and use during examinations as a means of compensating students who have been using their own Braille sheets for exercises throughout the term (Teacher Y interviewed in August, 2011).

Due to lack of teaching and learning materials the teacher does three things namely; pre-recording of lessons, using real objects and Brailing portions of the passages in order to make the lessons beneficial to his students.

In the school where the study was conducted, I found out that there are no Braille textbooks for the visually impaired students to use as noted by teacher Y above but a lot of textbooks for the sighted students. On why the sighted students have their books and the visually impaired do not have theirs, teacher Y explained "it is the government that provides the books for the students". This raised a question; why are the materials for the visually impaired students not provided for? Textbooks are provided for students in all government schools throughout the country by the government. Persons with visual impairment are in the government school as well but do not have any textbook in Braille for use in the school. In teacher Y's words:

Writing materials for the blind such as Perkins Braillers and Hand frames<sup>4</sup> are very expensive for parents/guardians of these students to purchase. Only few parents can buy one Perkins Brailler at a cost of GH¢ 1,500 Ghana cedis (\$ 766.20). Just a handful of the visually impaired students have the Perkins Braillers. This is clearly unacceptable since everyone deserve the right to benefit from education. I consider this as exclusion from education since those who cannot buy will miss a lot. Majority of the Perkins are broken down and the school lacks fund for maintenance work (Teacher Y interviewed in August, 2011).

Concerning why the materials of the visually impaired students are so expensive, teacher Y further explained that, "their materials are imported into the country for example, from Germany. Local companies who could go into this area do not find it cost effective since just few people of this group are in school." Even though the government provides four Perkins and other materials for the visually impaired on yearly basis according to the teacher, it is not enough to meet the increasing number of the students admitted yearly. On how the few they have are used, the teacher elucidated:

We give those in good condition to the final year students since they are preparing to write their

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<sup>&</sup>lt;sup>4</sup> Hand frames are writing materials used by persons with visual impairment in which the braille sheet is inserted into the frame where stylus is used to emboss the dots through the frame during the writing. After writing the frame is opened and the braille sheet removed for one to read the braille or what is written.

final examinations so that they will become conversant with their use before the time of their assessment. As a result only few are left which are reserved for students use during examinations. Cost of maintenance is another problem for us; many of them are broken and are out of use (Teacher Y interviewed in August, 2011).

Findings from the visually impaired students corroborated what their teachers said relating to the lack of and the expensive nature of the writing materials. During my enquiry it became clear that the school has a total of 22 Perkins Braillers out of which 19 are either broken down or faulty with only 3 in good conditions. This shows that 75 of the 78 visually impaired are without the Perkins Braillers. Two visually impaired students C and G shared their views. Student G pointed out:

The sighted students use textbooks that we do not have in Braille but, need to buy so they could read for us to transcribe into Braille before using. The Perkins Brailler that we use in writing are very expensive, I do not have one because my parents could not buy it for me. I understand more than ten of the Perkins Braillers are spoilt. If the spoilt ones are repaired it may not solve the problem but it will be better than it is now (Student G interviewed in August, 2011).

The other student C complained of his failure to borrow one of the Perkins from the school authorities:

I have attempted on three different occasions to borrow one of the Perkins Brailler in the resource centre for use and hand it over at the end of the term, but was not successful. The explanation given by the resource persons was a number of them are not in good condition and besides that a lot of students have been requesting for them. Priority is given to the seniors when it comes to the Perkins and the few in good condition are only released for our use during examinations (Student C interviewed in August, 2011).

The impression created by the school authorities suggested that they are carefully and wisely managing the very few educational materials they have for the visually impaired to keep the system running. This is obvious since the school is under resourced on the one hand when it comes to the provision of materials for the visually impaired and on the other hand due to of lack funds for maintenance. Thus they give priority to the final year students and are thereby denying the other students the opportunity of borrowing the few left for use. Nonetheless, the Perkins Braillers that are in good condition are released for students' use during examination but not all the students get them due to the very small number hence some still use the hand frame during examinations.

Other educational materials such as books on tapes, magnification tools for example, hand held

magnifying glasses and computers with JAWS<sup>5</sup> screen reading and magnification software that will read aloud and magnify what is on the computer screen to the low vision person or the visually impaired student are not available in the school. However, a visit to the science resource centre in the science department revealed that the sighted students have a well-furnished and functional computer laboratory which they use for their ICT lessons. Since we live in a world of ICT, I asked a visually impaired student B how they feel without acquiring any knowledge in computing. He responded:

This is a great worry for us we will complete and live just as we came. When people talk about ICT we cannot make any contribution because even the basic skill you do not have. If we do not have the opportunity here sir, where else are we going to have the opportunity. Computers that the sighted use they can install our programmes on some of them for our use but I do not know why they have not done this. We are in the same school others have the chance but we do not (Student B interviewed in August, 2011).

Having presented findings on teaching and learning materials, in the following section I focus my attention on the interactions among the students in class.

## 4.8 Interactions among students in class

My observation of the inclusive classes showed that the atmosphere that prevailed and interactions among students during lessons had been friendly. For example, both groups of students laugh over issues and were working together in groups during literature lessons. Contrary to my observation, an interview with a visually impaired student A rather revealed a mixed attitude among students in class. The student replied:

Some of the sighted students have been tolerant and do interact with us well in class and in doing group assignments. At other times they feel we, the visually impaired students, are wasting their time when the teacher has to spend some time to explain things in detail for us so that we can understand the concept at once. They will start making noise in the background when we are asking or answering questions. For example, one day during literature class one of the visually impaired student was trying to have a better understanding from the teacher. This does not go down well with some sighted students prompting them to pass a comment that he asked too many questions (Student A interviewed in July, 2011).

The student's remarks showed some element of intolerance among the students contradicting my observation of the class as being friendly. This could have been an observer paradox spoken about in

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<sup>&</sup>lt;sup>5</sup> JAWS are computer software that gives powerful access to computer applications via speech and Braille while working with other Microsoft applications (www.freedomscientific.com).

chapter three. Another visually impaired student B gave his experience when he said:

As for negative remarks from colleagues in class is everywhere so I do not consider such statements, but focus on the lessons and discussions arising as well as contributions from other members. Situations in class are not too bad, classes are mostly lively and one is free to ask questions provided they are reasonable and within context. Teacher's authority and control over the class keeps the lesson going. It is a good experience in the inclusive system, you learn a lot from the sighted colleagues especially during group assignments unlike the segregated system we went through at the school for the blind (Student B interviewed in July, 2011).

The interactions in class from a sighted student K were that they have being trying to work together and tolerate one another but since they are different people in the class, sometimes there are disagreements over issues which she thinks it's normal. When asked about comments over time wasting by the visually impaired students by some of the sighted students, she replied "as for that its true, teachers have to take their time and this makes us move slowly" (Student K). A follow up question was whether she realized that they are in a different programme which demands some amount of patience and tolerance for the special needs students among them. She answered in the affirmative and added, the visually impaired students are very intelligent but they are sometime too slow. Having presented outcomes on the interactions between the students in class the next section will concern itself with students' private studies and preparation towards examinations.

# 4.9 Students' private studies and preparation for examinations

A two and a half hour mandatory private study time popularly known in the school as prep-time is observed every evening from 7:00 pm to 9:30 pm except Saturdays where students have entertainment. Nevertheless, students who wish to go for studies earlier than the stipulated time are allowed to do so. According to teacher Y during prep-time students do their readings and written assignments, discussions, write their notes and other things relating to studies. He elucidated further that the study hours are observed under minimal noise making and students who are found to be making too much noise are asked by the prefects on duty to sweep their classroom for two days maximum. He added also that to ensure tranquillity during the study hours "prefects are put in all places of study to control noise making" (Teacher Y). As mentioned early on, the visually impaired students usually do their studies in the resource centre; however, sighted students who are members of the "friends of the blind" association occasionally observe their prep-time with the visually impaired assisting in reading for them to Braille. After the prep, students are given additional 30 minutes to prepare themselves to go to

bed. Thus, at 10:00 pm all lights in the cubicles are off and all students are expected to be in bed.

Occasions of examination on the one hand are often used by teachers to assess their students on what they have learned within a specified time period and on the other hand, students tend to be more serious with their studies in order to pass their examinations being it internal or external. The situation in the school where the study was conducted during examination was quite phenomenal in the sense that students were more serious with their studies where some are seen in small groups doing discussions. Three visually impaired students B, D and E shared their experiences about time of examinations in the school. All the three students agreed when they said:

The atmosphere during examinations is often characterized with seriousness in studies and noise making becomes minimal in the school. We usually prepare for exams by reading our notes and having discussions on topics covered during the school term in small groups of four or five which includes some sighted friends (Student B, D and E interviewed in July, 2011).

I found out that the visually impaired students write both their internal and external examinations separately from their sighted counterparts in the resource centre. Teacher X explained that the separation is a decision of the West African Examinations Council (WAEC), the body that oversees and organizes examinations for English speaking West African countries. According to the teacher, the school administration thought it wise to keep to the WAEC's decision of separating the students during examinations. All the seven visually impaired students who were sampled for this study have agreed with the school management's decision to keep to WAEC's rule of separating them since that has been the norm over the years and during their final West Africa Secondary School Examinations (WASSE), they will be separated. Student A commented "even during our Basic Education Certificate Examinations (BECE) we were separated." Teacher X mentioned later that the visually impaired students are also given additional time based on WAEC's regulation thus; half of the stipulated time in every examination is given as an additional time. For example, if the paper is 2 hours, 1 hour extra is added making 3 hours for them. This is to compensate for the slow nature of writing by persons with visual impairment. On whether the time is enough for them student F pointed out "in every examination the time is not always enough for students, I will say it's OK". On the separation concerning writing of examinations, a sighted student G said "I will not say it is good or not, that is what we came to meet and has been the tradition over the years. But one thing I have noticed is that their writing machines make a lot of noise and perhaps that could be one of the reasons for the separation".

Since the school is a boarding institution, where students live in the school until they vacate before going home, how they relate with each other in all areas of school life is deemed very essential for this study. In the following section I present findings about the students' relationship in some selected school gatherings.

## 4.10 Relationships

Relationships can be considered as a particular type of association or connection existing between people having to deal with each other and in this case in an educational setting where things are done in common. Even though relationships cut across all the sections in this chapter, how students co-exist in morning assemblies, during dining sessions, entertainment times and dormitories in the school are presented more specifically.

## 4.10.1 Morning assembly

Morning assemblies are a part of the everyday activity in the school from Monday to Friday at 06:30 am. Both students and staff thank God for a new day and commit the day's activities into the hands of the Almighty God. This affirms Mbiti's (1991) description of Africans as "notoriously religious" as cited in Gyekye (1997, p. 243) since prayer permeates all school gatherings. According to teacher Z "the assembly normally ends with announcements from the school authority. Attendance of school gatherings is compulsory for every student since important notices are given in these meetings for all students to hear" (Teacher Z). Nonetheless, those who do not attend for one reason or the other rely on other students for such announcements or could consult the school's notice board later for a written version where necessary. From the notice board I found out that, there are no Braille versions of the notices for the visually impaired students who could not attend the morning assembly to read for him/herself. Sighted student L when asked about the non-existence of the Braille versions of the school notices said "yes, announcements are not in Braille. Visually impaired students always ask us for the announcements" (Student L). So it is evident that any visually impaired student who was unable to attend any of the gatherings to listen to the announcements will need to rely on other colleagues for such announcements

Findings from a sighted student K revealed that whenever the visually impaired students are late for

morning assembly they do not get a place to sit sometimes since there is no place reserved for them due to the large number of the students who fill the hall. I further observed that there is a gutter at the entrance of the assembly hall which one must cross before entering. Concerning this student K said "if you are not careful or do not use a white cane as a guide in the case of the visually impaired persons, you can easily fall into it." A visually impaired student G remarked that "it is difficult for us to be on time for the morning assembly always. Even if we are late, due to the large number of the students who attend the assembly, there is no place for us to sit since all the seats are occupied". The door to the hall is sometimes closed behind all late comers according to student F thus leaving students to stand outside during the entire period of the assembly.

