

UNIVERSITY OF EDUCATION, WINNEBA
DEPARTMENT OF SPECIAL EDUCATION

**ASSESSING REGULAR TEACHERS' CAPACITY IN EDUCATING
CHILDREN WITH SPECIAL EDUCATIONAL NEEDS IN SELECTED
PILOT INCLUSIVE SCHOOLS IN NZEMA EAST MUNICIPALITY**



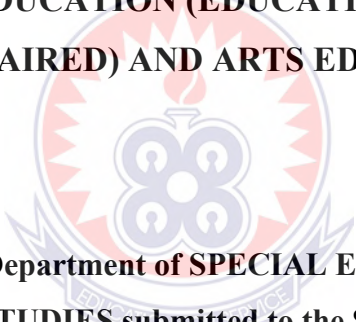
2014

UNIVERSITY OF EDUCATION, WINNEBA
DEPARTMENT OF SPECIAL EDUCATION

**ASSESSING REGULAR TEACHERS' CAPACITY IN EDUCATING
CHILDREN WITH SPECIAL EDUCATIONAL NEEDS IN SELECTED
PILOT INCLUSIVE SCHOOLS IN NZEMA EAST MUNICIPALITY**

BERNARD LUMOR HODOFE

**B.ED SPECIAL EDUCATION (EDUCATION OF THE VISUALLY
IMPAIRED) AND ARTS EDUCATION**



**A Thesis in the Department of SPECIAL EDUCATION, Faculty of
EDUCATIONAL STUDIES submitted to the School of Graduate Studies,
University of Education, Winneba, in partial fulfilment of the requirement for
the award of Degree of MASTER OF EDUCATION, SPECIAL EDUCATION of
the UNIVERSITY OF EDUCATION, WINNEBA**

DECEMBER, 2014

DECLARATION

CANDIDATE'S DECLARATION

I, hereby declare that this thesis is the result of my own original research. With the exception of quotations and references contained in published works (which have all been identified and acknowledged) the entire dissertation is my own original work, and it has not been submitted, either in part or whole for another degree elsewhere.

Candidate's Name: Bernard Lumor Hodofe

Signature:

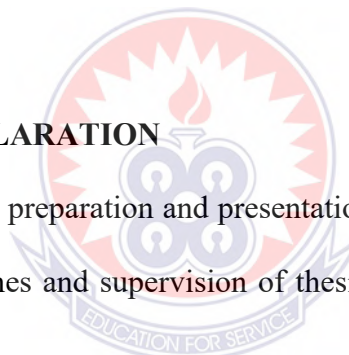
Date:

.....

.....

SUPERVISOR'S DECLARATION

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



Supervisor's Name: Dr. Samuel K. Hayford

Signature:

Date:

.....

.....

ACKNOWLEDGEMENTS

I am privileged to have all the encouragement from my parents, siblings and friends while I worked towards this goal. I am especially grateful and indebted to my supervisor, Dr. Samuel K. Hayford for his invaluable encouragement and patience in guiding me. It has been a privilege working with him. He was very instrumental in bringing this project to fruition.

I would also thank the education officers and teachers of the selected schools who participated in this study for their immense cooperation and assistance during the study.

Most of all, I thank the Almighty God for His abundant grace and love.



DEDICATION

This work is dedicated to my family and friends. They had been very encouraging and supportive during the study of the course.



TABLE OF CONTENTS

Contents	Page
Declaration	i
Acknowledgements	ii
Dedication	iii
Table of Contents	iv
List of Tables	viii
Abstract	ix

CHAPTER ONE

INTRODUCTION

1.1	Background to the Study	1
1.2	Statement of the Problem	3
1.3	Aim of the Study	4
1.4	Objectives of the Study	4
1.5	Research Questions	5
1.6	Significance of the Study	5
1.7	Definition of Terms	6
1.8	Delimitations	6
1.9	Limitations	7
1.10	Structure of the Study	7

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1	Introduction	9
2.2	Theory of Self- efficacy	9
2.3	Children with Special Educational Needs (SEN)	13
2.4	The Concept of Inclusive Education	17
2.5	Curriculum Adaptations	21
2.5.1	Curriculum Differentiation	26
2.5.2	Instructional Adaptation	29
2.5.3	Adaptation of Instructional Setting	30
2.6	Alternative Assessment Procedures	31
2.6.1	Authentic Assessment	31
2.6.2	Performance – Based Assessment	33
2.6.3	Portfolio Assessment	34
2.7	Collaboration with other Professionals.....	35
2.7.1	Collaborative Teaching	38
2.8	Summary of Literature Review	44

CHAPTER THREE

METHODOLOGY

3.1	Introduction	46
3.2	Research Design	46
3.3	Population	47
3.4	Sample and Sampling Technique	47
3.5	Instrumentation	49

3.6	Pilot Study	50
3.7	Validity and Reliability.....	52
3.8	Access	53
3.9	Distribution of the Questionnaire	54
3.10	Collection of Completed Questionnaire	55
3.11	Data Analysis Procedure.....	56

CHAPTER FOUR

PRESENTATION OF RESULTS AND ANALYSIS OF FINDINGS

4.1	Introduction	57
4.2	Result on Demographic Characteristics	57
4.2.1	Gender and Educational Qualification of Respondents	58
4.2.2	Age range of the Respondents	59
4.2.3	Teaching Experience of Respondents	59
4.2.4	Training in Inclusive Education or Teaching Children with Special Educational Needs	60
4.2.5	Type of Training	61
4.3.	Knowledge and Skills in Inclusive Education.....	62
4.3.1	Curriculum Adaptations.....	62
4.3.2	The use of alternative assessment procedures	65
4.3.3	Collaboration with other professionals	68

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1	Introduction	71
5.2	Discussion of Findings	71

5.2.1	Competencies of regular teachers in curriculum adaptations	71
5.2.2	Teachers' ability to use of alternative assessment procedures	78
5.2.3	Collaboration with other professionals	82

CHAPTER SIX

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

6.1	Introduction.....	85
6.2	Reflection on the methodology	85
6.3	Summary	85
6.4	Conclusions	87
6.5	Recommendations	88
6.6	Suggested areas for further research.....	89
	REFERENCES	90
	APPENDIX A: Questionnaire for Teachers	103
	APPENDIX B: Introductory Letter	107
	APPENDIX C: Request for Permission.....	108



LIST OF TABLES	PAGE
Table 3.1: Distribution of Teachers in the selected Basic Schools as at September, 2014.	47
Table 3.2: The Sample for the Study from the selected Schools	49
Table 4.1: Gender and educational qualification of respondents	58
Table 4.2: Age range of respondents	59
Table 4.3: Distribution of teaching experience of respondent	60
Table 4.4: Distribution of respondents on receiving training in inclusive education or teaching children with special educational needs	60
Table 4.5: Training received in inclusive education	61
Table 4.6: Teachers’ Responses on their knowledge and skills (competencies) in curriculum adaptations in the inclusive classrooms	63
Table 4.7: Teachers’ response on the use of alternative methods of assessment.....	66
Table 4.8: Teachers’ response on collaboration with other professionals.....	68

ABSTRACT

This study investigated regular teachers' capacity in educating children with special educational needs in selected pilot inclusive basic schools in Nzema-East Municipality. The study adopted descriptive survey design and used a researcher self-developed questionnaire as the main instrument for data collection. A sample of 90 teachers was selected by the simple random sampling technique from 10 purposively selected basic schools in the Nzema-East Municipality. Data was analyzed using frequency counts involving simple percentages using themes and data from respondents. This was to address the three research questions formulated to guide the study. The findings from the study showed that majority of the teachers reportedly felt they have not acquired capability to adapt the curriculum; instructional strategies, select teaching and learning materials, learning environment to meet the diverse learning needs of children with special needs in their classrooms. Further, close to half of the teachers thought they could not competently use alternative assessment procedures in assessing pupils with special educational needs in inclusive settings. Furthermore, majority of teachers, 62.7%, thought they were not able to collaborate with other professionals to co-teach in order to enhance the learning ability of students with special needs. From the findings it was recommended that intensive in-service training should be organized for teachers. Also, posting of professionally trained special educators to schools on the inclusive education programme should be prioritised to facilitate the implementation of the inclusive education programme in the schools.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Teachers are expected to exhibit their knowledge and skills using state-of-the-art equipments, materials, strategies and resources available to educate all school children under their auspices. Currently, educational policies, principles and practices of most nations are focusing on inclusive education. This policy of including students with special educational needs in the regular setting has become a primary educational goal. The policy started as mainstreaming, then integration and now inclusion. The major international organization behind the shift to inclusion is UNESCO. This agency issued Salamanca Statement on Principles, Policy and Practice in Special Needs Education and Framework for Action (UNESCO, 1994). The ideals of the movement reflect the United Nation's global strategy of Education for All (Farrell and Ainscow, 2002). Inclusive education is a means of providing quality education to all persons who are at risk of marginalization or suffer exclusion (National Council for Special Education, 2010).

The most compelling rationale for inclusive education is based on fundamental human rights (NCSE, 2010; UNESCO/UNCEF, 2007). In view of this, NCSE (2010) states that all children, including those with special educational needs, have a right to an education which is appropriate to their needs. The aims of education for pupils with special educational needs are the same as apply to all children. Education should be about enabling all children to live full and independent lives so that they can contribute to their communities, cooperate with other people and continue to learn throughout their lives. Education is about supporting children to develop in all aspects

of their lives – spiritual, moral, cognitive, emotional, imaginative, aesthetic, social and physical (National Council for Special Education, 2011).

Generally, the population of learners in every classroom and learning setting encompasses learners with diverse learning needs. This diversity, meaning differences, encompasses abilities, disabilities and difficulties (Hayford, 2013). Recognizing that children with special needs can be found in every country (Guski, 2008), UNESCO (1994), emphasizes the need to address diversity of learning needs in regular schools and points out that every child has unique characteristics, interests, abilities and learning needs. The regular teacher is therefore tasked to use various educational strategies, knowledge and skills to provide and meet the diverse educational and learning needs of all pupils in the inclusive classroom.

Ghana's movement towards inclusive education is reflected in educational reforms, policies, and legislations. These include the Free Compulsory Universal Basic Education (FCUBE) policy which aims at expanding, strengthening and making education relevant to all children (Ghana Government, 1996). The passing of a disability law in 2006 is also a major means of working towards inclusion in Ghana (Ghana Government, 2006). Inclusive education has also become the official policy of the Ministry of Education, Science and Sports (MOEYS) (2003, 2010) as outlined in the Education Strategic Plan (ESP) 2003-2015 (now 2010-2020). Besides, Hayford (2013) and Gadagbui (2013) further noted that inclusion and inclusive education practices are being piloted in selected districts across the country. Nzema-East Municipality is among 10 other districts in the Western Region which are on the inclusive education pilot project.

The prominent central figures to successful inclusion are the mainstream/regular teachers. They take ownership of inclusion and should believe in their own competence to educate students with special educational needs (Thomas, Walker, & Webb, 2005). There is increasing need for teachers who can provide effective instruction to students with disabilities in the inclusive setting. Hence, Ainscow, Dyson and Weiner, (2013) state that knowledge, belief and the values of the teacher that are brought to bear in creating effective learning environment for pupils make the teacher a more critical influence in education and development of inclusive education.

The ability of any of the regular teachers to exercise mastery in the inclusive class deeply depends on his/her acquired capacity. The capacity of the teacher is very critical and necessary as it reveals the ability of the teacher to function effectively in the inclusive setting. Above all, it tells how successful the implementation of the inclusive education programme would be realized. This is why the researcher will want to conduct this study to assess the regular teachers' capacity or competency towards effective education of children with special educational needs in the inclusive setting in the Nzema East Municipality.

1.2 Statement of the Problem

Though most teachers teaching in the inclusive pilot schools exhibit positive interest in the education of students, they seem to have limited knowledge and skills in special educational needs practices. Most teachers in the inclusive schools do not offer the necessary individual support to students to enhance their participation in learning. Informal observations by the researcher revealed that some teachers in the inclusive classes have difficulty in making the general curriculum accessible to learners with special needs. All pupils go through the same instructional and assessment

procedures. As a result some of the pupils are left behind and most at times labeled of being lazy, non-achievers and disrupters. These practices by the general education teachers may cause some of the learners with special educational needs to feel uncomfortable and thus, turn to be truant and finally, drop out of school. It is against these circumstances that the researcher sought to find out the capacity of regular teachers in teaching children with special educational needs in the inclusive pilot schools in the Nzema East Municipality.

1.3 Aim of the Study

The study aimed at assessing the capabilities of regular teachers in educating learners with special educational needs in the pilot inclusive setting in Nzema-East Municipality of the Western Region, Ghana.

1.4 Objective of the Study

- The study specifically sought to:
- examine the regular teachers' ability in guiding the learner with special educational needs to access the school curriculum in the inclusive setting.
- explore the teachers' knowledge in the use of alternative assessment procedures in assessing pupils with special needs in the inclusive setting.
- find out the ability of regular teachers in collaborating with other personnel and parents to enhance learning and inclusion of children with special needs in the regular settings.

1.5 Research Questions

The researcher raised three questions to guide the study.

1. What competencies do regular teachers exhibit in adapting the curriculum to meet the learning needs of learners with special educational needs in the inclusive setting?
2. What are the regular teachers' competencies in using alternative assessment procedures in assessing pupils with special educational needs?
3. How able are regular teachers in collaborating with other professionals to enhance the learning ability of students with special needs?

1.6 Significance of the Study

The outcome of the research will be of benefit to educational policy makers, teachers, researchers and training institutions as they will be informed about factors hindering the success of the inclusive education in the communities and the country as a whole. This would enable them to find means of assisting regular teachers to overcome the identified challenges. The curriculum developers and teacher training institutions would be guided by the outcome of this study to put measures in place to broaden the knowledge and skill base of teachers on effective ways of education children with special needs in the inclusive setting. Also, the findings of this research work will be a springboard for future researchers on capabilities of regular teachers in educating children with special educational needs in the inclusive settings. Finally, the findings of this study will influence teacher preparation programmes leading to experience of quality education by learners with special needs in the inclusive settings.

1.7 Definition of Terms

Regular teachers: The teachers who have no specialized training in educating any category of children or learners with special needs.

Capacity: The mental or physical ability to do so something.

Children with special educational needs: Children/pupils/students whose disabilities and /or circumstances prevent or hinder them from benefiting adequately from the education which is normally provided for pupils of the same age, or the education which is generally provided in the ordinary classroom is not sufficiently challenging. These categories of children include those with hearing problems, visual impairments, intellectual disabilities, physical disabilities, behaviour problems, specific learning disabilities, speech and language problems, gifted and talented, child soldiers, girl child, refugee child, children from poor homes, children from single parents, abused child, children from ethnic minority, rural child, orphans, lower attainers and those with multiple disabilities.

Inclusive basic schools: Basic schools where the school system makes it possible for both the learners with special needs and their counterparts to be educated in the same setting to achieve the maximum goal of the school curriculum.

1.8 Delimitation

Although there are many teachers in many basic schools in the Nzema-East Municipality, this study focused on only 10 basic schools and their teaching staff. The 10 basic schools were selected because they are the basic schools piloting inclusive education in the municipality.

1.9 Limitations

The study used descriptive survey design with questionnaire as the method of data collection. The exclusive use of questionnaires to obtain data might have yielded shallow findings since certain issues could not be followed up into greater depth. Again, the sampling technique did not allow every teacher to participate in the study. Also, the already limited population of the study had further lessened the sample since some teachers were used for the pilot study. This implies that the findings of the study are not representative enough to be generalized to the whole country.

1.10 Structure of the Study

The report of the research is in five chapters. Chapter one includes background to the study, statement of the problem, aim of the study, objectives of the study, research questions, significance of the study, definition of terms, delimitation and the structure of the study.

Chapter two describes literature review which used the theoretical and conceptual framework. The conceptual framework covered children with special educational Needs (SEN), the concept of inclusive education curriculum adaptations in inclusive classrooms, alternative assessment and collaboration with other professionals.

The third chapter describes the methodology that was employed to collect data for the study. The methodology includes research design, population, sample and sampling technique, instrumentation, piloting, gaining access, distribution and collection of questionnaire and data analysis procedure.

Chapter four presents the results and analysis of findings, while chapter five provides the discussions of findings. Finally, chapter six presents reflection on the

methodology, summary of the findings, conclusions, recommendations and suggested areas for further study.



CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter provides the review of related literature on assessing regular teachers' capacity or competency towards effective education of children with special educational needs in the inclusive setting. The literature had been reviewed under conceptual framework, based on the following sub-themes.

- (i) Theoretical framework
- (ii) Children with Special Educational Needs (SEN)
- (iii) The concept of inclusive education
- (iv) Curriculum adaptations
- (v) Instructional adaptations
- (vi) Alternative assessment procedures
- (vii) Collaboration with other professionals
- (viii) Summary

2.2 Theory of Self-efficacy

The study was guided by the Theory of Self-Efficacy. The theoretical foundation of self-efficacy is found in social cognitive theory, developed by Albert Bandura (Bandura, 1977; 1997). Bandura defined 'self-efficacy' as "people's judgment of their capabilities to organize and execute courses of action required to attain designated types of performance" (Bandura, 1986, p.391). Bandura (1986) clarified that self-efficacy "is concerned not with the skills one has but with judgments of what one can do with whatever skills one possesses" (p. 391). Perceived self-efficacy beliefs may

impact a person in either a positive, empowering way, or in a negative, demoralizing way. It is the individual's beliefs about being able to carry out the necessary actions to achieve a desired result that determine the impact (Bandura). This implies that individuals who believe in their ability to perform a specific task will work harder and persist in order to successfully reach the goal than those who do not believe in their ability (Pajares, 2002).

Bandura's works continued to develop and defend the idea that our beliefs in our abilities powerfully affect our behavior, motivation, and ultimately our success or failure (Bandura 1997). Bandura further proposed that because self-efficacy beliefs were explicitly self-referent in nature and directed toward perceived abilities given specific tasks, they were powerful predictors of behavior.

Educationally, self-efficacy beliefs are related to academic performance and self-regulated learning (Pajares, 2002; Zimmerman, 2000) and importantly, efficacy beliefs help dictate motivation (Lunenburg, 2011) According to Bandura's observation, people regulate their level and distribution of effort in accordance with the effects they expect their actions to have. As a result, their behaviour is better predicted from their beliefs than from the actual consequences of their actions (Bandura, 1986). From the social cognitive theory perspective, because human agency is mediated by our efficaciousness, self-efficacy beliefs influence our choices, our effort, our persistence when facing adversity, and our emotions (Pajares, 2002).

Teacher self-efficacy is one area of self-efficacy application directly relevant to educational improvement. Consistent with the general formulation of self-efficacy, Dellinger, Bobbett, Olivier and Ellett (2007) define teacher self-efficacy as a teacher's individual belief in their capability to perform specific teaching tasks at a specified level of quality in a given specified situation. In a similar view, Tschannen-Moran,

and Woolfolk-Hoy (2007) defined teacher efficacy as a teacher's judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated. Based on social cognitive theory, teachers' self-efficacy has conceptualized as individual teachers' beliefs in their own ability to plan and organize, then to carry out activities that are required to attain given educational goals (Skaalvik & Skaalvik , 2008) A teacher with a higher perception on self-efficacy is more confident about their abilities and, therefore, more likely to stay in the teaching profession. Teachers who have a high sense of self-efficacy usually employ effective approaches in the classroom. Skaalvik and Skaalvik posit that when teachers have a strong positive self-efficacy, students benefit from their high sense of self-efficacy and that, teachers with strong self-efficacy beliefs seem to be more prepared to experiment with, and later also to implement new educational practices.

Bandura (1997) has identified and described four principal sources of self-efficacy. These are past performance, vicarious experience, verbal persuasion and emotional cues. According to Bandura (1997), the most important source of self-efficacy is past performance. Employees who have succeeded on job-related tasks are likely to have more confidence to complete similar tasks in the future (high self-efficacy) than employees who have been unsuccessful (low self-efficacy). Managers or supervisors can boost self-efficacy through careful hiring, providing challenging assignments, professional development and coaching, goal setting, supportive leadership, and rewards for improvement (Bandura, 1977a).

The second source of self-efficacy, as noted by Bandura, is through vicarious experience. With this, Bandura states that seeing a co-worker succeed at a particular

task may boost your self-efficacy. Vicarious experience is most effective when you see yourself as similar to the person you are modeling (Bandura, 1977a).

The third source of self-efficacy is through verbal persuasion. Essentially this involves convincing people that they have the ability to succeed at a particular task. The best way for a leader to use verbal persuasion is through the Pygmalion effect. The Pygmalion effect is a form of a self-fulfilling prophesy in which believing something to be true can make it true (Bandura, 1997a).

Finally, Bandura argues that emotional cues dictate self-efficacy. A person who expects to fail at some task or finds something too demanding is likely to experience certain physiological symptoms: a pounding heart, feeling flushed, sweaty palms, headaches, and so on. The symptoms vary from individual to individual, but if they persist may become associated with poor performance (Bandura, 1997a).