Having presented findings from the morning assembly, in the next section I now turn my attention to the dining hall.

#### 4.10.2 Dining hall

Students go to the dining hall three times daily for meals at 9:15 am, 2:10 pm and 5:30 pm for their breakfast, lunch and supper respectively. Seating arrangements are such that fifteen students sit on a long table. Findings from teacher X revealed that students are now assigned with permanent tables by the school authority based on series of complaints received from the visually impaired students. He explained further that "this was based on the way they are sometimes treated by some of their sighted colleagues during dining session. Before the permanent tables were created, students have the opportunity to sit at any table in the hall once the number is not more than fifteen" (Teacher X). Sighted student J explained the situation in the dining hall in more detail when she stated:

Visually impaired students are faced with a lot of challenges for instance, if some of the sighted students see the visually impaired coming to sit with them on the table they will tell them (visually impaired) the table is occupied or there is no space. The visually impaired students are therefore left with no option than to struggle to get another table to sit at. The sighted students keep tossing them from table to table without any assistance which is very embarrassing and challenging to them (Student J interviewed in July, 2011).

One can conjuncture that it was based on such treatments that complaints were made to the school management, hence the creation of the permanent tables. The permanent tables in the dining hall according to visually impaired student F has helped in solving the situation. The student said "those days that we have to be in so much hurry to the dining hall are over. Now that there are permanent

tables you are sure of a place and before you get to your table food is already served" (Student F). This implies that with the creation of permanent tables by the school authority, elements of the sighted students who are not comfortable sitting with the visually impaired during dining sessions do not have any other choice than to do so. Sighted student K also shared her opinion when she stated:

Before the introduction of the permanent tables, things were not all that smooth in the hall for the visually impaired students, but with the introduction of permanent tables by the school administration we all sit together with the visually impaired students and eat together. I think this is good for the inclusive education (Student K interviewed in July, 2011).

Findings from the perspective of the teachers substantiated what the students shared with me. Teacher X elucidated:

There had been complaints from the visually impaired students on how they were sometimes treated in the hall. Upon investigation by the school authority it was realized that a cordial relationship in the spirit of inclusiveness to some extend was lacking among the students in the hall. A response by the school administration led to the creation of the permanent tables which according to the visually impaired students have solved the situation in the hall now. The school administration and we the teachers are doing our best to ensure good relationship among the rank and file of the students in all spheres of school life (Teacher X interviewed in August, 2011).

Summing up the section, the school administration has now created permanent tables for the students as a measure to stop unfair treatment of the visually impaired students during dining session by some of their sighted colleagues. By this permanent table, elements of the sighted students who are uncomfortable with the visually impaired students sitting with them at the tables are compelled to comply with the school authority's decision. This decision has solved the situation in the dining hall according to both the teachers and the visually impaired students.

Another vital area of school life where all the students meet to socialize is entertainment time on the weekend. This I present findings about in the following section.

### 4.10.3 Entertainment programmes

After a busy week of academic work, social activities such as entertainment programmes are organized in the school's assembly hall on Saturday evenings between the hours of 6:30 pm to 8:30 pm for students to relax, socialize and refresh themselves for the coming week. I found out from a visually

impaired student B that entertainment programmes consist of three activities namely jams, film shows or variety night. According to the student jams are musical concerts by known artists for students to dance to. Film shows has to do with films which are considered educative and teach moral lessons for students to watch and learn from while variety night is a programme that tries to unearth talents in the students. On how they get students for the variety night, the students' entertainment prefect answered:

Announcements to that effect are usually made at various school gatherings and besides that individual students are encouraged to sign up for activities they can do best. During the programme such students are called to perform on stage for their colleagues to watch (Student entertainment prefect interviewed in August, 2011).

Nonetheless, the variety night I observed was characterized with a lot of noise making rendering it difficult for one to hear exactly what was going on. Two visually impaired students D and E expressed their concern about what they called "one way" activity which is monotonous and excluding as far as they are concerned. Student D remarked "I want to see events like debates and quiz competitions being part of the entertainment activities." Student E also added "such programmes will be more inclusive and be in our interest since we can also actively take part in them". Another sighted student H commenting on the entertainment programmes said:

I think the programmes are good but we need to consider those that will actively involve the visually impaired students, for example, debates and quiz competitions. But we already have quiz and debaters club in the school in which a number of the visually impaired are members. How can we use the same programmes for entertainment? We also need to control the noise level at the programmes (Student H interviewed in August, 2011).

On the noise making the students' entertainment prefect explained that Prefects On Duty (POD) are charged to see to that and results so far has been positive. Their concern now is how to make the visually impaired students to show interest in the entertainment activities. He responded "we have been trying to encourage them and sometimes put them on programme or make some of them master of ceremony (MC) yet they do not show the interest" (Student entertainment prefect). When asked whether an attempt was made to find out what their concerns are, he explained that class captains have been asked to find out from their classmates and report to the entertainment committee.

I consider life in the students' residence as another fundamental area to look into in trying to find answers to the research questions of the study. In the next section I present findings about life in the student's houses of residence.

#### 4.10.4 Dormitories

I visited two houses during the study which I will call houses Gee and Pee both at the boys' side to observe the general layout of the dormitory. I observed that the houses were divided into cubicles where double decked student beds are arranged with spaces for easy passage. However, students' trunks, chop boxes and buckets are in the dormitories and some on pathways making it seemingly dangerous for the visually impaired students. I also noted that both the sighted and the visually impaired students were mixed up in the cubicles. One of the house captains whom I will call Koo-Fori explained:

Mixing up the sighted with the visually impaired students by the school authority is to enable the visually impaired students to be assisted by their sighted counterparts where necessary. It is my responsibility as a house captain to ensure that all the students in the house especially the visually impaired are protected. There are cubicle monitors in all the cubicles and I work with them. If there is any problem with any of the students which I cannot handle, I report to the house master for further action (Koo-Fori interviewed in September, 2011).

## A visually impaired student B pointed out:

Because of the situations sometimes in the dorm we want to be left alone to do certain things by ourselves such as ironing of school uniforms and washing of our bowls. Part of my former school anthem says disability is not inability. We can still do certain things (Student B interviewed in September, 2011).

Having seen a visually impaired student washing his clothes earlier, I then asked the student how they easily identify their wash clothes on Saturdays after drying them together on the same drying lines as the sighted students. He replied:

It is a problem we sometimes lose our items when they are blown off by the wind or get mixed up with other students' items. We do asked the sighted students to help identify them for us since almost every student has a name tag on his clothes. But even that they get lost or mixed up sometimes with other students' items, for example, when rain is coming and students are rushing to remove their washed items from the line. The good ones will later bring them to you upon seeing your name when you thought they are lost. At other times a friend will just tell you he has seen your item on the ground (Student B interviewed in September, 2011).

The remarks by the student early on concerning the situations in the dormitory urged me to revisit that

comment to find out what exactly the condition is. Contact with sighted student H clarified the situation in the students' residence in more detail as hinted by the previous student A. Student H gave details in stating that, "some of the sighted students do not help the visually impaired students when they need assistance. Some even ignored them when they called for assistance for example, in carrying of water to the bathhouse for them" (Student H).

Regarding the trunks, chop boxes and buckets in the dormitories another house captain whom I will call Paa Solo lamented the unchanging behaviour of some of the sighted students by leaving those objects in pathways after using them which is a real danger to the visually impaired students. The house captain said:

I have spoken to the students over and over again about the dangers of leaving objects in the way but they will not change. I am sometimes pushed hard by the actions of some of the disobedient students to punish them to serve as a deterrent for the rest of the students (Paa Solo interviewed in September, 2011).

On how the visually impaired students were able to move in their houses of residence and the school in general, the following section presents findings on that.

## 4.11 Mobility

Movement from one place to the other especially when it has to do with persons with visual impairment cannot be over emphasized. I have observed that the roads in the school have potholes and there are open gutters all over, which are not protected by hand rails. These apparently posed a great danger to persons with visual impairment in the school. Two visually impaired students D and F that were interviewed expressed their difficulties in moving from one part of the school to the other. According to student D "moving about in the school is really difficult because of the potholes and more especially when you are new in this place. Sometimes I fall or get lost in my attempt to move alone but now it is better." The other visually impaired student F also remarked:

The open gutters you see around I have fallen into them several times and I believed almost every visually impaired student in this school has fallen into them as well. We do not have white canes which we can use as guide to trail the gutters as we move about in the school. Few of the students who have the white canes among us brought them from the school for the blind and may have a better story to tell with regards to falling into these gutters. Sometimes if the sighted students see that you are about to fall in to a gutter instead of them helping you out, they are

prepared to see you fall so they will laugh at you (Student F interviewed in September, 2011).

With regards to whether they are not taken around the school during the orientation the student mentioned "I cannot remember anybody taking us around the school; and even if we are taken around the school once during orientation as a new student what impact will that make? We are only encouraged to make friends who will help us get use to the school environment" (Student F). I asked another visually impaired student E who takes her around the school. In her reply she said "mostly members of the Friends of the Blind (FB) association and sometimes our own low vision friends." I observed one student using the white cane as he moves about in the school, with the help of the white cane he was able to detect some objects on his way and manoeuvred through. With this I then realized that lack or inability to use white canes as guides by most of the visually students may affect their smooth movement in the school.

Sighted student L and a member of FB association also shared her experience on the mobility of the visually impaired students on campus. She disclosed that:

Most of the sighted students generally are unwilling to help the visually impaired students whenever they are faced with difficulties in moving about on campus, except their friends. Visually impaired students do sometimes get lost in the school. For example, one rainy morning a visually impaired student lost his way and many sighted students were running pass him whilst in the rain. I was the one, who ran through the rain and led him to his class because I am their friend (Student L interviewed in September, 2011).

From the teachers' perspective on the subject of mobility by persons with visual impairment on campus teacher Z said; "the potholes on the roads and the open gutters have been a great danger to our students as far as their movement is concerned. The students do fall into the open gutters and sometimes lost their way." Nonetheless, she explained further that it does not mean nothing has been done. According to her, "the school authority is aware of the situation and gutters on regular pathways of these students have been covered as an initial action and response" (Teacher Z).

A question on how students travel home when school vacates, teacher Y in a replied paused for a while and stated:

Parents and guardians do pick some of them up but majority of them just go the normal way as their sighted counterparts do. Thus, they go to the roadside to pick cars but when the cars are not readily available and the number of students becomes large then, the students struggle over

any car that comes. In that situation the visually impaired are faced with great challenges, they have to wait until the number reduces before they get the chance. In fact when it becomes worse some come back to spend the night and leave the following day (Teacher Y interviewed in September, 2011).

When asked why the school bus is not used in such situation. According to him the entire visually impaired students do not go to a particular town so that they could be transported together. "I know that few of the sighted who come from the same town as the visually impaired do travel together. But again when there is pressure at the lorry station you can imagine what will happen" (Teacher Y). A follow up question was on how the students report back to school upon reopening. To this, he said some are brought in by their parents while others tickets are bought for them by their parents, where the drivers are instructed to alight them at the school junction. From there they wait for other students who are also reporting so that they could come with them or they pick a taxi to the school.