The theory of Self-Efficacy is relevant to the study of how confident general teachers are in their competencies towards educating learners with special needs in the inclusive setting. Just as various writers explain the theory, teachers with a high level of “can do spirit” are more confident about their abilities and, therefore, more likely to exhibit all adaptive dimensions of attending to the diverse needs of all learners in the practice of their teaching profession. On the other hand, teachers who are diffident in their capabilities are usually less effective in their approaches to meeting the educational needs of all the learners in the classroom.

The theory further requires teachers to develop a high sense of self-efficacy because when teachers have a strong positive self-efficacy, they are able to persuade the students, especially those with special needs, to believe in themselves to overcome all

impediments and reach full attainments. With strong self-efficacy teachers believe and seem to be more prepared to experiment with, and also to implement new educational practices such as the inclusive education policy.

2.3 Children with Special Educational Needs (SEN)

Children with special educational needs (CSEN) is relatively a new concept in special education. It emanated from the language and philosophy of the Warnock Report of the United Kingdom (Department of Education and Science, 1978, cited in Department of Education and Science, 2007; Walker & Webb, 2005). The concept was introduced as a legally defined term by the Education Act (Department of Education and Science 1978). It is used interchangeably with children with special needs. Even though it has been there for some time now, there is no precise definition for it. Different sources and nations use different description and different categorizations to represent the concept.

The National Council for Special Education (NCSE) (2014) argues that children with special educational needs are children first and have much in common with other children of the same age. According to NCSE there are many aspects to a child's development that make up the whole child, including – personality, the ability to communicate (verbal and non-verbal), resilience and strength, the ability to appreciate and enjoy life and the desire to learn. Each child has individual strengths, personality and experiences hence, particular disabilities will impact differently on individual children. A child's special educational need should not define the whole child.

In the Education for Persons with Special Educational Needs (EPSEN) Act (Government of Ireland, 2004), special educational needs has been defined as a restriction in the capacity of the person to participate in and benefit from education on

account of an enduring physical, sensory, mental health or learning disability, or any other condition which results in a person learning differently from a person without that condition. The EPSEN Act recognizes that special educational needs may arise from four different areas of disability: physical, sensory, mental health and learning disability or from any other condition that results in the individual learning differently from a child without that condition. It is also important to understand that a child can have a disability but not have any special educational needs arising from that disability which require additional supports in school.

According to Gadagbui (2013), learners with special educational needs are those individuals whose personality, specific behaviour, intelligence, sensory skills and performance deviate from the average child. This author mentioned that children with special educational needs include those with hearing problems, visual impairments, intellectual disabilities, physical disabilities, behaviour problems, specific learning disabilities, speech and language problems, and those with multiple disabilities. Another view contained in a report of Special Educational Review Committee (SERC) in Dublin (1993), describe pupils with special educational needs as those whose disabilities and/or circumstances prevent or hinder them from benefiting adequately from the education which is normally provided for pupils of the same age, or the education which is generally provided in the ordinary classroom is not sufficiently challenging. This description has expanded the category of children with special (educational) needs to include child – soldiers, girl child, refugee child, children from poor homes, children from single parents, abused child, children from ethnic minority, rural child, orphans and lower attainers (Hayford, 2013; UNESCO/UNICEF, 2007). The gifted and talented children are not left out of the list of special educational need children (Gadagbui).

The Warnock Committee believed that, children often experienced a range of difficulties which meant they may not be fitted into the categories of disabled pupils and that, even pupils with the same disabilities, may have varied needs in terms of teaching approaches and classroom management (Department of Education and Science, 1978 cited in Department of Education and Science, 2007; Walker & Webb, 2005). They again sided with Frederick and Cline (2006) that, there are times when different categories of pupils with disabilities may have the same needs. These reasons therefore led to their recommendation that, the statutory categories of disabled pupils should be abolished and instead children who require special educational provision should be identified on the basis of a detailed profile of their needs following assessment.

Added to these, UNESCO's International Standard Classification of Education (ISCED) (1997) cited in UNESCO (2006) states that, those with special educational needs are defined by additional public and/or private resources provided to support their education. This resource approach to defining special education needs brings together pupils with a wide variety of learning difficulties. The following, as identified by ISCED, are some of categories of pupils who may require special educational needs. A child with a/an;

- learning difficulties that make it harder for him or her to learn as most other children of the same age
- emotional and behavioral difficulties, social skills such as making friends, relating to peers among others.
- sensory or physical needs such as hearing or visual which might affect his or her learning.

- communication problems: when a child has a problem expressing him or herself or understand what others are saying
- medical or health conditions which may slow a his or her progress and/or involves treatment that affects his or her education.
- no disabilities but is gifted and/or talented; disadvantaged children like refugee children, street and working children, children from nomadic populations, children who have lost their parents through AIDS or civil strife among others (pp 81-82).

The broad aims of providing special educational needs for students with special needs, as identified by Department of Education and Science (2007) include:

- helping students with special needs to have access to appropriate broad and balanced curriculum. This in turn enables them to live a full life and to realize their potential as unique individuals.
- enabling the student to function relatively as independent as possible in society through the provision of such educational supports as are necessary to realize that potential.
- special educational needs incorporates the proven principles of sound pedagogy from which all children may benefit. It assumes that human differences are normal and that learning must accordingly be adapted to the needs of the child rather than the child fitted to pre-ordained assumptions regarding the pace and nature of the learning process.
- experience has demonstrated that, it can substantially reduce the drop-out and repetition rate that are so much a part of many educational systems while ensuring higher average levels of achievement.

- it can help to avoid the waste of resources and the shattering of hopes that is frequently associated with poor quality instruction in one size fit for all mentality towards education.
- it brings about a people-oriented society that respects both the difference and the dignity of all human beings.

The methods or techniques for teaching special needs children depend on each category of learners. The kinds of teaching methods, techniques and strategies the teacher can use to effectively teach any special need child are largely influenced by information gathered from assessment of the child concerned (NCCA, 2007).

2.4 The Concept of Inclusive Education

As far back as 1924 the League of Nations adopted the declaration on human rights and the rights of the child (Urika, 1996 cited in Avoke, 2005) in spite of that, discrimination and acts of aggression are still perpetuated against some children all over the world. The current body, the United Nations, formulated new and more elaborate conventions on human rights in 1959. These declarations directed member states to protect the right of citizens, particularly, vulnerable groups such as women, children and those with disabilities, as well as the disadvantaged. Yet in spite of these conventions, people with disabilities are still being subjected to in human treatment, and denied access to relevant services in many parts of the world, including Ghana (Avoke, Hayford, Ihenacho & Ocloo 1998). The United Nations Charter on Human rights, (1948), the Salamanca Statement (1994), and the United Nations Standard Rules on the Equalization of Opportunities for Persons with Disabilities (1993) are compelling regular schools and institutions to open their doors for students having special needs to be educated together in the same class, with their non-disabled peers.

Delegates at the World Conference on Special Needs Education held in Salamanca, Spain in 1994, recognized the urgency and the importance of providing education for individuals with special needs within the regular education system and made the following proclamation among others:

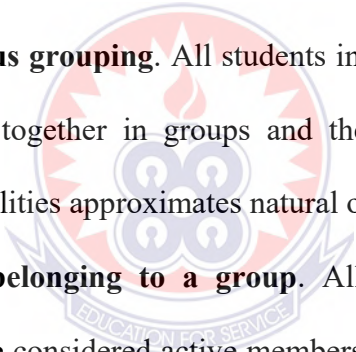
...those with special needs education must have access to regular schools which should accommodate them within a child-centred pedagogy capable of meeting these needs...regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all; moreover they provide an effective education to the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire education system.....United Nations Education, Scientific and Cultural Organization (UNESCO, 1994, p. 9).

The UNESCO (2009) states that inclusive education is: ‘an ongoing process aimed at offering quality education for all while respecting diversity and the different needs and abilities, characteristics and learning expectations of the students and communities, eliminating all forms of discrimination’ (p. 3). The current thinking has moved beyond the narrow idea of inclusion as a means of understanding and overcoming a deficit, inclusion is now widely accepted as concerning issues of gender, ethnicity, class, social conditions, health and human rights encompassing universal involvement, access, participation and achievement of school activities (Ouane, 2008). Inclusive education describes the process by which a school attempts to respond to all learners as individuals, by reconsidering and restructuring its curricular organization and by providing and allocating resources to enhance equality of educational opportunities (Hyam, 2004).

Inclusive education is however more than just a placement. Specific principles underlying this approach are usually built into a bill of rights and governmental policies (Department of National Education - DNE, 2002) which perceive education as a basic human right. The principle implies that all learners have the right to equal

access to the widest possible educational opportunities. The state (Ghana) has an obligation to protect and advance these rights so that all citizens, irrespective of race, class, gender, creed, or age have the opportunity to develop their capacities and potential and make their full contribution to society. The principle of quality education for all learners suggests that schools have to meet the diverse needs of all learners (Farrell, Alborz, Howes, & Pearson, 2010)

According to Giangreco, Dennis, Cloninger, Edelman and Schattman, (1993) inclusive education has five components and all of these should occur on an ongoing basis. They contend that inclusive education is in place only when all the five features occur regularly. The five features are:

- 
- **Heterogeneous grouping.** All students including those with special needs are educated together in groups and the number of students with and without disabilities approximates natural or normal proportions.
 - **A sense of belonging to a group.** All students including those with disabilities are considered active members of the class. Students who have disabilities feel welcomed as those without disabilities.
 - **Shared activities with individualized outcomes.** Students share educational experiences, for example, lesson, laboratories, field work, and group learning at the same time. The learning objectives for the students are individualized to meet each student's learning needs.
 - **Use of environments frequented by individuals without disabilities.** The learning experiences take place in general education classrooms and community work sites.

- **A balanced educational experience.** Inclusive education seeks an individualized balance between the academic/functional and social /personal aspects of schooling.

Arnesen, Allen, and Simonsen (2009) note that ‘inclusion may be understood not just as adding on to existing structures, but as a process of transforming societies, communities and institutions such as schools to become diversity-sensitive’. These authors make the point that the international commitment to human rights has led to a changing view and a reduced emphasis on an individual’s disability which has, in turn, led to its classification as socio-cultural. This view is consistent with the disability studies perspective which recognises disability as another interesting way to be alive (Smith, 2009) and sees individual support as the norm for all learners.

More specifically regarding teacher education, Ballard (2003) says that inclusive education is concerned with issues of social justice, which means that graduates entering the teaching profession should:

‘understand how they might create classrooms and schools that address issues of respect, fairness and equity. As part of this endeavour, they will need to understand the historical, socio-cultural and ideological contexts that create discriminatory and oppressive practices in education. The isolation and rejection of disabled students is but one area of injustice. Others include gender discrimination, poverty and racism’(p.59).

In Ghana more efforts are being made in implementing inclusive education. According to the Ministry of Education (2003), the Education Strategic Plan 2003-2015 (now ESP 2010-2020) document mandates that special education should include more in-depth knowledge of special needs children particularly in the light of policy on inclusive education, and that all teachers in the country should be trained in the UNESCO special education training packs (1993) which provides basic approaches to helping children with special needs. It also suggested that a more comprehensive

special needs education module should be developed for Colleges of Education in Ghana (Ministry of Education, 2003, cited in Avoke (2005). As at 2011, 379 pilot inclusive schools have been established in 70 districts (Ghana Education Service, 2011)

2.5 Curriculum Adaptations

The success of imparting knowledge and skill to all learners of diverse abilities depends greatly on the teachers' ability to adapt the curriculum when students have difficulty acquiring skills and information. The general curriculum is mainly designed to serve students in the normal range which exclude diverse learners such as the disadvantaged and students with disabilities (Lu, 2011). Adapting general education curriculum to meet each student's needs is necessary for successful inclusion (NCCA, 2012). However, the national curriculum of Ghana and the subject teaching syllabi are not inclusive in order to address the diverse learning needs of learners in the classroom. This was made known by the Ministry of Education, Youth and Sport (2004) that; "not much has been achieved in the area of curriculum adaptation to address the diverse learning needs of children with special needs in the regular classroom" (p. 15). The need to make the curriculum to respond to the needs of the children with special educational needs, therefore making it accessible to them, is what UNESCO is calling on all nations to do as it states that: "curricula should be adapted to children's needs, not vice-versa. Schools should therefore provide curricular opportunities to suit children with different abilities and interests (NCSE 2010). Children with special needs should receive additional support in the context of the regular curriculum, not different curriculum. The guiding principle should be to provide all children with the same education, providing additional assistance and

support to children requiring it (UNESCO, 1994). This assertion of UNESCO defeats the mentality of many educators who still tend to use the “one-size-fit-all” approach to teaching (Wade, 2000). In reality educators are faced with a group of learners with unique characteristics, interests, styles and pace of learning and working. In light of this, curriculum modifications/adaptations, and differentiation should not be an exception but rather central methods of ensuring access to the general curriculum (Gilbert & Hart, 1990, cited in Potmesilova, Potmesil, & Roubalova, 2014; King-Sears, 2001).

Curriculum modifications can be put into practice for different purposes ranging from altered content knowledge, conceptual difficulty, educational goals, to instructional methods and assessment. Nevertheless, curriculum modification still remains an ambiguous concept especially in relation to the concept of learners with special needs, special educators, and to some extent curriculum implementers (Okumbe & Tshenko, n.d.) Curriculum modification involves change to a range of educational components in a curriculum, such as content knowledge, the method of instruction, and student's learning outcomes, through the alteration of materials and programs (Comfort, 1990 cited in Perez 2014; King-Sears, 2001). Koga and Hall (2004) define curriculum modification as modified contents, instructions, and/or learning outcomes for diverse student needs. In other words, curriculum modification is not limited to instructional modification or content modification but includes a continuum of a wide range of modified educational components. Reisburg (1990), cited in Koga and Hall (2004) lists examples of the modifications of content, such as teaching learning strategies, simplifying concepts or reading levels, teaching different sets of knowledge and skills needed by students, and setting up specific objectives and examples of modifications to instructional methods, including reducing distractions, altering the pace of lessons,

presenting smaller amounts of work, clarifying directions, and changing input and response modes. To this end, all of these teaching events should be considered as examples of curriculum modification.

To make the curriculum inclusive through modifications or adaptations is a means to affording all learners equal opportunities to lifelong education. However, not recognizing that special measures have to be in place for the learners with special needs would be denial of reality. Modifying the curriculum to accommodate those with special needs in inclusive classrooms is to avoid a “watered-down” curriculum which usually accompanies exclusive schools (Okumbe & Tsheko, n.d).

Commenting on curriculum modification for inclusion, Hoover and Patton (1997), cited in Hayford (2013) emphasize that, “effective curriculum implementation and associated adaptations for students with learning and behavior problems best occur when educators possess an understanding of the total curriculum implementation process at the classroom” (p. 142). In other words, an informed, prepared teacher who is comfortable with curriculum will be most adept at adapting that curriculum to the needs of individual students. Hoover and Patton (1997) cited in Hayford (2013) and Hoover and Patton (2004), point to three “curricular elements” that can be adapted: content, instructional settings, and instructional strategies, which promote inclusion.

This section explains the processes involved in modification of content, which will still maintain curricular integrity. The advice is that, rather than changing what is expected of a student, best practice must focus on using different methods to teach the same material, knowledge and skills (Hayford, 2013). As Hoover and Patton (1997) cited in Hayford (2013) write, “due to increased emphasis upon...mandated curricular in which the objectives related to subject material that students must be taught are

already outlined.... teacher are responsible for teaching required content; however, adapting that content is frequently necessary to meet the needs of special learners” (Hayford, 2013, p. 143). Hoover and Patton have provided several strategies for adapting content to fit individual needs. These include:

- Concentrating on the pacing of instruction, combined with ongoing review of material.
- Simplification of tasks (eg. Rewriting phrases in reading material in simpler language).

Apart from the above means of modifying/adapting the curriculum to meet the needs of children with special educational needs, Wright (2005) also outlined nine types of curriculum adaptation as follow:

- **Quantity:** Adapt the number of items that the learner is expected to learn or number of activities student will complete prior to assessment for mastery. For example, reduce the number of social studies items a learner must learn at any one time. Add more practice activities or worksheets (Wright, 2005).
- **Time:** Adapt the time allotted and allowed for learning, task completion, or testing. For example, individualize a timeline for completing a task; pace learning differently (increase or decrease) for some learners (Wright, 2005).
- **Level of Support:** Increase the amount of personal assistance to keep the student on task or to reinforce or prompt use of specific skills. Enhance adult-student relationship; use physical space and environmental structure. For example, assign peer buddies, teaching assistants, peer tutors, or cross-age tutors. Specify how to interact with the student or how to structure the environment (Wright, 2005).

- **Input:** Adapt the way instruction is delivered to the learner. For example, use different visual aids, enlarge text, plan more concrete examples, and provide hands-on activities, place students in cooperative groups, pre-teach key concepts or terms before the lesson (Wright, 2005).
- **Difficulty:** Adapt the skill level, problem type, or the rules on how the learner may approach the work. For example, allow the use of a calculator to figure math problems; simplify task directions; change rules to accommodate learner needs (Wright, 2005).
- **Output:** Adapt how the student can respond to instruction. For example, instead of answering questions in writing, allow a verbal response, use a communication book for some students, allow students to show knowledge with hands on materials.
- **Participation:** Adapt the extent to which a learner is actively involved in the task. For example, in geography, have a student hold the globe, while others point out locations. Ask the student to lead a group. Have the student turn the pages while sitting on your lap (kindergarten) (Wright, 2005).
- **Alternate Goals:** Adapt the goals or outcome expectations while using the same materials. When routinely utilized, this is only for students with moderate to severe disabilities. For example, in a social studies lesson, expect a student to be able to locate the colours of the states on a map, while other students learn to locate each state and name the capital (Wright, 2005).
- **Substitute Curriculum (Sometimes called “functional curriculum):** Provide different instruction and materials to meet a learner’s individual goals. When routinely utilized, this is only for students with moderate to severe

disabilities. For example, during a language lesson a student is learning toileting skills with an aid (Wright, 2005).

2.5.1 Curriculum Differentiation

Curriculum differentiation is one approach to catering for the learning needs of students with the goal of enhancing every student's access to the curriculum (National Council for Special Education (NCSE) (2012). The National Council for Curriculum Assessment (NCCA) (2007) defines differentiation as the process of varying content, activities, teaching, learning, methods and resources to take into account the range of interest needs and experience of individual students. NCCA further states that differentiation applies to all effective teaching but is particularly important for students with special educational needs. Differentiation is an important way of facilitating access to the curriculum for children with SEN.

According to NCSE (2011), there are a number of different definitions of differentiation. These definitions tend to vary in the level of detail and the language used to express the underlying concept, rather than in the concept itself, which has been described succinctly in a number of well-known definitions such as those proposed by Gartin, Murdick, Imbeau and Perner (2002), cited in Hoover and Patton (2004), that differentiation refers to using strategies that address student strengths, interests, skills, and readiness in flexible learning environments. These authors further state that differentiation has to do with adjustment of the teaching process according to the learning needs of the pupils. They go on to talk about five dimensions of differentiation. The first four of these – content, process, products and classroom organization and management – are common to many of the definitions of differentiation. In an Irish context, differentiation has to do with the adaptation of

lesson content, teaching methodology, learning outcomes, resources and assessment (Hibernia, 2010, cited in NCSE, 2011). In this content the term differentiation is used to encompass the variety of strategies that teachers employ to try and ensure that they are enabling all pupils to learn, and achieve the aims and goals of the curriculum. NCSE (2010) interprets differentiation as including adjustments to classroom organization and management, lesson content (including the provision of additional content), learning outcomes, resources (including additional staff support), pedagogy, and assessment methods.

Different teaching approaches, materials, or indeed curricula may be used to ensure that all children in the class are given access to a relevant curriculum experience. King-Sears (2008) addresses a fallacy linked with differentiation, which is that, it may distract from the achievement of other students in the class. The author points out that using differentiation can potentially lead to greater achievement in exams and assessments, given that differentiation is responsive to the needs of all students. King-Sear (2008) further says, one way to make school achievements “look much better” is to ensure that differentiation occurs in general education settings. She further states that schools that promote differentiation can potentially achieve higher scores on large-scale assessment than schools that promote “one size fits all” instruction.

A number of examples of differentiation are being practiced. NCSE (2011), citing Dockrell and Lindsay (2007), document practices such as the provision of easier work for one group or part of the class, the provision of different learning objectives and the use of different strategies. The simplest way that differentiation can be achieved is to use different worksheets, with different numbers of tasks or differences in the level of difficulty in the tasks set. When tasks are either too difficult or insufficiently challenging they are less likely to progress. Effective class differentiation should

include proactive curriculum differentiation and instruction rather than a reactive response to students who are failing to make adequate progress” (NCSE, 2012).

Based on the views of Tomlinson and Allan (2000), a teacher can make the child with special educational needs feel the positive impacts of inclusive education by committing him/herself to undertaking the following activities:

- Having high expectation for all students
- Permitting students to demonstrate mastery of materials they already know and to progress at their own pace through new materials.
- Providing different avenues to acquiring content, to processing or making sense of ideas, and to developing products.
- Providing multiple assignments with each unit, tailored for students with differing levels of achievement.
- Allowing students to choose with teacher’s guidance, ways to learn and how to demonstrate what they have learnt.
- Being flexible and move students in and out of groups, based on student’s instructional needs.