Enquiries from the visually impaired students confirmed the information given by their teacher. According to visually impaired student A one has to prepare for travelling in advance when school is about to vacates for example, the eve of the vacation so that as soon as school breaks, you just have to go inn for your bag and set off to the station in order to escape the tension that will build at the lorry station afterwards. Another visually impaired student F expressed her challenges in stating that:

It's really difficult travelling home on the day of vacation when there are a lot of students at the lorry stations. Students struggle for any available car and you can imagine what we the visually impaired persons will be able to do in such a situation. When you are tired at the lorry station, the only solution is to go back to the school to spend another night hopping that the following day majority of the students if not all would have gone home easing the pressure at the stations. The situation is such that some of my friends have even decided not to make the attempt to travel on the day of vacation (Student F interviewed in September, 2011).

On how they travel back to school when school reopens a visually impaired student D shared his experience in the following words:

Sometimes my mother will travel with me to the next town where there is the possibility of meeting a student who is also on his/her way to school. She will then buy the ticket and pleaded with the student to guide me to the school. But if there is no student she will plead with the driver to alight me at the school junction which the drivers have been doing. At the school junction you are sure of getting someone to guide you to the school (Student D interviewed in September, 2011).

In a follow up on how the parent will know that such a person is going to the same school with him, he replied they all have a travelling uniform with the school logo on which is mandatory for every student to wear when travelling and thus it is easy to identify which school one attends. Seeking clarification from teacher X on the reason behind the travelling uniform the teacher elucidated "there are a number of reasons for instance, for easy identification in times of misbehaviour or accident so that the school leadership can be informed promptly for action before their parents are later notified" (Teacher X).

Sighted students who are members of friends of the blind association have been helping the visually impaired in the school. In the next section I present findings about the group.

## 4.11.1 Friends of the Blind (FB) association

I found out that the school has an association called Friends of the Blind (FB). According to teacher Y this association is a voluntary one consisting of sighted students who out of their own volition want to help the visually impaired students on campus. The teacher said "some members of the association do go to evening studies with the visually impaired students at the resource centre upon request to help read notes and portions of textbooks for the students or offer any assistance to them during the study hours" (Teacher Y). The teacher explained further that members of the association every now and then lead the visually impaired students to school gatherings such as morning assemblies; they help iron their uniforms for them in their houses of residence and generally assist them in times of need. Outcomes from visually impaired student G were that "only few members of the association are active due to the fact that they are also students who need to study and do their individual assignments as well." According to another visually impaired student B the "the situation becomes worse when examinations are approaching and it is quite understandable since they are also students who need to revise their notes and prepare for the examinations". The student is of the opinion that the association needs a reorganization in order to attract new members and also revamp its activities on campus to the advantage of persons with visual impairment in the school.

Having presented findings on movement by the visually impaired as well as the activities of friends of the blind association, in the subsequent section the spotlight will be on water issues in the school.

#### 4.12 Water situations on campus

Water is life, so the saying goes, as every living organism needs water for survival and students in the secondary school where the study was carried out are no exclusion. A number of poly tanks for storing water, bore holes both at the boys and girls dormitory sides, individual student's water storage containers I saw at a distance from the girls' dormitory side as well as students in queues fetching water gave an indication even to any first time visitor what the water situation might be in the school. Teacher X made the point that:

The water situation on campus is not the optimal due to frequent water shortages in the school. The flow of water from the Ghana Water Company Limited (GWCL) to the school is not regular prompting the school authorities to provide poly-tanks and bore holes for the students as you see around (Teacher X interview in August, 2011).

Interviews with four other participants which included three students 'I', L, G and a teacher brought out some revelations on the water situation in the school. According to a visually impaired student G:

The taps do not flow regularly in the school. For instance last year we found it very difficult in getting water. We sometimes go to town or to the school gate to fetch from the well and even that we have to join long queues and wait for our turn. Again after fetching, carrying the water to the dormitory is another challenge. We sometimes hired the services of taxies to carry the water to the dormitories for us which we pay for ourselves. Even though we have been given the opportunity to fetch from the kitchen when there is water shortage, we hardly go. But now the situation is far better than it was last year (Student G interviewed in August, 2011).

A sighted student 'I' explained that the "provision of poly-tanks in which water is stored for our use when the taps are not running and the bore holes dug by the school administration have reduced the pressure considerably making us not to go outside the school premises to look for water". Sighted student L also remarked that "I have been seeing the visually impaired students go to look for their own water just as we do when there is water shortage. It has been a challenging moment for all of us but for the visually impaired students in particular" (Student L). On why the visually impaired students go to look for their own water student E who is visually impaired answered:

It is not all the time you will get people to help you and also due to the unwillingness of some of the sighted students to help you. It is good to be doing some of these things yourself before you are disappointed at the time you need the help most (Student E interviewed in August, 2011).

She was quick to reason that they understood their sighted colleagues since they also need the water just as they do.

Teacher Y's assessments on the water issues in the school corroborates with that of the students. According to him, water is one of the main challenges they face on campus even though they now have some boreholes at vantage locations in the school and poly-tanks for storing water at the students' residences. Solution to "the water situation in the school remains half solved at the moment. Last term for instance, at a point in time the kitchen ran out of water so students had to go out to fetch water for the kitchen before meals were prepared" (Teacher Y). He further explained that when there is no water in the school, every student looks for his/her own water which he acknowledged to be a great challenge for the visually impaired students especially. But he pointed out that "at the moment the visually impaired students are given the opportunity to fetch from the kitchen whilst their sighted friends go to look for their own water" (Teacher Y).

The question is if the kitchen itself runs out of water sometimes according to teacher Y what then will the visually impaired person do? That is why "the water situation remains a challenge and the school administration is doing all it can to put the situation under control" he concluded.

### 4.13 Summary of findings

The school administration has made a number of preparations for the smooth running of the inclusive programme some of which include reallocation of classrooms and the installation of a siren. It was found out that materials for teaching and learning for the visually impaired are either absent or in limited supply in the school, for example, Braille textbooks. Writing materials for the visually impaired are very expensive to the extent that only few of the parents can buy for their wards. The very few Perkins Braillers that the school has are given to the final year students as they prepare for their final examinations. This results in a situation where the other students who want them are denied the opportunity since a large number of the Perkins Braillers are broken down, however, the rest are released for students' use during examinations only. It was also found out that, visually impaired students only do the arts subjects in the school since materials that will help them to do other subjects such as the sciences are not available. They are also faced with challenges with regards to movement in the school such that they sometimes lose their way or fall into the open gutters in the school. Students also face the challenge of travelling home upon vacation to the degree that some have to spend a night

in the school and leave the next day when pressure eases at the lorry stations and more cars are available.

On the support given to the visually impaired students during instructional hours, it was found out that in the absence of Braille textbooks, books on tape and other teaching and learning materials, the teachers try as much as they can to Braille portions of the textbooks for the visually impaired students and improvise other learning materials. Teachers even go to the extent of pre-recording lessons, looking for relevant teaching and learning materials as a means of advance preparation towards their lessons. At other time they used real objects where possible, verbalize and spell new words for the visually impaired students and write them boldly on the chalkboard for the low vision ones to make the lessons understandable to them. Teachers also encourage peer assistance among the students through group work and discussions. With regards to adapting the learning environment for teaching the visually impaired students, findings revealed that in the absence of teaching and learning materials little else has been done except for the few teachers own ingenuities.

Concerning how the sighted students relate with the visually impaired students on campus it was discovered that there has been mixed feelings and reactions on different occasions. The sighted students do not willingly help the visually impaired students in times of need except students who belonged to the friends of the blind (FB) association. During school gatherings such as dining sessions and in their halls of residence relations between the sighted and the visually impaired has not always been very cordial. It emerged also that many of the sighted students do not have any close working relationship with the physically challenged before their admission into the school, thus education is considered as essential tool to bring about some changes in how the students perceive and relate with each other in the school.

## **CHAPTER FIVE: DISCUSSION AND ANALYSIS OF FINDINGS**

#### 5.1 Introduction

One of the important chapters in a study such as this one is the discussion and analyses chapter. It is deemed essential because it is in this chapter that the research questions are answered. This chapter discusses and analyses the findings from chapter four which will be presented in three sections according to the main themes that emerged. The first section concerns itself with teaching and learning (academic issues) in the school. The analyses will be done to portray the reality of the situation in the school as told by the research participants since reality lies with the people (Berger & Luckmann, 1967). This will be in an attempt to answer research question one which centred on whether the visually impaired students are given any support and assistance during instructional hours.

The second section deals with issues pertaining to relationships between the two groups of students, the visually impaired and the non-visually impaired, in the school. Areas that the discussion will cover include: morning assembly, the dining hall, entertainment programmes, life in the student houses (dormitories). The final section of the chapter will centre on student mobility. Students' responses were analysed in light of the emerging picture which helped to provide answer to research question two which grapples with how the non-visually impaired students relate with their visually impaired counterparts in the school.

In the course of the analysis, excerpts of some of the findings will be used to buttress arguments in an effort to make the discussion and the analysis clearer.

## 5.2 Teaching and learning - academic issues

Teaching and learning form the core principle of academic institutions and thus school management has and continue to devise means to improve upon that. It is against this framework that the school administration had done some preparation prior to and during the inclusive programme to ensuring that teaching and learning go on smoothly in the school. Among some of the notable things done for instance include, making classrooms accessible to the visually impaired learners through reallocation, organization of in-service training for the staff to acquaint them with current concerns pertaining to inclusive education and also building of a resource centre to improve upon the learning conditions of

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the visually impaired learners. Subjects that these students do in the school, I present a discussion and analysis on that in the following section.

From chapter four it was revealed that not all students that were admitted into the school do all the subjects taught. The visually impaired students, for example, do not do the sciences which include Mathematics, Biology, Chemistry, Physics and Integrated Science. This was not based on the inability of the students concerned, but due to logistical constraints and unavailability of resources. This clearly shows imbalances and differences in the opportunity these students are presented with. The above scenario is what Rawls (1999) referred to as the 'difference principle' in his theory of justice. The 'difference principle' demands that "social and economic inequalities are to be arranged so that they are both to the greatest expected benefit of the least advantaged ... and positions open to all under conditions of fair equality of opportunity (Rawls, 1999, p. 72). Deducing from the above quote this implies that opportunities must be equally distributed and more resources for example, income and wealth spent to the benefit of those in unequal positions. Thus, more should be done for the visually impaired students in terms of their materials such as books, computers and Perkins Braillers than the sighted students in order to balance the inequalities thereof in the school. Nevertheless, grounded on the findings the advantaged members of the society which are the sighted students are rather benefiting, while the least advantaged members the visually impaired students are left unattended to as far as provision of their materials are concerned. In fact the theory underscores the essentials of providing a total account of what resources that should be made available to these groups of students in order to develop their skills to become useful members of their communities.

According to Rawls (1999) inequalities for instance, the subject one could do in this regard can only be permissible under the dictums of justice. The argument therefore is that for differences to exist in in the subjects one does has to be warranted, acknowledged and allowed within the ambits of justice. Sen (2009) on equality in education argues among other things that what is basic in accessing equality is not just an equal means to freedoms but rather an equal share of opportunities for valuable functioning. The situation here is that some categories of learners are being denied the equal opportunities to function and develop their talents. This can be equated to exclusion within inclusive education. It is against this milieu that Rawls (1999) emphasizes the significance of fair distribution of educational resources to all categories of learners as pointed out in the distributive aspect of his theory of justice in chapter four. Lack of educational facilities and unequal provision of resources can only be acceptable under the domains of impartiality. To this end Rawls (1999) maintains that "deep inequalities not are

they only pervasive, but they affect '[people's]' initial chances in life" (p. 7). Non availability of facilities that will enable the visually impaired students to do the sciences effectively or the subjects of their choice could impact negatively on their life chances and achievement.

Materials that teachers use during the course of their lessons play substantial role to the understanding of their students. Enquiry from the school of the study revealed that Braille textbooks and other materials teachers could use during lessons were either not available or in short supply. Teacher Y's answer to what he does in the absence of basic materials for teaching and learning such as textbooks for the visually impaired he teaches evinces his determination and what he could do to help the visually impaired in the school. His comments "I braille portions of the passage for the visually impaired students in the absence of Braille textbooks" suggests that the brailed portions only serve as materials the students can lay their hands on and use during lessons, while their sighted colleagues use their textbooks. This further implies that the visually impaired students will only use these brailed scripts in their revision limiting them very much to other materials they may need in their private studies. In other words they only rely on information received from class during lessons as well as notes taken.

I maintain that adequate access to textbooks is one prerequisite for quality and equitable education. Under the Ministry of Education (MoE) policy, "each student in basic schools should have access on individual basis to three government-designated core textbooks namely English, Mathematics and Science" (Ministry of Education, 2010, p. 10). According to the 2010 Education Sector Performance Report (ESPR) data available indicates a monumental increase in the availability of textbooks. Conversely, the reality on the ground portrayed a disagreeing picture to the data available and what the policy states when it comes to the education of the visually impaired students in this study. Whereas every individual student is entitled to at least three government textbooks, the visually impaired students in an inclusive education school do not have a single textbook in Braille for their use. This leaves their teachers with no other option than to resolve to manually brailing sections of the textbooks for use during lessons by their visually impaired students. We may, however, ask why is it that textbooks of the visually impaired in a school that runs inclusive education for the sighted and the visually impaired are not provided, while the sighted students have theirs provided? This can be considered as institutionalized discrimination and additional work for teachers of this disadvantaged group of learners. The findings on this matter turn to confirm what was reported on the 17th of February, 2012 in the Ghanaian Times newspaper (Corporate Profile of Newtimes Corporation, 2012). The Minister for Lands and Natural Resources Mr Mike Hammah in a speech read on his behalf in a

five-day sub-regional summit on inclusive education for West and Central Africa at Winneba, Ghana admitted that there are several problems facing the implementation of policies on inclusive education and assured that all is being done to ensure that all children including those with special educational needs have access to equitable quality education (Corporate Profile of Newtimes Corporation, 2012). Logically, I argue that some of the numerous challenges from the minister's speech could be possibly interpreted as non-availability of textbooks and other writing materials such as Perkins Braillers for persons with special educational needs such as the visually impaired in this context, which my study has pointed out as a serious problem.

Inclusive education is not just bringing persons with special needs to sit in the same classroom with regular students in mainstream schools, but that their educational materials and all that it takes for them to stay in the schools and benefit thereof must be provided. In fact the individual nations and governments have a duty to supply all the educational needs for persons with disabilities just as they supply that of other students. Terzi (2010) endorses the above position when she argues that "educational equality, ultimately, is inscribed in a theory that considers equality in terms of equality of opportunities, thus generally in terms of equality of inputs, and principles of fair distribution of resources as fundamental elements of social justice" (p. 6). This suggests that for equal opportunities to be given to all categories of learners, whatever they need to reach their full potential in education should be provided for. This again fits squarely under the distributive viewpoint of Rawls's (1999) theory of justice. Thus according to Rawls (1999), Sen (2009) and Terzi (2010) there is the need to consider the uneven starting points of the two student groups this should be supported by a concerted effort by stakeholders in education such as Parent Teacher Associations (PTA) backed by a political will and functioning education systems which will help champion the course and improve upon the provision and delivery of inclusive education.

Besides the non-availability of textbooks for use by the visually impaired students, the exorbitant price of their educational materials is another barrier making it very difficult for most parents and guardians especially those in the low income bracket to buy them for their wards. At the time of the field work from June to September, one Perkins Brailler cost \$ 766.20 (GH ¢1, 500 Ghana cedis) and the Hand frame cost \$ 12.77 (GH ¢ 25 Ghana cedis).

Below are some of the pictures of Braille writing machines for the visually impaired persons.



Source<sup>6</sup>

Attesting to the discoveries on the unreasonable prices of the writing materials are the remarks of teacher X which is a case in point "only few of the visually impaired students have the Perkins Braillers because of the high cost involved." The point at play here is do we consider the price of these indispensable materials for the education of the visually impaired and compromise on quality education? Premised on the data collected educational and other writing materials such as Perkins Braillers, Hand frames and Braille sheets that the visually impaired students use are in short supply in the school such that students are even denied the opportunity to borrow the few available for use since the school management gives priority to the final year students. Again from the findings, the few writing materials that are in good condition are kept and only released for use by students during examinations. But if only the students are given the opportunity to use the writing materials during examinations only, how will they become very conversant in the use of these machines since it is only through practice that those who do not have can become efficient in their use. This situation where the resources of the visually impaired are not adequately provided for in the school made the authority to result to careful management of the very few materials they have to keep the system running. This is based on the fact that they lack funds they could use in the maintenance and repair of the broken ones for example, the Perkins Braillers as evident from the findings.

Findings also revealed that the government supplies only four of the Perkins Braillers each academic

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<sup>&</sup>lt;sup>6</sup> Sources: http://www.livingmadeeasy.org.uk/communication/braille-\_-embossing-frames,-styles-%26-accessories-1461-p/http://www.perkins.org/store/braillers/

year which are not enough to meet the increasing number of the visually impaired students admitted every year. The Education Sector Performance Report (ESPR) of 2010 clearly states that Special education Division (SpED) of Ghana Education Service (GES) receives less than one percent of the GES total budgetary allocation implying that the division of special education of GES is under resourced. With less than a percent of the total budget, one wonders what impact will be made out of that since this can be considered as woefully inadequate in providing for the special needs learners owing to the fact that their educational materials are very expensive.

Another very important material worth mentioning in the education of the visually impaired students is the Braille embosser. The school can boast of one dilapidated Braille embosser which breaks down very often taking weeks to be repaired in the nation's capital Accra. This machine is very important because it is what the resource person's use in producing Braille materials for use by the visually impaired students during both classes and examinations. One imagines how academic work can happen in the school in the absence of the embosser when it breaks down. This will then mean additional work for the resource persons in that they will have to manually prepare the materials needed for lessons. Does monitoring and evaluation in the special and inclusive schools go on and effectively? On this the ESPR of 2010 identified insufficient funding as the root cause of inadequate monitoring and evaluation of special schools resulting in low performance, lack of resource support for example technology devices and teaching and learning materials such as embosser, Braille writing machines and other tactile objects (Ministry of Education, 2010).

#### Below are pictures of some Braille embossers



Juliet Pro 60 Braille Printer
Source<sup>7</sup>



Braille Express 100 Embosser.



Marathon Braille Embosser

<sup>&</sup>lt;sup>7</sup> Sources: http://www.ulva.com/Online-Store/hardware/Braille-Embossers/marathon.htm http://www.ulva.com/Online-Store/hardware/Braille-Embossers/braille-express100.htm http://www.synapseadaptive.com/brailler/br/juliet\_pro\_60.htm

Ultimately it can be argued that educational equality necessitates the distribution of resources to all children on the grounds of fairness (Rawls, 1999) since this will enhance on the education provision and will help play important role in shaping the future lives and identities of the recipients.

In the next stage of the analysis of the findings, I focus my attention to discussing Information Computer Technology (ICT).

## 5.2.1 Information Computer Technology (ICT) in inclusive education

We live in a world of technology where almost everything is being done through the use of computer and the skill one acquires in Information Computer Technology (ICT). ESPR of 2010 identified among other things that good knowledge in ICT is an important factor in the delivery of quality education (Ministry of Education, 2010). Nonetheless, from the findings, in the resource centre built for the visually impaired learners there is not a single functional computer in the computer laboratory for use by these students. On the other side of the coin, their sighted counterparts have a well-furnished and functional computer laboratory. Thus, the educational needs of the sighted are supplied again leaving that of the visually impaired under resourced, which is opposite of the theory of social justice and fair distribution of educational resources which according to Rawls (1999) should benefit the least advantaged members in the society. The possibility of the visually impaired students completing their courses of study without acquiring even the fundamental skills in ICT is a cause of worry for these students. This manifest in students B's answer to a question when he states:

This is a great worry for us we will complete and live just as we came. When people talk about ICT we cannot make any contribution because even the basic skill you do not have. If we do not have the opportunity here sir, where else are we going to have the opportunity. Computers that the sighted use they can install our programmes on some of them for our use but I do not know why. We are in the same school others have the chance but we do not.

The cardinal point of the visually impaired students' acquiring education is to become functional in their societies and contribute their quota to national development, yet, the issue of ICT as it stands now in the school will turn the expectations of the visually impaired students into a mirage. The concept of inclusive education is inextricably linked with an inclusive society and education is regarded as an underlying tool to that realization (Terzi, 2010). Thus, the welfare and learning needs of everyone must be given a thought with curricula adaptation and school improvement strategies shaping the process

leading to a true inclusion. This observation (Barton 1998 cited in Terzi, 2010, p. 65) supports when he noted "the notion of inclusivity is a radical one in that it places the welfare of all citizens at the centre of the consideration". The point to consider here is not the difference in individual capability of the student but the inability of those in charge and the school system as well as the individual schools to respond to individual differences where existing school systems, aspects of the curriculum and teaching expectation altered to meet the demand posed by the diverse learners (Johnsen and Skjørten, 2001; Terzi, 2010). In a different perspective I argue that the provision of the materials for the education of the sighted can be interpreted as the promotion of one group of learners over the other as far as the school of the study is concerned which is against the idea of inclusive education. To this end Terzi (2010) observed that the elevation of particular kind of knowledge and in this regard the sighted students as the main aspect of the curriculum or culture could end up producing unsuccessful students, and therefore students with different or special needs. The situation with regards to the non-availability of teaching and learning materials and other educational equipment for the visually impaired in the school where the study was carried out can be intimately linked to disparities and lack of fairness in the distribution of resources. Thus, the situation can be summed up in the argument advanced by Rawls (1999) when he said:

Deep inequalities not only are they pervasive, but they affect '[people's]' initial chances in life; ... it is these inequalities, presumably inevitable in the basic structures of any society, to which the principles of social justice must in the first instance apply. The justice of a social scheme depends essentially on how fundamental rights and duties are assigned ... in the various sectors of society (p. 7).

Inferring from the above reference Rawls (1999) was not only expressing his deep concerns in opposition to the variations in the societies, but rebukes how this will impact adversely on the chances of survival of the disadvantaged and the marginalized, in this context person with visual impairments in their educational pursuit. Once the school already has a functional computer laboratory for the other group of students thus the sighted as manifested from the findings, I argue that there can and should be made available to the visually impaired students as well by installing JAWS programme a screen reading and magnification software that will read aloud and magnify what is on the computer screen to the low vision person or the visually impaired student to make them also acquire some skills in ICT. On the issue of fairness in connection with the distribution of educational resources Sen (2009) contends that:

The notion of fairness is taken to be foundational, and is meant to be, in some sense, 'prior' to the development of the principle of justice. ... We have a good reason to be persuaded by Rawls that the pursuit of justice has to be linked to – and in some sense derived from – the idea of fairness. (pp. 53–54).