Other differentiation strategies Tomlinson and McTighe (2006) recommends include:

- flexible use of small group learning and teaching in the classroom
- varied use of learning materials
- matching materials to the students’ instructional needs
- variable pacing of the class to respond to learners’ needs knowledge-centred teaching, using the knowledge-base of teachers alongside materials and concepts to ensure student understanding learner-centred teaching, whereby students play an active role in learning, helping them to see the utility in the subjects they are learning.

2.5.2 Instructional Adaptations

Drawing from the work of Mastropieri and Scruggs (1994), Hoover and Patton (1997), cited in Hayford (2013), suggested that, clarification of learning goals, presenting tasks in steps, modeling required procedures, and the continuous monitoring of student's understanding in order to adjust teaching style if necessary, are required to ensure that all learners including those with disabilities or special educational needs participate successfully in learning. The authors provide an exhaustive list of possible strategies, including:

- Contingency contracting (verbal or written agreement between student and teacher that lays out expectations and rewards with regard to a particular activity assignment, etc)
- Providing choices (providing several avenues for a student to accomplish the same goal.
- Student input into curriculum decisions.
- Shortened or stepped assignments
- Individualized instruction
- Alternative methods for response
- Modification of presentation of abstract concepts
- Peer tutoring
- Using proximity, touch, time-out and non-verbal cues to manage disruptive behaviours
- Planned ignoring
- Clear and concise expectations (p. 143).

2.5.3 Adaptation of Instructional Setting

Adapting instructional settings often involved the types of student groupings used in the classroom; for example, the organization of different learning areas within classrooms, the use of study carrels, and group seating to maximize student involvement in their own work as well as the group work (Hayford, 2013). Hoover and Patton (2004) and Hoover and Patton (1997) cited in Hayford (2013) state that the style of an instructional setting must:

- Provide the opportunity and requirement for a student to manage her or his own behaviour.
- Minimize the risk of behavior-baized failure
- Foster the message that students are expected to complete the task.

In a different view, Treffinger and Barton (1989), cited in Mamah (2005), state that, the adaptation of the learning/instructional setting includes adapting the classroom climate, physical setting, grouping students for instruction and technical supports and support personnel. Considering the classroom climate, these authors mention that, while most learners respond best in a climate that is warm and supportive, there may be significant difference in their individual needs. Commenting further, Treffinger and Barton (1989), cited in Mamah (2005), noted that certain aspects of a classroom environment may be very important for one learner and inconsequential for another. However, teachers cannot possibly accommodate the preferences of each student at all of the time. An awareness of the preferences allows the teachers to accommodate individual preferences some of the time, while simultaneously developing a student's capacity to work in a variety of environments. The physical setting includes variation in environmental factors such as noise level, light, temperature, ventilation, room arrangement, and times of day for optimum learning which may have impact upon the

students' learning. Teachers are to take these elements of preplanning for a learning environment that maximizes student's learning potentials (Mamah).

2.6 Alternative Assessment Procedures

The move towards inclusive education requires novelty in assessment practices to foster participation of all learners. Traditionally, assessment was used to determine eligibility for special education on services. Thus emphasis was usually on formal types of assessment with the use of standardized tests. As a result, states and educators are called upon to adopt the creation of flexible assessment options for students with special educational needs through modification and use of alternate assessment strategies such as authentic, performance-base and portfolio assessments (Cortiella, 2007; Darling-Hammond & Adamson, 2010). As students with diverse educational needs participate in small and large-scale assessments with the various participation methods, administrators must have specific knowledge of each type of assessment and must be familiar with the needs of students who participate (McLaughlin, & Thurlow, 2003).

2.6.1. Authentic Assessment

Authentic assessment has become increasingly popular, as a perception has grown that there is a need for more holistic approaches to evaluating students. It moves beyond learning by rote and memorization of traditional methods and allows students to construct responses (Aitken & Pungur, 2005). These authors explained further that, authentic assessment captures aspects of students' knowledge, deep understanding, problem-solving skills, social skills, and attitudes that are used in a real-world, or simulation of a real-world situation. It sets meaningful and engaging tasks, in a rich context, where the learner applies knowledge and skills, and performs the task in a

new situation and help students rehearse for the complex ambiguities of adult and professional life.

Khaira and Yambo (2005) argue that ‘authentic assessments should resemble meaningful performances in real world contexts’ and should ‘involve real life tasks with multiple solutions for the student’. Similarly, Mueller (2006) also suggests that the rationale for using authentic assessment usually springs from the idea that graduates should be proficient at performing the tasks they encounter when they graduate therefore their assessment should require them to perform meaningful tasks that replicate real world challenges. Analyzing the argument and suggestion of the above authors, it implies that; authentic assessment has to do with students demonstrating that they know a body of knowledge, have developed a set of skills, and can apply them in a ‘real life’ situation and can solve real life problems. It is designed to provide students with genuine rather than contrived learning experience. Students are encouraged to complete or demonstrate the desired behaviour in a real-life context.

Authentic assessments have some characteristics. Among these characteristics, as outlined by Darling-Hammond and Adamson (2010), Khaira and Yambo (2005) and Smith and Koshy (2005) are:

- They are similar to the real work done in professional contexts and highlights situational and contextual knowledge including the acquisition of relevant professional attitudes and competencies
- They reflect clear alignment between desired learning outcomes, curriculum content, and future career-based knowledge.

- They are motivating, enjoyable, sustain interest, and are challenging, but achievable
- They are fair and free from bias so they do not advantage or disadvantage any groups of students
- They are designed to be truly representative of performance in the field. For example, students actually conduct science experiments rather than memorise disconnected facts about science experiments.
- The criterion used in the assessment seeks to evaluate the essentials of performance against well articulated standards.
- Students are encouraged to evaluate their own work against public standard that is taking the initiative to assess their work publicly and orally.

2.6.2 Performance-Based Assessment

Performance-based assessments are the processes of using student activities, rather than tests or surveys, to assess skills and knowledge. They permit pupils to show what they can do in a real situation (Biggs, 1996, cited in Bryant & Timmins, 2002). Performance assessments gather evidence by observing and rating their performance or product. They are appropriate for all grade levels and across subject areas. Performance assessments are especially useful in subjects such as art, music and foreign language learning (Lane & Stone, 2006). Performance assessment is frequently used in early childhood and special education. This is because pre-scholars and kindergarten and primary school pupils are limited in their communication skills. Therefore, much assessment information is obtained by observing their performance and products. Some characteristics of performance-based assessment are:

- They identify observable aspect of the pupil's performance/product that can be judged.
- They provide an appropriate setting for eliciting and judging the performance/product.
- They provide a judgment product.
- They provide a judgment or score that describe performance (Darling-Hammond & Pecheone, 2009, p. 134)

2.6.3 Portfolio Assessment

A portfolio is a systematic collection of work demonstrating what the student has done over a period of time. It can contain examples of assessments, tests, essays, poems and art work. A portfolio assessment must work. A portfolio assessment must be upgraded as the pupil's achievement and skills grow (Thompson & Baumgartner, 2008).

There are numerous types of portfolios which can be used to assess a student's progress based on a varied collection of the students work (UNESCO, 2004). The items in the portfolio can include work samples, home works, assignments, final products and classroom tests results. Others are various works in progress, samples of tests completed, self evaluation of the progress of learning and teachers' observation (UNESCO, 2004). These works can be collected in a carton box, folder, drawers, cabinets, bags or other suitable containers (Pleiss, Prouty, Schubert, Habib & Goergel, 2003; UNESCO). When a student completes an assessment activity or task, it is placed in the portfolio and these pieces of work in the portfolio contribute to an overall evaluation of students' work. Portfolios therefore show a variety of assessment tasks the students has learnt and the student's progress overtime (Pleiss, et. al 2003).

These authors further emphasize that in some instances, portfolios of students' works can take the place of examination or tests.

According to Birgin and Baki, (2007), portfolios have a number of benefits for both the teachers and learners. Among the benefits are:

- Students become more engaged in knowing about their own progress since they are able to participate in the on-going assessment progress.
- Portfolio shows a wide range of students' abilities overtime unlike testing which shows only a narrow range of ability at a given point in time.
- Portfolio gives more reliable and dynamic data about students for teachers, parents and the student himself. Portfolios can thus be used to exhibit student work to their peers, parents and others.
- Portfolios require students routinely identify the strength and weaknesses of their work.
- In addition, portfolio place emphasizes on students' improvement (Birgin & Baki, 2007 pp 56-57).

Finally, it makes it possible to capture the learning process overtime as well as the non-traditional strengths and talents which have not been well understood or valued by schools (Birgin & Baki, 2007; Pleiss et al., 2003; Thompson and Baumgartner, 2008; UNESCO, 2004).

2.7 Collaboration with other Professionals

Effective education of pupils with special needs requires collaborative teaming to plan individual student's daily schedules and collaborative instruction and to incorporate special education services and supports into the classroom (Friend, 2005). Educators

are required to collaborate frequently to best implement instruction and service delivery within inclusive setting (Stuart & Rinaldi, 2009). Specifically, collaboration among general educators, special educators, paraprofessionals, administrators, and/or parents is essential to meet diverse needs of all students in various classroom settings (Pugach, Johnson, Drame, & Williamson, 2012). Teachers learning and working together to achieve common goals is considered by many scholars to be a central element of major school reform efforts, including those aimed at improving the inclusion of students with disabilities (special needs) in general education settings (Darling-Hammond, 2006). The assumption is that when teachers work together to achieve a common vision, they will be able to change their instructional practices in important ways. Pugach, et al., identify that, in collaborative working environments, teachers have the potential to create the collective capacity for initiating and sustaining ongoing improvement in their professional practice so each student they serve can receive the highest quality of education possible.

In special education, as far as educating children with special needs is concerned, professional collaboration is viewed as a powerful tool for helping teachers serve students with disabilities (Brownell, Adams, Sinderlar, Waldron, & Vanhover, 2006). Since inclusive education is based on the premise that one teacher cannot possess all expertise needed to meet the educational needs of all the students in the classroom (Deiker, 2006), teachers should have support system in place through collaboration with trained experts and peer assistance. Hence, Brownell, et al. made an underlying assumption that general educators will improve practice if they have opportunities to participate in collaborative professional development aimed at improving instruction for students with disabilities (special needs).