Sen's position on the idea of justice is linked with Rawls's theory of justice which should be functional and applicable in all areas of human endeavour and includes the concept of fairness. When fair opportunities are offered to persons with special educational needs in an effective and functioning education system, the result is true inclusive education as opposed to making some organizational or structural changes.

Having discussed and analysed the findings on teaching and learning materials, in the next section, the spotlight will be on teachers' preparation for classes and how the learning environment is adapted to the merit of the learners.

### 5.2.2 Teachers preparation for classes

To set the tone for discussing teachers preparation towards classes and how they utilized the skills they have received from their training, I first of all borrow the words of Johnsen and Skjørten (2001) when they admonished educational workers and other researchers in the field of education to be cognizant of the fact that:

It is important to realize that teachers can usually make educational adjustments when they have developed holistic child-centred educational views and skills. But they may also need to have some training methods and techniques that it is necessary to implement. However one cannot expect that class teachers will be able to meet all challenges (Johnsen & Skjørten, 2001, p. 34).

It is obvious that the class teacher alone cannot meet all the challenges of his/her students that is why all concerned must endeavour to put in their maximum effort to the benefit of the learners. Nonetheless, data from chapter four point out that the training in techniques and methods argued by Johnsen and Skjørten (2001) have not been given when the programme was implemented. Thus, again we can question the true nature of inclusive education in the school (Terzi, 2010). I maintain that effective training of teachers in techniques and methods will contribute to the effort they make in their teaching profession since it has the possibility of making them plan and prepare well before going to class. To this end, Carrington, Deppeler, and Moss (2010) note that for teachers to embrace the new wave of

pedagogical practices in inclusion their training and motivation should be seen as very essential. Johnsen and Skjørten (2001) further point out the importance of teacher training in inclusive education when they explain that it plays a momentous role particularly when diverse learning needs of the learners are considered in the training programmes focusing on the few materials available in the school premises. This can be interpreted as if teachers are given the required training they will probably be able to adapt the learning environment to the advantage of their learners using the few available materials in the school. On this, Darnell and Hoem (1996) advised that the modification should be done in resemblance to the home environment of children to enhance on their cultural integration from home to school and vice versa. Teacher Z's remarks thus "out of nothing we are doing our very best, we cannot do everything" to a question on adapting the learning environment turn to suggest that their best connote the efforts being put in as teachers to prepare well in advance by looking for the appropriate teaching and learning materials to support their lessons and "we cannot do everything" can be attributable to their inability to alter the learning environment to the merits of the students since materials they could use to that effect are lacking in the school. She however, seems to be speaking on the behalf of her other colleagues with the use of the pronoun "we" implying many. On this subject of environmental adaptation, the ESPR of 2010 noted among other things that teachers' incapability to modify the learning environment could be ascribed to lack of training exposures, inadequate resource support materials in inclusive technology and pedagogy as well as lack of motivational packages (Ministry of Education, 2010). In spite of that, teachers who teach in the inclusive education where the study was conducted could be said to have adequate training based on the fact that majority of them hold bachelor degree in special education in the exception of some who were not specially trained that are also working. To eliminate the non-special educators from the inclusive programme, it emerged from the findings that the school management has already tabled a proposal in which only teachers that were trained as special educators will be considered for future engagements.

Methods used by teachers in their teaching process are my point of consideration in the ensuing section of the discussion.

### 5.2.3 Teaching methods and peer support

Teaching strategies such as verbalization, group discussion, use of real objects and individualized teaching whenever necessary surfaced from the findings as the methods used by the teachers in inclusive education. During my observation of one of the classes it appeared that the teacher was

exaggerating verbalization in spelling new words thus overstressing the new words over and over asking the students to repeat after him resulting in slow progress of the lesson. At another time during group work I noticed that the teacher was extra patient in explaining key concepts to his students and spending considerable time on the visually impaired students as he supervises the groups instead of him using the peers in that regard.

Students being the beneficiary of the methods have divided opinion on how effective these four teaching strategies were to them. In order to do a thorough analysis on the teaching methods, I present two responses one from each side (thus the visually impaired and the sighted). First from visually impaired student B:

I will say teachers are patient with us; they use real objects where possible and do verbalize new words to our hearing while writing on the chalkboard for the other students. Even in group assignments we are grouped with the sighted students which have been helping us a lot. We learn many things from the sighted students during the group work and discussions (Student D interviewed in August, 2011).

Sighted student H on the other hand commented:

Teachers have been spending too much time on the visually impaired students resulting in our inability to finish the term's teaching syllabus on time. Even though we are given quite a number of group assignments in which we have been working together through which we assist the visually impaired students ... I think their resource persons should organize remedial classes for them so that we can move a little bit faster.

Though the "I" element in student B's response portrayed personal view of the teachers' method of teaching yet, it emerged from the findings that some of the sighted students have been helping their visually impaired counterparts especially during group assignments. Nonetheless, the proposal by the student that remedial classes, be organized for the visually impaired students by the resource persons as evident in students H's response to take care of the slow movement in class could be interpreted as another avenue in which the visually impaired students can be helped further. Even though it surfaced from the findings that students are given the opportunity to help, share and interact among themselves during group exercises. I still maintain that the visually impaired students do not only need more support to improve upon their self-help skills but also extra assistance in their academic endeavours as well. It is against this conditions that Vygotsky (1978) argues on the necessity for support of the weak and the marginalized in society, advocating for a better understanding of an ability or task in a

particular assignment or field to help those who do not understand or are in difficulty since the mind cannot be understood in isolation to the environment. Thus those close to the child for example parents, teachers and peers must help the child to overcome their challenges and the length of time it takes for them to overcome difficulty in performing a given task (Rodina, 2007). Again (Vygotsky, 1993 cited in Rodina, 2007, p. 15) maintains that "peer interaction is one important condition for social development among children with disabilities". This implies that willingness to assist, tolerance, collaboration and peer interaction among learners from different backgrounds with different learning needs can help boost self-confidence and psychologically raised morals among children with special needs. To stay in school and achieve full participation by learners with disabilities, those from marginalized groups will require collaboration by all stakeholders in education, for example, policy makers, teachers, parents and learners. This position was recognized and captured in the Salamanca Statement and Framework for Action on Special Needs Education (1994) which states that "achieving equal and full participation required a concerted effort not only by teachers and school staff, but also by peers and parents" (UNESCO, 1994, p. 11). Reasoning along the same direction Johnsen and Skjørten (2001) argue that inclusive education:

Does not just mean the integration of children and young adults with physical, sensory or intellectual disabilities into ordinary schools or just access to education for excluded learners. Inclusion is a two-way process of increasing participation in learning and identifying and reducing or removing barriers that inhibit learning and participation ... It is a process of addressing and responding to the diversity of needs of all learners and will involve change and modifications in content, approaches, structures and learning strategies (p. 8).

From the citation this suggests that inclusive education should aim at increasing inclusion of the special need learners where the existing structures are modified, curriculum restructured and new approaches adopted in responding to the needs of the diverse learners in the mainstream schools.

Having discussed and analysed the findings on academic issues, in the subsequent section the centre of attention will be on students' relationship with one another apart from the academic arena in major school gatherings such as morning assembly, dining hall, Saturday entertainment programmes and life in the dormitories.

### 5.3 Relationships - interaction among students

Discussion about life outside the classroom on major school gatherings and how the students interact

and relate with one another in a boarding institution where students spend their entire life in the school will go a long way to help present a holistic view of how inclusive education is practised in the school. I first of all discuss and analyse the situation in the morning assembly.

## 5.3.1 Morning assembly

Morning assemblies set the tone for every day's activity in the school with announcements from the school authority sometimes. From the findings, any student who was not at the morning assembly could consult the schools' notice board for the written version of the announcements, but there are no Braille versions of the announcements for visually impaired students who could not go to the assembly. Why is it that the Braille versions of the announcements were not available? We can again question the true nature of inclusive education in the school (Rawls, 1999; Terzi, 2010). The theory of justice considered equality in terms of coequal opportunities and fair treatment of all (Rawls, 1999). I argue that inclusive education is not merely bringing special needs learners to the mainstream schools to be taught collectively with the regular students without making substantial changes to improve upon their inclusion and involvement in the schools. Barton (1989) cited in Terzi (2010) also maintains that:

Inclusive education is not merely about providing access into mainstream school for pupils who have previously been excluded ... it is about the participation of *all* children and young people and the removal of *all* forms of exclusionary practice (p. 66 emphasis original).

Since the Braille version of the announcement is not available in the school, it can be considered as an exclusionary practice. It is thus important that the school management do all they can to bridge not only the learning gap, but that they remove all barriers that militate against the concept of inclusion in the school.

Another area of school life where students also interact among themselves is the dining hall, this I now turn my attention to.

### 5.3.2 Dining hall

The dining hall is a place where all students go to have their meals at appointed times. In the dining hall, inquiries confirmed that the visually impaired students are sometimes treated badly by their sighted counterparts such that the school authority has now created permanent tables of fifteen students

each. An interview with student J points this out in clear terms when she states:

Visual impaired students are faced with a lot of challenges for instance, if some of the sighted students see the visually impaired coming to sit with them on the table they will tell them (visually impaired) the table is occupied or there is no space. The visually impaired students are therefore left with no option than to struggle to get another table to sit at. The sighted students keep tossing them from table to table without giving any assistance which is very embarrassing and challenging to them (interviewed in July, 2011).

From the above interview it is obvious that the kind of treatment the visually impaired have been going through during dining sessions led to the establishment of permanent tables instead of the temporal ones where they are allowed to sit at any table provided the number does not exceed fifteen. Such treatments by some of the sighted students contradicts the concept of inclusion which Gadagbui (2008) considers as an approach to educating persons with special educational needs alongside those without special educational needs in the same classroom where they interact socially and share resources together. This implies that cordial and free social interactions among the two categories of students are not of its best. The school administration's response was to create permanent tables which have provided a solution in the hall according to the visually impaired students. It is therefore important to point out that this shows some of the challenge schools face in inclusive programmes if only organizational/structural changes are made and when the programme does not require that students also are sensitize leading thus to additional changes also in the inclusive programmes (Johnsen & Skjørten, 2001; Terzi, 2010). Although there has been some form of sensitization among the students it manifests from the findings that it was not intensified since such education are only done during the school's orientation programme for new students at the beginning of the academic year.

With this I now discuss and analyse the findings from the students' entertainment activities.

# 5.3.3 Saturday entertainment programmes

The aim of the entertainment programme as part of the schools' activity is to encourage the students to socialize among themselves. Humans are social beings and thus "little meaningful social interaction '[causes]' loneliness and poor feelings of self-worth" (Johnsen & Skjørten, 2001, p. 25). The entertainment platform could be used by the students to overcome loneliness and boredom and at the same time make new friends. However, findings showed that the usual activities namely; jams, variety

night and film shows made some of visually impaired students feel ostracised from the entertainment programmes and thus they do not show interest. The comments of student D wanting to see events such as debates and quiz competitions being part of the entertainment activities highlights the interest area of the visually impaired students. Nevertheless, an interview with a sighted student H revealed the school already has a quiz and debaters club and will not be fitting to use in the entertainment platform. In view of the fact that the school already has a quiz and debaters club the area of interest for the visually impaired students, there could have been collaboration and discourse between the two groups of students (the visually impaired and the sighted) to resolve their differences as to what activities forms part of the entertainment programmes. Even so, it is important to consider the level of cooperation, integration, understanding, help and friendship between the sighted and the visually impaired in the school of the study which has been pointed out as not always cordial. I argue that entertainment times could be used to improve upon relations between the sighted and the visually impaired through socialization and making of new friends. Krotosky (n.d.) observed that socialization for students, no matter their level of aptitude is very important since it helps break down barriers and negative attitudes by facilitating cohesion among all categories of learners. Reasoning along this line Johnsen and Skjørten (2001) maintain that creating the awareness of the importance of interaction and communication, not necessarily only through verbal means as a basis for all learning and the utilization of a holistic and resource oriented approach, play a colossal role in the co-existence of learners of different educational needs. This implies that socialization in inclusive education has the capability of improving interaction and communication skills among the students as well as deepening the level of integration.