Educators need support to be prepared to cope with a challenges associated with inclusive education. Resistance to including special need children may emanate from fear of not being adequately prepared to teach special need children (Goddard, 1995). The degree of support the educator receives is the most powerful predictor of positive attitudes towards the inclusive education. Sharing information and working as a collaborative team can serve to alleviate concerns and resistance (Downing, 2002). Hence, educators must be prepared to work as a team and support each other. The educator should not be expected to integrate a learner with disability into mainstream on their own (DNE, 2002). Without adequate support educators feel unsure and demotivated, and may become negative and pessimistic. Instead of viewing the situation from the perspective of “my learner” and “your learner” all educators must be ready to share the responsibility for the learning of all learners (Corbett, 2001).

Working as a team is a key to success. For some educators, especially those who feel that they lack the necessary training to teach learners with disabilities or who may be experiencing integration for the first time, the concept may be frightening and intimidating them (Flavell, 2001). Teachers should be prepared to discuss the problem they may experience with special need children with other teachers and colleagues particularly the experienced ones. They should be prepared to accept different suggestions and to admit that they do not have all the answers. Teachers must be prepared to learn from each other (Hyam, 2004).

According to Fullan (2005) teachers can be effectively prepare for inclusive education if they are prepared to be committed to the inclusive process. Hay (2004) points out that it seems obvious that inclusive education will function at its best if all parties from the mainstream and special schools (for example, principals, governing bodies,

etc.) are strongly involved in the process. A willingness to work together is a vital prerequisite.

Intensive participation of educators and school boards from mainstream and special schools heightens the expertise and leads to mutual adaptations of goals at different levels. Educators who work together will have more opportunities to investigate and explore their beliefs and attitudes and instructional alternatives (Meadan & Monda-Amaya, 2008). Teachers could then be encouraged to develop a shared commitment and vision for future development towards inclusive education and will be more committed to achieving that goal (Downing, 2002).

Collaboration among teachers toward effective education of learners with special educational needs in the inclusive schools takes the forms of collaborative teaching (interactions) (Brownell et al., 2006; Friend, 2008; Mastroieri & Scruggs, 2007)

2.7.1 Collaborative Teaching

Collaborative teaching in educational setting often referred to as cooperative teaching or co-teaching is a style of interaction professionals use to undertake shared responsibilities. It occurs when two or more teachers provide instruction to a group of students with diverse learning needs. Co-operative teaching involves direct interaction between at least two parties voluntarily engaged in shared decision-making as they work toward a common goal (Friend, 2008). This author further states that the two certified professionals in the co-teaching and learning environment share the responsibility of lesson planning, delivery of instruction, and progress monitoring for all students assigned to their classroom. As a team, these professionals share the same

physical classroom space, collaboratively make instructional decisions, and share the responsibility of student accountability (Friend, 2008).

In contribution, Department of Education and Science (2007) states that co-teachers share a common belief that each partner has a unique expertise and perspective that enriches the learning experience; together they provide opportunities for students to learn from two or more people who may have different ways of thinking or teaching and they work together to achieve common, agreed-upon goals. Successful co-operative teaching requires collaboration between resource teachers, learning-support teachers, and mainstream teachers. However, the resource teacher and learning-support teacher usually pay particular attention to students with special educational needs or those with low achievement and endeavours to ensure that these students experience success in their learning programmes.

Dettmer, Knackendoffel, and Thurston, (2012) and Pugach, et al. (2012) ascertain that many special education scholars believe that collaboration is an essential component of any professional development effort aimed at helping classroom teachers learn to address the needs of students with disabilities. The defining characteristics of collaboration as enumerated by Friend and Cook (2012) and Kampwirth, (2006) are:

- It is voluntary
- It requires parity among participants
- It is based on mutual goals
- It depends on shared responsibility for participating and decision making
- It requires individuals to share their resources, and
- It requires that those who collaborate share accountability for outcomes

In the views of Friend and Cook (2012) the first two characteristics above are preconditions for collaboration; that is, educators must willingly participate and each must consider the other a professional peer, even though the professions differ. Unless these two preconditions exist, successful collaboration will not likely be possible. The other four characteristics or factors critical for collaboration all relate to mutual or shared responsibilities of the colleagues and all seem consistent with our past experiences in deploying special education staff to work collaboratively. Those who clearly understood that they were mutually responsible for goal setting, decision making, and outcomes were much more likely to work together effectively.

Co-Teaching can be approached in numerous ways. In each approach both teachers take on teaching and supportive roles. Determining the best approach depends on student needs, the subject being taught, the teachers' experience, and practical considerations such as space and time for planning (Cook, 2004; Friend, 2008; Friend & Cook, 2012; Villa, Thousand & Nevin, 2005). These authors made mention of the following models or approaches of co-teaching:

Team Teaching: Teachers using teaming share the responsibility of leading instruction. While their roles may shift throughout the lesson, the key characteristic is that both teachers are fully engaged in the delivery of the core instruction (Friend, 2008). Similar to team teaching is Collaborative Team Teaching Services. It is an integrated service through which students with disabilities are educated with age appropriate peers in the general education classroom. It provides students the opportunity to be educated alongside their non-disabled peers with the full-time support of a special education teacher throughout the day to assist in adapting and modifying instruction.

United Federation of Teachers (2010), citing Friend (2008), state that collaborative team teaching ensures that students master specific skills and concepts in the general education curriculum, as well as ensuring that their special education needs are being met including meeting alternative curriculum goals. The Collaborative team teaching classroom consists of one special education teacher and one general education teacher. When they team teach, the general education and special education teacher meet to co-plan and prepare lessons, activities and projects that incorporate all learning modalities. Together, the general education and special education teacher carry out instruction employing a range of methodologies (United Federation of Teachers).

Station Teaching: This allows teachers to work with small groups. Teachers begin by dividing the content into three segments and grouping students so that one-third of the students begins with each part of the content (Friend & Cook 2010). Two groups are teacher-led and the third group works independently. During the lesson, the students rotate through the “stations” until they complete all three sections of the content. This approach is beneficial because it allows teachers to create small group activities that are responsive to individual needs. According to Tremblay (2007), this arrangement requires a clear division of labor, as each teacher is responsible for planning and teaching their part of the content. This separating of instruction can increase the comfort level of inexperienced co-teachers. Students can benefit from the reduced teacher-pupil ratio and be exposed to a wider range of experiences as they move from station to station. Disadvantages include additional planning and prep, noise, and timing issues (Friend, 2005).

Parallel Teaching: This style provides opportunities for teachers to maximize participation and minimize behavior problems. When teachers use this approach, they

divide the class in half and lead instruction with both groups. In this approach, teachers form groups to maximize learning. Student grouping should be flexible and based on students' needs in relation to expectation(s) being taught. Students benefit from working in smaller groups and receiving instruction from only one of the teachers (Friend & Cook, 2010).

One Teach, One Observe: Decision taking on student should be based on data. Consequently, one teaching, one observing approach allows one teacher to provide instruction while the other collects data on the students' academic, behavioral, or social skills (Friend, 2008). This observational data can be used to inform instruction and document student progress. This model allows the teachers to have valuable data to analyze in determining future lessons and teaching strategies (Vaughn, Schumm & Arguelles, 1997, cited in NCSE, 2010).

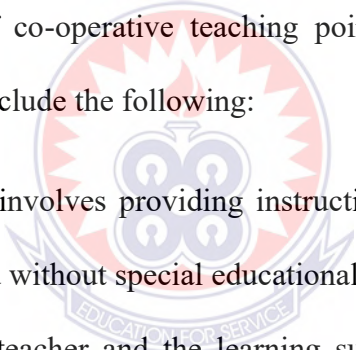
One Teaching, One Assisting: This model of co-teaching, places one teacher in the lead role while the other functions as a support in the classroom (Vaughn, Schumm & Arguelles, 1997, cited in NCSE, 2010). The teacher in the supportive role monitors student work, addresses behavior issues, manages materials, and assists with student questions. In other words, he/she provides adaptations and other support as needed. Teachers must use caution when using this approach to avoid a learning environment in which the general educator provides all instruction and the special educator serves as an assistant. According to Friend (2008), professionals should be actively involved in all aspects of the instructional process and they should not be functioning like paraprofessionals.

Alternative Teaching: According to Friend (2008), this co-operative type of instruction allows teachers to target the unique needs of a specific group of students

by using student data to create an alternative lesson. During instruction, one teacher manages the large group while the other teacher delivers an alternate lesson, or the same lesson with alternate materials or approaches, to a small group of students for a specific instructional purpose.

The Department of Education and Science (2007) state that co-operative teaching approaches can be particularly successful in helping to address the learning targets set for a student with special educational needs in their individual education plan and for reviewing progress at the end of a period of instruction. However, this author noted that the success of co-teaching and its benefits to the school, pupils and teachers can be realized when the co-teachers observe the basic principles of co-operative teaching.

The basic principles of co-operative teaching pointed out by the Department of Education and Science include the following:

- 
- The intervention involves providing instruction to a heterogeneous group of students, with and without special educational needs.
 - The mainstream teacher and the learning support or resource teacher work together with the class.
 - Teaching interventions occur in the same classroom during the same class period.
 - Joint planning by the teachers takes place; for example grouping the students and choosing the teaching methods, curriculum formats, learning strategies, study skills, and evaluation methods.
 - Both teachers and students benefit from their shared involvement in the teaching and learning process (p. 106).

Further, Walther-Thomas, Korinek, McLaughlin, & Williams (2000) and the Department of Education and Science (2007) illustrate that, for co-operative teaching to be successful it is essential that there is:

- a commitment by the whole school to inclusion
- managerial, administrative and collegial support, especially from teacher colleagues
- mutual trust and respect between the teachers
- a willingness among the teachers to work in a compatible and adaptable manner
- equal partnership between the teachers, so that their skills are used in a complementary manner
- a shared sense of teamwork and achievement
- a strategy for identifying and agreeing the students' needs
- a co-operative teaching plan devised by the two teachers
- clarity of roles, responsibilities, rules, routines, and work load
- sufficient time for preparation and planning
- confidentiality and discretion
- regular reviews of all aspects of the co-operative teaching plan (p. 106).

2.8 Summary of Literature Review

There are very few research works delving into the capabilities of regular teachers in educating learners with special educational needs in the inclusive school settings in Ghana. These limited research works have not sufficiently dealt with assessing regular teachers' effectiveness in adapting the components of the curriculum for learners with special needs. The majority of the literature reviewed in this study are foreign and they are focused on the evaluation and analysis teachers' efficacy in adapting the

curriculum to meet the learning needs of learners with special needs in the inclusive setting. The works which are cited and duly referenced also investigate the knowledge and skill base of general education teachers in working on students with disabilities in the inclusive education setting. This study is presently intended to replicate the information from the literature to assess the circumstances in the Nzema East Municipality by exploring competencies of regular teachers in educating learners with special educational needs in the inclusive education settings.



CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presents the methods and procedures that will be used in collecting data for the study. This includes research design, population, sample, sampling technique, instrumentation, and procedure for data analysis.

3.2 Research Design

Descriptive survey was adopted for this study. Best (1970), cited in Cohen, Manion, & Marrison (2007) state that, descriptive survey is concerned with: conditions or relationships that exist; practices that prevail; beliefs, points of views, or attitudes that are held; processes that are going on; effects that are being felt; or trends that are developing. Salkind (2009) and Franekel and Wallen (2009) add that descriptive survey involves the use of numerical data to test hypothesis or answer questions concerning current status either through self-reports collected through questionnaires or interviews or observation. Descriptive surveys are designed to portray accurately the characteristics of particular individuals, situations or groups (Avoke, 2005). He notes that survey research in education involves the collection of information from members of a group of students, teachers or other groups of persons associated with educational issues. As this study sought to gather information from teachers about their capabilities in educating learners with special needs in the regular settings, it was just appropriate to use descriptive survey design. The choice was useful because of the relatively large teacher population involved and the number of schools that were covered.

3.3 Population

The population of interest to this study is all the teachers, numbering 153, in the 12 primary and 10 junior high regular basic schools which are on the inclusive education programme in the Nzema-East Municipality.

Table 3.1. *Distribution of Teachers in the 10 selected Basic Schools on the Pilot Inclusive School Programme in Nzema East Municipality as at September, 2014.*

S/N	Schools	No. of Teachers
1	Brawire/Akyinim M/A Primary A and B and Junior High School	24
2	Akonu M/A Primary and Junior High School	13
3	Awuku M/A Primary and Junior High School	13
4	Avredo M/A Primary and Junior High School	13
5	Edele M/A Primary and Junior High School	13
6	Bamiankor Catholic Primary and Junior High School	13
7	Kwekukrom M/A Primary and Junior High School	13
8	Gwira Bansa M/A Primary and Junior High School	13
9	Asonti M/A Primary and Junior High School	13
10	Apataim Methodist Primary A and B and Junior High School	25
Total =10		153

3.2 Sample and Sampling Technique

The sample of the population for this study was 90 teachers from 10 primary and 8 junior high of the selected regular basic schools which are on the inclusive pilot programme.

Purposive and simple random sampling techniques were used. Purposive sampling was used in selecting the primary and junior high schools from the municipality. Purposive sampling enables the researcher to handpick the cases to be included in the sample on the basis of his/her judgment of their typicality or possession of the particular characteristics being sought. In this way, the researcher builds up a sample that is satisfactory to his/her specific needs (Cohen, Manion, & Marrison, 2007). The researcher used purposive sampling to enable him work with respondents from primary and junior high basic schools which were on the inclusive pilot project at the time. On the other hand, simple random sampling technique was used in selecting the respondents for the study. This technique provides the opportunity for every teacher, who was teaching in the selected basic schools on the inclusive pilot programme, to be a respondent. The use of the simple random enable the sampling method to be free from preconception and unfairness (Sidhu, 2011). In each school, marked and unmarked pieces of papers were mixed up for the teachers to pick. The teachers who picked the marked pieces of papers became the respondents for the study.

Table 3.2. The Sample for the Study from the Schools on the Inclusive Programme in Nzema East Municipality as at September, 2014.

S/N	Schools	No. of Teachers	No. of Teachers Sampled
1	Brawire/Akyinim M/A Primary A and J.H.S.	16	12
2	Akonu M/A Primary and Junior High School	13	9
3	Awuku M/A Primary and Junior High School	13	9
4	Avredo M/A Primary	8	5
5	Edele M/A Primary and Junior High School	13	9
6	Bamiankor Catholic Primary and J.H.S.	13	9
7	Kwekukrom M/A Primary	8	5
8	Gwira Bansa M/A Primary and Junior High School	13	9
9	Asonti M/A Primary and Junior High School	13	9
10	Apataim Methodist Primary B and J.H.S.	17	14
Total =10		127	90

3.5 Instrumentation

The instrument for data collection is questionnaire. Questionnaire is used because it offers the researcher an opportunity to assess the aptitudes of a larger population. In addition, the use of questionnaire helps to ensure that one gets a high proportion of information that is usable. Beissel-Durrant (2004), cited in Frankfort-Nachmias and Nachmias (2010) underlines the need for confidentiality of participants' identities, and that any violations of this should be made with the agreement of the participants. Using questionnaire ensures the confidentiality and anonymity when the researcher or another person cannot identify the participant or subject from the information provided. Where this situation holds, a respondent's privacy is guaranteed, no matter

how personal or sensitive the information is. Thus a respondent completing a questionnaire that bears absolutely no identifying marks is ensured complete and total anonymity. This encourages the willingness of the respondents to participate in the completion and return of the questionnaire to the researcher. However, a poorly designed questionnaire can invalidate any research result, notwithstanding the merits of the sample, the field workers and the statistical techniques (Brinkman, 2009). A well designed questionnaire can boost the reliability and validity of the data to acceptable tolerance (McMillan & Schumacher, 2010). The respondents used a 5-point Likert scale that ranges from 1 = strongly agree, 2 = agree, 3 = undecided 4 = disagree, 4 = strongly disagree. The rating concerns statements about the teacher's judgement of how knowledgeable and skillful he/she is in teaching to meet the needs of learners with special needs. The questionnaire for this study was grouped into four main sections. Section A was on background data of the respondents; Section B demands data on teachers' level of knowledge and skills about curriculum adaptations; Section C was to find out teachers' abilities to use alternative assessments in assessing diverse students' learning; and Section D was to assess the extent to which teachers collaborate with other professionals to meet the diverse and special needs of all children in inclusive settings.

3.6. Pilot study

The pilot study was conducted in two primary and junior high schools (Brawire/Akyinim M/A Primary B, Apaitaim Methodist Primary A, Avredo and Kwekukrom M/A Junior High Schools) of the selected inclusive pilot basic schools in the Nzema-East Municipality in the Western Region of Ghana. The purpose of the pilot study was to collect information in order to yield data concerning instruments

deficiencies as well as suggestions for improving the items. The pilot study was also to assess the research plan to identify potential problems so that if need be, the plan would be modified or even overhauled. The researcher, assisted by the Special Education Officer, personally visited the schools to conduct the pilot study after taking a verbal permission from the Assistant Director in charge of Supervision, Monitoring and Evaluation at the Nzema East Municipal Directorate of Education, Axim. Two Primary and Junior High Schools were purposively selected. In each school, the researcher first introduced himself to the head teacher/headmaster/headmistress as the case may be to explain the purpose of the study. Twenty sets of questionnaires were then given to a total of twenty (20) teachers, who were selected by the simple random sampling method, in the schools. This is to ensure that each teacher on the staff has an equal chance of being selected. The test re-test technique was used to test the reliability of the instrument.

Frankfort-Nachmias and Nachmias (2010) state that simple random sampling is a sampling procedure that gives each of the sampling units of the population an equal non-zero probability of being selected. Since the main purpose of the pilot study was to pre-test the questionnaires to identify any defects, the respondents were told to comment and make remarks on them. The lottery method of simple random sampling procedure was used. In each school, ten pieces of papers were ticked (\surd) and folded. The ticked pieces of papers were put in a bowl together with 3 plain pieces of papers. The content was thoroughly mixed and the individual teachers were made to pick at a time. The teachers who picked the marked pieces of papers became the respondents for the pilot test of the instrument of the study.

A set of 20 questionnaires were distributed in all. The researcher went back five days later to collect the completed questionnaire. Out of the 20 set of questionnaires given out, 17 were completed and returned, giving a return rate of 85%. This high response rate was an indication that the research plan was on course.

As a result of the pilot study, the researcher got informed on whether the participants understood the questions they were being asked. This offered the researcher an idea of improving the instruments. Changes were made on some items that respondents had indicated they needed further clarification on. A number of questions were reworded as a result of ambiguity. Three questions were removed in the process on the grounds that they were not meant to measure any of the three key issues concerning the assessment of teachers' capacity in educating children with special needs in the inclusive class. Consequently, the questionnaire items for the main study were developed based on the outcome of the pilot study.

3.7 Validity and Reliability.

The first step taken in order to achieve validity and reliability of the questionnaires was to carefully construct them. As Best and Khan (1995), point out, ensuring validity of questionnaires was asking the right questions framed in the least ambiguous way. Then the entire questionnaires were subjected to peer review. They were scrutinized by colleagues (M.ED students) and M.Phil graduates. The items were also vetted by the researcher's supervisor. A pilot study was also conducted to see the consistency of the responses with those of the actual study.

Tamakloe, Attah and Amedahe (2005) suggest that any useful and good measuring instrument should possess the characteristics of stability and relevance. Still working to

achieve reliability, the respondents for the pilot study were selected from adjacent schools which were also practising the inclusive education programme. This was to be sure that these respondents possessed the same or similar characteristics as the respondents for the actual study. Borg and Gall (1989), cited in Frempong (2011) propose that while carrying out a pilot study you should select individuals from a population similar to that from which you plan to draw your research subjects. As the essence of the pilot study was also to improve upon the quality of the items, the respondents were asked to complete the questionnaires. Besides, the researcher held a session with the respondents at each school where questionnaire were to be distributed. They were asked to say aloud their understanding of the meaning of the items in their own words. All these the researcher did to be certain that the respondents understood and interpreted the questions as they were meant.

Reliability according to (Osuala 1993) refers to consistency of measurement. Before coming out with the final items, cognizance was taken of the comments, suggestions and inputs of the researcher's supervisor and other consultants and the pilot respondents to ensure reliability and validity of the questionnaires. Etsey (2005) points out that reliability is the degree to which assessment results are the same when (1) the same tasks are completed on two different occasions, (2) different but equivalent tasks are completed on the same or different occasions. To ensure this the researcher carried out a pilot testing of the instrument.

3.8 Access

A letter of introduction was obtained from the Department of Special Education (Appendix A). Consequently, permission was sought from the Municipal Director of Education, Axim (Appendix B). The Municipal Director referred my request to the

Special Education Officer to assist me conduct the study. The permission and introductory letter were used to access the schools.

Writing on ethics, legal constraints and human relations Borg and Gall (1989) cited in Frempong (2011) suggest that in conducting an educational research, one must never lose sight of the special requirements and problems involved in working with people. The human relations aspect is particularly important when the research is carried out in public schools. Borg and Gall further recommend that when working with any administrative hierarchy, such as a school district (education district), then it is very important to follow appropriate channels of authority. If you plan to use subjects from more than one school, you generally need first to obtain approval from the district superintendent (District Director) and the assistant director in charge of research (Assistant Director, Supervision). After obtaining such approval, visit each school concerned and present your ideas to the principal (Head). In pursuance of these guidelines the researcher involved the administrative hierarchy of the district in the process of gaining access to the research site.