In the next segment of the discussion, I focus on analysing the findings from the students' houses of residence.

#### 5.3.4 Dormitory

In the student's houses of residence both the sighted and the visually impaired students are mixed up in the cubicles by the school management with the intention that the sighted will help the visually impaired in times of need. It emerged from the data that there has been an opposite attitude as far as helping the visually impaired in the residences; thus, the sighted sometimes help them and at other times do not. A reply to a question on how easily visually impaired students identify their washed clothes from the drying lines when many students have washed and dry on the same drying lines

showed that sighted students help them in that regard and some even bring their items that got mixed up with other students' item later. On the other hand the comments of student H "some of the sighted students do not help the visually impaired students when they need assistance. Some even ignored them when they called for assistance, for example, carrying of water to the bathhouse for them" support the opposite attitude. The house captain's statement further confirms the above position "I am sometimes pushed hard by the actions of some of the recalcitrant students to punish them to serve as a deterrent for the rest of the students".

One of the disadvantaged groups in society is persons with disabilities. Just like any marginalized group, they need to be encouraged, helped and included in the larger society hence the concept of inclusion is one that must be embraced by all. I argue that humans are communal beings and for one to achieve his/her full potential needs help and cooperation from those around him or her. It is along this framework that Vygotsky (1978) draw attention to the need for one to be assisted if he or she will become somebody in the future when he states that "human beings come into this world attain consciousness and development throughout their lives in relationship with others" (Vygotsky, 1978 cited in Michalellis, 2010, p. 18). This denotes that those around us are very important and can influence our lives either positively or negatively if we are to make it in life, since no individual can do everything alone. We all depend on each other and thus it is important for the sighted students who are around the visually impaired in the school to offer them the needed assistance in all spheres of school life.

### **5.4 Mobility**

The conditions of the visually impaired as a result of loss of vision make it difficult to move about freely. It will be more difficult for them if the environment is not enhanced to ease their mobility. It was evident from the findings that the visually impaired students find it extremely difficult to move about in the school owing to potholes on the school's road network and many of them who move about alone either gets loss or falls into the open gutters. This on the one hand can be ascribed to the absence of hand rails along the gutters which will serve as a check preventing them from falling into them and on the other hand as unavailability of white canes for the students to use in trailing these gutters or detecting objects as they move about. One visually impaired student I observed using the white cane was able to detect obstacles on his way with the assistance of the cane and moved passed them. The above scenario has a direct bearing on Rawls's theory of justice which emphasize on the need for the

least advantaged members in the society are to be given priority over the advantaged when it comes to the distribution of resources in order to balance the scale which veered largely towards the advantage members. Even white canes are not provided by the SpED of the GES to the school for use by the students which will help ease their difficulties as they move about in the school. Again this can be assigned to lack of funds in the SpED of GES since it receives less than one percent of the GES total budgetary allocation (Ministry of Education, 2010). I will argue based on the observation of the school infrastructures that since the introduction of the inclusive education programme in 1970 the school has not seen any major work on the old structures to make them user friendly, more accessible and also to lessen the challenges faced when moving about on campus by the visually impaired. The above argument resonates with what was identified in ESPR 2010 report as some challenges facing delivery of quality inclusive education in Ghana for example, "removal of honey-comb windows, construction of hand rails and ramps... are very critical in the provision of SNE" (Ministry of Education, 2010, p. 46). The findings on the difficulty of the visually impaired students to move freely on campus as a result of user an unfriendly structural designs turn to confirm the 2010, ESPR of the GES. In their study, Ocloo et al., (2002) also identified architecture barriers, erection of staircases instead of ramps for wheelchair users as some of the challenges persons with disability face in their attempt to using most of the existing structures in the schools. The school authority nevertheless, argues that they have done what they could to keep the systems running. For instance, they were ingenious in making internal changes for example, reallocation of classrooms and building of resource centre for the visually impaired students to improve upon their academic condition in the school. They also installed a stand by generator for use in times of power failure, dug bore holes and bought poly-tanks for water storage and use by students. Besides that they do respond to some of the visually impaired students' complaints, for example, solving the situation in the dining hall through the creation of permanent seating place as well as giving priority to the visually impaired students to fetch water from the kitchen when there is water shortage in the school.

From the data it came to light that members of a voluntary group on campus Friends of the Blind (FB) association and also low vision students have been guiding their visually impaired colleagues to school gatherings, helping them occasionally during evening studies and also in the dormitories. However, from the other sighted students who are not members of FB association it appears that they do not normally help or guide the visually impaired in moving about in the school. An answer by a sighted student L supports this line of analysis when she states:

Most of the sighted students generally are unwilling to help the visually impaired students whenever they are faced with difficulties in moving about on campus except their friends. Visually impaired students do sometimes lost their way in the school. For example, one rainy morning a visually impaired lost his way and many sighted students were running pass him whilst in the rain. I was the one, who ran through the rain and led him to his class because I am their friend.

On travelling home by the students when the school vacates for holidays it became apparent that there has not been any organized travelling plan for which the school bus will transport the students to common destinations for them to continue their journey individually or be picked up by their families at these destinations. Thus, the visually impaired students may be forced to spend an additional night in the school due to pressure at the lorry stations.

## 5.5 Summary

The school management did some organizational changes to ensure smooth running of the inclusive programme and also to improve upon teaching and learning in the school. For instance, reallocation of classrooms, organization of workshop for the staff to acquaint them with current affairs pertaining to inclusive education and how to assist the visually impaired in times of need as well as building of a resource centre to improve upon the learning situations of the visually impaired learners. Nonetheless, it became clear that the visually impaired students do not do the sciences in the school due to lack of resources that could have enabled them do the sciences just as their sighted colleagues. Materials for the visually impaired are in short supply in the school and are also very expensive for the ordinary parents to buy for their wards but that of the sighted students are well provided for. This however, was found to be contrary to the difference principle under Rawls's theory of justice which advocated strongly for more resources to be used on the needy in the society so as to balance the scale. This again is found to be contrary to inclusive education since the concept is not just to bring learners with special needs to the mainstream schools to be taught alongside the regular students but that all their needs supplied (Rawls, 1999; Johnsen & Skjørten, 2001; Terzi, 2010). Even though materials for the visually impaired are in short supply, the teachers prepare very well before going to class and do their possible best to help the visually impaired students in the school for example, looking for appropriate teaching and learning materials and sometimes pre-recording lessons for use in class. They also try to encourage peer support among the students by giving them group assignments through which the sighted help the visually impaired students. In the area of ICT it is obvious that the visually impaired students may complete their study programmes without acquiring any skill in computing because they do not have

computers installed with JAWS software which they could use.

With regards to relationships between the sighted and the visually impaired in all spheres of school life, it emerged strongly that relationships have not always been cordial even though Vygotsky (1978) underscored the importance for those around the weak to help them. On the subject of mobility it became apparent that the visually impaired students find it difficult to travel home when school vacates and move about in the school on their own yet, members of friends of the blind (FB) association have been very supportive to the visually impaired students in the area of mobility and other self-help activities.

#### CHAPTER SIX: CONCLUSION AND WAY FORWARD

Inclusive education is a concept that aims at developing the full potentials of the individual in an atmosphere of co-equal opportunities where limiting barriers such as lack of acceptance and recognition by the larger society are eliminated. Inclusive education as a global concept has been embraced by both developed and developing countries such as Ghana and efforts are being made to improve upon inclusive education delivery in the country. The preoccupation of this study is to find answers to two main research questions, the first centred on whether the visually impaired students have been given any support during instructional hours, while the second examined how the non-visually impaired students relate with their visually impaired counterparts in terms of assistance given to them both in and outside the classroom. The conclusion to this study will centre on three key points namely; teaching and learning materials for the visually impaired students, relationship between the sighted and the visually in the school and finally the preparation of the school as well as teachers towards the inclusive education programme. The way forward for future researchers will also feature to bring the study to an end.

Firstly, with regards to the first research question even though data from the study revealed that the SpED of GES due to the "non-release of approved budgets" (Ministry of Education, 2010, p. 11) has not been able to provide the necessary educational materials such as Braille textbooks, books on tape and computers installed with the relevant software for the visually impaired students and even those provided, for example, Perkins Braillers are in short supply in the school, teachers were able to do a number of things before and during instructional hours to support the visually impaired students in their studies. For instance, teachers pre-recorded lessons, brailed sections of passages for use by the visually impaired students and looked for relevant teaching and learning materials to support the concepts to give the students first-hand information. Also during the lessons the data of the study did point to the fact that teachers do a lot of verbalization, spell new words aloud for the hearing of the visually impaired students and even write them on the chalkboard for the sighted and the low vision students to get the right pronunciation in addition to the correct spelling. Teachers' advance preparation before lessons as evident from the data support Ocloo's (2002) assertion when he writes teachers preparation before lessons at any level of education is essential as it contributes to smooth delivery of lessons, makes the teachers focus and also informs the teacher about which teaching and learning materials to use. Consequently, inadequate provision of educational materials for the visually impaired students in the school coupled with lack funds for maintenance work left the students and the school struggling to

cope with the few resources they have to really make an impact in the lives of these students. For example, 19 out of the 22 Perkins that the school has are broken down leaving only 3 of them functional. It is thus worrisome, premised on the findings that after 42 years after the introduction of inclusive education in the school vital educational materials such as the Perkins and Braille textbooks for the education of the visually impaired students are either not available or in short supply. To this end Terzi (2010) on the inequalities in the provision of educational resources for persons with special educational needs contents that opportunity given to students on equal basis irrespective of their physical conditions will enable them explore their life chances. One major role of education is that it brings about liberation and enlightens people about opportunities in life (Freire, 1996; Vandayer, 2003). If education plays such an important role in the life of the individual then what it takes for the education of the individual must be provided especially for learners with special needs since they are the less advantaged in the society (Rawls, 1999). On the antithesis, it manifests from the findings that the materials of the sighted students have been adequately provided for in the school. This is contrary to the theory of justice as propounded by Rawls (1999) which specifies that more resources are to be spent on and provided for the less privileged members of the society, in this case the visually impaired students, in order to balance the scale which usually favours the privileged (the sighted students) in the society. It is therefore important to point out that differences in the provision of educational materials for these two groups of students can only be endorsed under the umbrella of justice (Rawls, 1999; Sen, 2009; Terzi, 2010).

Secondly, on how the non-visually impaired students relate with and the assistance they offer to their visually impaired colleagues, it came to light from the findings that generally the sighted students on some occasions help and on other occasions do not help their visually impaired colleagues. Thus, there is a mixed response from the sighted students with regards to the help they give to the visually impaired students. For example, the sighted sometimes help in identifying washed clothes for the visually impaired students but at other times the sighted students sometimes turn down or ignore a request of assistance from the visually impaired student, for example, in carrying water to the bathhouse for them. From the enquiry it became clear that on other occasions when the visually impaired students lose their way in the school, some of the sighted do not help them find their way except those (the sighted students) who are members of friends of the blind association. It is thus needful for all the sighted students, not only members of the friends of the blind association, to help their visually impaired counterparts in their movement in and outside the school since it is evident from the findings that the visually impaired students find it extremely difficult in moving about in the school, due to an

unfriendly infrastructure design such as open gutters and potholes on the school's road network. It also emerged from the enquiry that interaction between the visually impaired and the sighted students in major school gatherings such as morning assemblies, dining hall sessions and Saturday entertainment programmes clearly portray an unfriendly relationship between the two groups of students. For instance, the school management at a point in time had to respond by creating permanent tables in the dining hall to forestall poor treatments of the visually impaired students during dining sessions by some of their sighted colleagues. By this, the visually impaired are given a permanent seating place during dining sessions without having to go through any frustration from their sighted friends.

With regards to the assistance from the sighted students to the visually impaired in the academic front, data suggest that the two groups of students do collaborate with each other, especially during group assignments. Members of the friends of the blind association have also been very helpful in that they intermittently go to private studies with the visually impaired students at the resource centre to assist them in reading textbooks for the visually impaired to transcribe into Braille and also offer any other help to them.

Finally, concerning preparation of the school and teachers towards the inclusive programme it evinces from the findings that the school authority has embark on awareness creation campaign of the school community which includes the staff, thus teaching and non-teaching and the students. With effect to that a signpost with the inscription "Drive Carefully Blind Students Are Campus" was erected at the entrance of the school to caution motorist and even first time visitors to the school that visually impaired students are in the school. The staff has been taken through a one week in service training course under the theme "educating the special needs child" in which a resource person was invited. This workshop was organized by the school administration to edify the staff on issues pertaining to the visually impaired and also to put them in a position where they will be able to assist the students in times of need. Among the students the awareness creation through education is not intensified, thus it is only done at the beginning of every academic year when new students admitted in to the school are being orientated. Additionally, the school put some structures in place namely; generator (plant) as an alternative power source for use in time of power failure, siren for calling students and a resource centre built for the visually impaired students to ensure smooth implementation and running of the inclusive programme. Also done worth mentioning by the school was the reallocation of classrooms to facilitate easy accessibility by the visually impaired students. The school in addition bought poly tanks for water storage for the students and dug bore holes at vantage locations in the school to alleviate

acute water shortage faced by the students and the rest of the school community especially in the dry season thus from November to April.

#### 6.1 The way forward

By way of conclusion, I emphasize three issues in relation to the findings which future researchers in the area of inclusive education could focus on. The first is how to devise means to organize a comprehensive in-service training for the school staff on regular basis to familiarize them with current issues concerning the visually impaired in the school. This is deemed significant as it will empower the staff to better to offer the necessary assistance to the visually impaired students in their educational pursuit. Under this the researcher may also look into whether budgetary allocations are made available towards such an important exercise. Given that teachers are the final implementers of educational policies should be endowed with the requisite skills and information which they can use in teaching their students.

The second issue worth considering in a future research centres on possible and effective ways to sensitize the sighted students to willingly help the visually impaired students in the school. Education as argued by Freire (1996) brings about enlightenment and has the power to change peoples' perception about certain concepts such as the occurrence of disability. Through education sighted students could be encouraged about the capabilities of persons with impairment and the need to collaborate with them not only in the school but also in the society. The need for the sighted students to have a different perception about persons with disability and shed away their lack of interest and freely assist the visually impaired students cannot be relegated to the background. Given that the less advantaged in the society, in this case the visually impaired in the school, will have to be helped to overcome difficulties they face as explained in general as an issue of social justice. The education of the sighted students can touch on causes of impairment and through it they can be encouraged as the advantaged members in the school community to willingly help since lack of cooperation and support for the visually impaired could add to their impaired condition and limit their development further (Johnsen & Skjørten, 2001). The underlying focus however, should be on ways education can be used as a tool to sensitize the sighted students on regular basis to bring about the attitudinal change.

The third and final issue concerns the difference in the provision of the educational resources between the two groups of students (the visually impaired and the sighted) in the school. In view of the fact that inclusive education is not just bringing persons with special educational needs to the mainstream schools to be taught alongside their regular colleagues but their needs adequately provided for (Johnsen & Skjørten, 2001; Terzi, 2010). Future researchers could look into what led to such serious discrepancies in the provision of educational resources in the school. Specific attention may perhaps be whether there is lack of policy direction towards special education in general. This is an important area for the provision of quality inclusive education in Ghana grounded on the fact that the 2010 Education Sector Performance Report (ESPR) stated that delays in and the non-release of approved budgets for service is affecting the activities of the regional and district directorates of education to enhance on quality inclusive education in Ghana (Ministry of Education, 2010). Another likely area to explore in a future research may possibly be understand that lack of political will resulting in a mere cosmetic action in the provision of educational materials for the visually impaired students even though the concept has being in practice since 1970 in the school. For the concept of inclusive education to make a meaningful impact in the lives of the disadvantaged in the society, in the case of the visually impaired student, I maintain that their materials should and must be made available to them.

## **Bibliography**

- Agbenyega, J. A., & Deku, P. K. (2011). Building New Identities in Teacher Preparation for Inclusive Education in Ghana. *Current Issues in Education*, *14*(1), 1–37.
- Ainscow, M. (1999). *Understanding the development of inclusive schools*. London: Falmer Press.
- Ainscow, M., & Booth, T. (Eds.). (1998). From Them to Us: An International Study of Inclusion in Education. London and New York: Routledge.
- Avoke, M., Hayford, S. K., Ocloo, M. K., & Ihenacho, I. J. (1998). *Issues in special education*. Accra: City Publishers.
- Barraga, N. (1976). *Visual Handicaps and Learning: A Developmental Approach*. Boston: Wadsworth Publishing Company.
- Befring, E., & Tangen, R. (2008). Spesialpedagogikk (4th ed.). Oslo: Cappelen akademisk forl.
- Berger, P. L., & Luckmann, T. (1967). *The social construction of reality: a treatise in the sociology of knowledge*. Harmondsworth: Penguin.
- Best, T. (1991). *Teaching Children With Visual Impairment* (1st ed.). Philadelphia: Open University Pres.
- Bryman, A. (2008). Social Research Methods (3rd ed.). Oxford: Oxford University Press.
- Butler, R., & Parr, H. (Eds.). (1999). *Mind and Body Spaces: Geographies of Illness, Impairment and Disability*. London: Routledge.
- Carm, E., Mageli, E., Berryman, L. N., & Smith, R. (2003). *Education and its Impact on Poverty: An Initial Exploration of the Evidence* (unpublished manuscript No. 9). Oslo: Oslo University College: Centre for International Education. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.198.9553&rep=rep1&type=pdf
- Carrington, S., Deppeler, J., & Moss, J. (2010). Cultivating teachers' beliefs, knowledge and skills for leading change in schools. *Australian Journal of Teacher Education*, *35*(1), 1–13.
- Cohen, L., Morrison, K., & Manion, L. (2007). *Research methods in education* (6th ed.). London: Routledge.
- Corporate Profile of Newtimes Corporation. (2012, February 17). Govt To Implement Inclusive Education Policy. *The Ghanaian Times*. Ghana. Retrieved from http://newtimes.com.gh/story/govt-to-implement-inclusive-education-policy
- Darnell, F., & Hoem, A. (1996). *Taken to Extremes: Education in the Far North*. Oslo: Scandinavian University Press.

- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2005). *The SAGE Handbook of Qualitative Research* (3rd ed.). London: Sage Publications, Inc.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The Sage Handbook of Qualitative Research* (Fourth ed.). Los Angeles: Sage Publications, Inc.
- Dixon, R. M., & Verenikina, I. (2007). Towards Inclusive Schools: An Examination of Socio-cultural Theory and Inclusive Practices and Policy in New South Wales DET Schools. *Learning and Socio-cultural Theory: Exploring Modern Vygotskian Perspectives International Workshop* 2007, 1(1), 15.
- Freire, P. (1996). Pedagogy of the Oppressed (2nd ed.). London: Penguin Books.
- Gadagbui, G. Y. (2008). Inclusive Education in Ghana: Practices, Challenges And The Future Implications For All Stakeholders. *Faculty of Educational Studies University of Education, Winneba*, 6.
- Gall, J. P., Gall, M. D., & Borg, W. R. (2009). *Applying Educational Research (with MyEducationLab)* (6th ed.). Princeton, N.J.: Pearson.
- Gubrium, J. F., & Holstein, J. A. (1997). *The new language of qualitative method*. New York: Oxford University Press.
- Gyekye, K. (1997). *Tradition and modernity: philosophical reflections on the African experience*. New York: Oxford University Press.
- Gyimah, E. K., & Vanderpure, I. (2009). *Inclusive education in Ghana: what are the levels for change?*University of Cape Coast: Department of Educational Foundations. Retrieved from http://www.deta.up.ac.za/archive2009/presentations/word/Gyimah.pdf
- Hammersley, M., & Atkinson, P. (2007). Ethnography. London: Routledge.
- Hardman, A. E., & Stensel, D. J. (2009). *Physical activity and health: the evidence explained*. London: Routledge.
- Harms-Ringdahl, L. (2001). *Safety analysis: Principles and practices in Occupational Safety* (2nd ed.). London: Taylor & Francis.
- Haug, P. (2006). Understanding inclusive education. The example of Norway. Volda University Collge.
- Hill, E. W., & Ponder, P. (1976). *Orientation and Mobility Techniques: A Guide for the Practitioner*. New York: American Foundation for the Blind.
- Huttly, S., Sweet, J., & Taylor, I. (Eds.). (2002). *Effective Learning and Teaching in Medical, Dental and Veterinary Education* (1st ed.). London: Kogan Page.
- Igune, W. G. (2009). *Inclusion of blind children in primary schools*. *A case study of teacher's opinion in Motoro district in Uganda* (Master Thesis). University of Oslo, Oslo. Retrieved from

- http://urn.nb.no/URN:NBN:no-22831
- Ilon, L. (2002). International Journal of Education Development. College of Education, Florida International University, Miami, Agent of global markets or agent of the poor? The World Bank Education Strategy., 22, 475–482.
- Jankowski, N. W. (Ed.). (2009). *E-Research: Transformation in Scholarly Practice* (1st ed.). New York: Routledge.
- Johnsen, B. H. 1951-. (2005). *Socio-emotional growth and development of learning strategies* (Vol. book no. 3). Oslo: Unipub.
- Johnsen, B. H. 1951-, & Skjørten, M. D. 1935-. (2001). *Education special needs education* (Vol. book no. 1). Oslo: Unipub.
- Kirk, S. A., Gallagher, J. J., & Anastasiow, N. J. (2003). *Educating exceptional children*. Boston: Houghton.
- Krotosky, L. (n.d.). Cons of Inclusive Classrooms. *eHow*. Retrieved June 15, 2012, from http://www.ehow.com/list\_7301200\_cons-inclusive-classrooms.html
- Kuyini, A. B. (2010, April). Inclusive Education In Ghana: Are We Achieving The Vision? *Ghana Web*. Retrieved May 16, 2010, from <a href="http://www.ghanaweb.com/GhanaHomePage/features/artikel.php?ID=179726">http://www.ghanaweb.com/GhanaHomePage/features/artikel.php?ID=179726</a>
- Kvale, S., & Brinkmann, S. (2009). *Interviews: learning the craft of qualitative research interviewing*. Los Angeles, Calif.: Sage Publications.
- Lewis, R. B., & Doorlag, D. H. (2010). *Teaching Students with Special Needs in General Education Classrooms (with MyEducationLab)* (8th ed.). New York: Pearson.
- Lowenfeld, B. (1973). The visually handicapped child in school. New York: John Day.
- Marks, S., & Clapham, A. (2005). *International human rights lexicon*. Oxford: Oxford University Press.
- Mason, J. (2002). Qualitative researching. London: Sage.
- Maxwell, R. L. (2002). Maxwell's guide to authority work. Chicago, Ill.: American Library Association.
- Merriam, S. B. (2009). *Qualitative Research: A Guide to Design and Implementation* (3rd ed.). San Fracisco: Jossey-Bass.
- Michalellis, I. (2010). Individual education plan and multiculturalism. University of Oslo, Oslo.
- Ministry of Education. (2010). *Education Sector Performance Report 2010* (p. 92). Accra: Ghana Education Service. Retrieved from www.idpfoundation.org/Ghana MoE Ed Performance Report 2010.pdf
- Ocloo, M. K. (2002). Effective education of persons with visual impairment in Ghana. Cape Coast:

- Primrod Press.
- Ocloo, M. K., Hayford, S. K., Agbeke, W. K., Gadagbui, G. Y., Boison, C. ., & Essel, J. (2002). Foundation in special education. The Ghanaian perspective. Winneba: University of Education, Winneba.
- Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, Califonia: Sage Publications.
- Patton, M. Q., & Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park: Sage.
- Potts, P. (Ed.). (2003). *Inclusion in the City: Selection, Schooling and Community* (1st ed.). London: Routledge.
- Pratt, J., & Swann, J. (2003). *Educational research in practice: making sense of methodology*. London: Continuum.
- Rawls, J. (1999). A theory of justice. Oxford: Oxford University Press.
- Reynolds, C. R., & Fletcher-Janzen, E. (Eds.). (2004). Concise Encyclopedia of Special Education: A Reference for the Education of the Handicapped and Other Exceptional Children and Adults (2nd ed.). New York: Wiley.
- Rodina, A. K. (2007). Vygotsky's Social Constructionist View on Disability: A Methodology for Inclusive Education. *Department of Special Education, University of Oslo*, 27.
- Scheyvens, D. R., & Storey, D. D. (2003). *Development Fieldwork: A Practical Guide*. (R. Scheyvens & D. Storey, Eds.) (1st ed.). London: Sage Publications Ltd.
- Sen, A. (2009). The idea of justice. London: Allen Lane.
- Silverman, D. (2004). *Qualitative research: theory, method and practice* (2nd ed.). London: Sage.
- Smith, P. K., Cowie, H., & Blades, M. (2011). *Understanding children's development*. Chichester: Wiley.
- Society, A. B. (1980). Holy Bible: King James Version. Nashville: American Bible Society.
- Sommer, D., Pramling Samuelsson, I., & Hundeide, K. 1936-. (2010). *Child perspectives and children's perspectives in theory and practice*. Dordrecht: Springer.
- Terzi, L. (2010). Justice and Equality in Education: A Capability Perspective on Disability and Special Educational Needs (1st ed.). New York: Continuum.
- The Constitution of Ghana. (1992). Retrieved August 26, 2012, from http://www.right-to-education.org/country-node/347/country-constitutional
- Thomas, G., & Vaughan, M. (2003). *Inclusive Education: A Reader* (1st ed.). London: Open University Press.

- Thomas, P. (2009). *Tolerance in religious education: a comparative study of three junior secondary schools in Kumasi, Ghana* (Master Thesis). Høgskolen i Oslo, Oslo.
- Tucker, V. (1999). The myth of development. A critique of Eurocentric discourse. *Critical Development Theory Contributions To A Paradigm* (p. 244). London: Zed Books.
- UNESCO. (1990). World Declaration on Education for All and Framework for Action to Meet Basic Learning Needs. (EFA Global Monitoring Report) (p. 37). New York. Retrieved from http://www.unesco.org/education/pdf/JOMTIE E.PDF
- UNESCO. (1994). The Salamanca Statement and Framework for Action on Special Needs Education (p. 50). Spain. Retrieved from http://www.unesco.org/pv\_obj\_cache/pv\_obj\_id\_63E82E00B956CB7A3CF525F2ED36392878 830300/filename/SALAMA\_E.PDF
- UNESCO. (2005). *EFA Global Monitoring Report: The Quality Imperative* (p. 428). Paris. Retrieved from http://unesdoc.unesco.org/images/0013/001373/137333e.pdf
- UNESCO. (2010). *Global Monitoring Report: Reaching The Marginalized* (p. 525). London. Retrieved from http://unesdoc.unesco.org/images/0018/001866/186606e.pdf
- Vandeyar, S. (2003). The Jagged Paths To Multicultural Education: International Experiences And South Africa's Response In The New Dispensation. *Faculty of Education, University of Pretoria, South Africa*, 23(3), 193–198.
- Victor, C., & Anson-Yevu A case study on special education in Ghana (1988). Retrieved from unesdoc.unesco.org/images/0009/000944/094448EB.pdf
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.) (14th ed.). London: Harvard University Press.
- Wehmeier, S., McIntosh, C., & Turnbull, J. (1997). Oxford Advanced Learner's Dictionary. *Oxford Advanced Learner's Dictionary*. New York: Oxford University Press.

#### **APPENDICES**

# Appendix A

#### **OBSERVATION SCHEDULE**

- 1. Is there anything to warm a first time visitor to the school that there are visually impaired students in the school?
- 2. Are the gutters in the school covered? If not are they protected by hand rails?
- 3. How user friendly is the infrastructure in the school to the visually impaired?
- 4. Do visually impaired students use white canes as they move above in the school?
- 5. How is the classroom furniture arranged?
- 6. Where do the visually impaired students sit in the classroom?
- 7. What teaching and learning materials do teachers use in the inclusive classes to make their lessons more understandable to the visually impaired child?
- 8. Do the visually impaired students have their materials for example Braille textbooks, sheets, Perkins Braillers, hand frames and styluses readily available for use during lessons?
- 9. Do the visually impaired have access to computers in their education?
- 10. How do the sighted students relate with their visually impaired counterparts in the school? For example during dining session, are they freely assisted or only upon a request?
- 11. How do the students (both the visually impaired and the sighted) relate with each other and their teachers?
- 12. How is the school provided with power? For example is it by a generator or is it connected to the national grid?
- 13. Does water flow regularly in the school? If no, is there any sign to show preparations made for the students in time of water shortage?

## Appendix B

#### INTERVIEW GUIDE FOR TEACHERS

- 1. What is your qualification?
- 2. How long have you been teaching in the school?
- 3. Can you share some of your experiences with me when teaching in the inclusive setting?
- 4. What materials do you use in teaching the visually impaired students to make them understand the lesson better since we learn mostly through the sense of sight which they lack?
- 5. Is there any challenge(s) you face in teaching the visually impaired students?
- 6. How do you overcome those challenges in the short term?
- 7. What do you think can be done as solution to those problems in the long term?
- 8. Is there any incentive given to teachers who teach the visually impaired students alongside the non-visually impaired students either from the school or government?
- 9. How is your work load like? Will you say it is too much or OK?
- 10. What do you think can be done to improve upon the current delivery of inclusive education in the school?
- 11. Have you been educating the sighted students on campus on how to relate and help the visually impaired? If yes how often do you do that? If no don't you think it is necessary?
- 12. Does water flow always in the school? If no, what does the school authority do to help the visually impaired students on campus?
- 13. What help do you give to the students in your capacity as a teacher?
- 14. How would you assess the inclusive program being run in the school generally? Would you say is a success or lacking certain elements?
- 15. Are the students allowed to use mobile phones in the school in general? If no how do they report any emergency situation in their various houses to the school authority or communicate with their parents?
- 16. Do you have any association in the school that helps the visually impaired students?
- 17. If yes what is their work? And if no don't you think it's necessary?
- 18. Is there anything I have not asked which you think it's very important in this regard?

## Appendix C

#### INTERVIEW GUIDE FOR VISUALLY IMPAIRED STUDENTS

- 1. Which class and year are you?
- 2. How long have you been in the school?
- 3. How do you see teaching you alongside the non-visually impaired students in the same classroom?
- 4. Are there any challenges you faced as a student?
- 5. Can you please share those challenges with me?
- 6. What will you say are the causes of those challenges?
- 7. Can you please suggest ways to overcome them?
- 8. Is there any day that you feel sad in the school and what is the cause?
- 9. Have you been receiving assistance or support from your teachers or non-visually impaired students during instructional hours?
- 10. If yes in terms of what? And if no don't you think it's necessary?
- 11. In your dormitory are you separated or mixed?
- 12. Do the non-visually impaired students help you in any way or do they sometimes tease you?
- 13. How is the situation like in the dining hall? Are you given a separated table?
- 14. How do you receive information from the school authorities since there are no Braille versions of the information on the notice boards?
- 15. How do you fine movement in the school in general? Have you are ever fallen into any of the open gutters before? How do you feel?
- 16. How do you travel home when school vacates?
- 17. Do you learn Information Computer Technology (ICT)? If yes how do you learn it? If no how to you feel about it?
- 18. If the taps are not flowing, how do you get water for use?
- 19. Is there something I have not asked you which is very important for which you want to share with me?

## Appendix D

#### INTERVIEW GUIDE FOR NON-VISUALLY IMPAIRED STUDENTS

- 1. Teaching you and the visually impaired students in the same classroom, do you find it helpful?
- 2. If yes or no what accounts for that?
- 3. Have you ever had a close personal interaction with any of the visually impaired students on campus?
- 4. Can you briefly tell me what that was?
- 5. Generally how do you assess the interaction between the visually impaired and non-visually impaired students on campus?
- 6. What reason would you assign to that?
- 7. Do school authorities educate you on how to relate and help the visually impaired on campus?
- 8. If yes, how often is it done?
- 9. In the classroom, dormitory and dining hall, how do you assess the assistance to the visually impaired students on campus by the non-visually impaired students?
- 10. Have you helped any of the visually impaired students before?
- 11. If yes, will you please share with me and if no why?
- 12. Notices to students are in written form but Braille versions are not available, how do visually impaired students get the information for themselves?
- 13. Is there anything I have not asked which in your opinion I should have not asked?

# Appendix E

#### CONSENT FORM FOR TEACHERS AND STUDENTS

I am student of Oslo and Akreshus University College of Applied Sciences (HiOA) doing Masters Programme in Multicultural and International Education. The title of my master thesis is Inclusion of the Visually Impaired in Secondary Education in Ghana. It is an academic exercise in partial fulfilment of the award of MPhil in Education.

In relation to this I want to do observation and interviews for teachers and students in the school. I will investigate (a) the support given to the visually impaired students during instructional hours and (b) the kind of relationship between the visually impaired and their sighted counterparts in the school.

A voice recorder will be used during the interviews if approval is given by the teachers and the students. All the information gathered from the participants will be treated as confidential and will not be accessible to any other person but probably my supervisor Professor Halla Bjørk Holmarsdottir of Oslo and Akreshus University College of Applied Sciences (HiOA). Taking part in this study will not be harmful to the participants in anyway while the information recorded will be deleted at the end of the project in November, 2012. Furthermore, the name of the school will not be mentioned in the final report to ensure confidentiality. It is voluntary to participate in this project; teachers and students can at any time withdraw from this enquiry without any prior information or reason.

Please do not hesit	tate to contact me for further exp	lanation.	
Cornelius Kwaku	Worlanyo		
E-mail: s169059@	stud.hioa.no / worlacon@yahoo	.com / worlass.33@ hotmail.com	
Cell phone number	rs +233 203 934 361/ +233 208	100 770	
I have read the abo	ove information and I am willing	to participate in the study.	
Please tick			
Teacher [ ]	Date	Signature	
Student [ ]			