3.9 Distribution of the questionnaire

The questionnaires were delivered personally by the researcher to the schools. For the purpose of the study though a cover letter was attached to the questionnaires, the researcher was on hand to explain the objectives of the study, clarified other issues that may be difficult for respondents and answered pertinent questions.

The researcher decided to meet the respondents personally in order to establish acquaintance so that participants' interest in the study would be boosted. There is the fear that if you merely dump the questionnaire with the head and go away,

respondents may treat the questionnaire with contempt and may not show the desired interest in the study leading to a low response rate. In all cases the researcher delivered the questionnaires to the headteachers/headmasters/headmistresses who in turn distributed them to the teachers for completion. Gay (1987) cited in Gay, Mills, and Airasian, (2005) suggested that it is more productive to send questionnaire to a person of authority rather than to the person with the derived information. In his view, if a person's boss passes a questionnaire and asks a person to complete it and return it that person is likely to do so than if you ask him /her.

3.10 Collection of Completed Questionnaire

The researcher directed the respondents to deposit the completed questionnaire with the various heads of schools. Respondents were also asked to complete the questionnaire within two (2) weeks. After two weeks the researcher again went to the schools with the aim of collecting the completed questionnaires. In most cases the completed questionnaires were ready for collection with the head. In a few instances however some of the respondents were unable to complete the questionnaire ahead of time. In such cases the researcher waited for the respondents to complete the questionnaire for instant collection. Some respondents neither completed and submitted nor were they present at the time of collection. Hence, the researcher did not get access to all the distributed questionnaires. Out of the 90 set of questionnaires distributed, 84 were retrieved, representing 93.3% rate of response.

3.11 Data analysis procedures

The study is a descriptive type and the data was collected through questionnaire. Hence, it was fitting to state how much information was collected and analyzed. Fraekel and Wallen (2009) state that, data analysis is the process of simplifying data in order to make in comprehensible. As this study sought to assess the capabilities of regular teachers in imparting knowledge and skills to the learners with special educational needs in the inclusive setting, the researcher recorded answers to the questions and summarize data which enabled him to draw conclusions.

In order to analyze data for the study, aspects of the questionnaire were coded, edited and categorized. The five Likert type scaled response subgroups of Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree were collapse into a three type scale response subgroups of 1. Agree, 2. Undecided and 3. Disagree. This was done to further simplify the data for easier analysis. The completed questionnaire from the respondents was reported along with the overall percentage of the returns. Responses to each item which were coded with scores and categorized were to make it easy for computing. The numbers and percentages of respondents who responded to each alternative for each question were stated. All appropriate descriptive statistics were used to describe the data and the result of each question tabulated. The final percentage was reported.

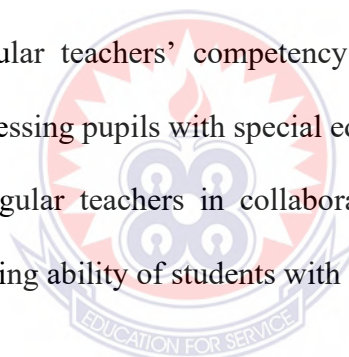
CHAPTER FOUR

PRESENTATION OF RESULTS AND ANALYSIS OF FINDINGS

4.1 Introduction

This chapter deals with the presentation of result and the analysis of findings of the study. The findings are presented according to the three research questions posed to guide the study. The study sought to investigate;

1. What competencies do regular teachers exhibit in adapting the curriculum to meet the learning needs of learners with special educational needs in the inclusive setting?
2. What is the regular teachers' competency in using alternative assessment procedures in assessing pupils with special educational needs?
3. How able are regular teachers in collaborating with other professionals to enhance the learning ability of students with special needs?



4.2 Results on Demographic Characteristics

This section covers the gender, educational qualification, age range, and teaching experience of the respondents. It also presented on whether or not the respondent had training in inclusive education or teaching children with special educational needs and the type of training received by the respondents.

4.2.1 Gender and Educational Qualification of Respondents

Table 4.1: Gender and educational qualification of respondents

Demographic Factor	Response Subgroups	Gender Male(M) Female(F)	Total	Percentage (%)
Gender and Educational Qualification	MSLC	M(4) F(2)	6	7.1
	SSSCE/WASSCE	M(7) F(6)	13	15.5
	Teacher Cert. 'A'	M(12) F(7)	19	22.6
	DBE/UTDBE/HND	M(21) F(12)	33	39.3
	Degree	M(8) F(4)	12	14.3
	M.A/M.ED/M.PHIL	M(1)	1	1.2
Total		M (53 = 63.1%) F (31 = 36.9%)	84	100

Results in the table above indicated there were 53 males (63.1%) and 31 females (36.9%) that participated in the study. Majority of respondents held the teachers Diploma in Basic Education/Untrained Teacher Diploma in Basic Education; 33, representing 39.3%. 19 of the respondents (22.6%) held the Teachers' Certificate 'A' while 13, (15.5%) of them held Senior Secondary School/West African Senior Secondary School Certificates. The number of teachers who held Bachelor of Education (B. Ed.) degree was 12 (14.3%), 6 (7.1%) held Middle School Living Certificate and 1 representing 1.2% held Master of Art/Master of Education/Master of Philosophy.

4.2.2 Age range of the respondents

Result from Table 3 above indicate that 13 respondents(15.5%) were within the age range of 21-30 years, 26 making 31% of the respondents were within the age range of 31-40 years, 28 making 33.5% were in age range of 41-50 while the remaining 17 respondents, representing 20.2% were in the age range of 51-60 years.

Table 4.2: Age range of respondents

Age in Years	Total/frequency	Percentage (%)
21-30	13	15.5
31-40	26	31
41-50	28	33.3
51-60	17	20.2
Total	84	100

4.2.3 Teaching experience of respondents

An analysis of the teaching experience of the respondents shows that 14, representing 16.7% of the respondents have taught for up to five years, 21 representing 25% have taught for between five to ten years, 22, representing 26.2% have taught for between 11-15 years, 16 representing 19% have a teaching experience of between 16-20 years whilst 11, representing approximately 13.1% have a teaching experience of 21 years and above. With 58.3% of the respondents having taught for 11 years and above, then the respondents in this study could be described as very experienced.

Table 4.3: Distribution of teaching experience of respondent

Teaching Experience in Years	Total/frequency	Percentage (%)
1-5	14	16.7
6-10	21	25.0
11-15	22	26.2
16-20	16	19.0
21+	11	13.1
Total	84	100

4.2.4 Training in inclusive education or teaching children with special educational needs

Table 4.4 below shows that 38 respondents, representing 45.2% had some kind of training in either inclusive education or teaching children with special educational needs. On the other hand, 46(54.8%) respondents had no training on educating children with special educational needs.

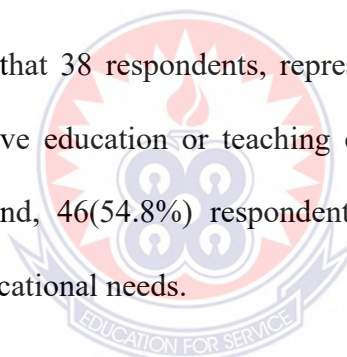


Table 4.4: Distribution of respondents on receiving training in inclusive education or teaching children with special educational needs

Demographic Factor	Response Subgroups	Total/frequency	Percentage (%)
Training in inclusive education or teaching children with special educational needs	Yes	38	45.2
	No	46	54.8
	Total	84	100

4.2.5 Type of Training

The following table highlights respondents' background in inclusive education

Table 4.5: Training in inclusive education or special needs educational.

S/N	Type of Training	No. of Respondents	% of 38 Trained Respondent	% in Relation to Total Respondent(84)
1	Initial teacher training	18	47.4	21.4
2	In-service training	9	23.7	10.7
3	Workshop	7	18.4	8.3
4	Special education as a semester course at university	4	10.5	4.8
Total		38	100	45.2%

The findings as shown in Table 4.5 above revealed that out of the 38 respondents who had some kind of training, 18(47.4%) of them had training in inclusive education or teaching children with special educational needs during their initial teacher training period of education. In relation to the total respondents (84) in the study, 21.4% had training in inclusive education or teaching children with special educational needs during their initial teacher training period of education. Again, 9(23.7%) of the 38 (10.7% in relation to 84 respondents) had in-service training in educating children with special educational needs. Also, 7(18.4%) of the 38 respondents; 8.3% in relation to the total 84 respondents in the study, had a workshop on inclusive education/educating children with special needs. Additionally, 4(10.5%) of the 38 respondents; representing 4.8% in relation the total 84 respondents of the study, had a semester's course of study in special education. Thus majority of the respondents did not have any background in inclusive education.

4.3 Knowledge and Skills in Inclusive Education

The following section focus on teachers' knowledge and skills in inclusive education.

The issues which have been discussed include curriculum adaptations, assessments and collaborations.

4.3.1 Curriculum Adaptations

Twelve (12) statements were framed under the theme; curriculum adaptations, to elicit responses from respondents on research question one.



Table 4.6: Teachers' Responses on their knowledge and skills (competencies) in curriculum adaptations in the inclusive classrooms

S/N	Statement	Responses			
		Disagree	Undecided	Agree	Total
1	I adapt instructional strategies to meet the learning ability of all children with special needs in inclusive class.	47(55.9%)	8(9.5%)	29(34.5%)	84(100%)
2	I apply inclusive management skills in controlling behaviour in the inclusive classroom.	25(29.8%)	16(19%)	43(51.2%)	84(100%)
3	I adapt curriculum contents to make them accessible to the special need children.	36(42.9%)	8(9.5%)	40(47.6%)	84(100%)
4	I value the diversity among pupils in class.	31(36.9%)	4(4.8%)	49(58.3%)	84(100%)
5	I use instructional resources and assistive technology for children with special needs.	66(78.6%)	5(5.9%)	13(15.5%)	84(100%)
6	I modify teaching and learning materials to suit the needs of all children in inclusive class.	44(52.4%)	9(10.7%)	31(36.9%)	84(100%)
7	I have the knowledge and skills necessary for designing learning programmes and materials for students in the inclusive class.	55(64.5%)	11(13.1%)	18(21.4%)	84(100%)
8	I adapt the learning environment to suit the various needs in class.	37(44%)	4(4.8%)	43(51.2%)	84(100%)
9	I reduce barriers to learning in class during teaching.	53(63.1%)	9(10.7%)	22(26.2%)	84(100%)
10	I consider myself capable to teach students with special needs placed in my class.	60(71.4%)	10(11.9%)	14(16.7%)	84(100%)
11	I can screen and identify learners with special needs.	61(72.6%)	13(15.5%)	10(11.9%)	84(100%)
12	I can tell the importance of early identification of children with special needs	22(26.2%)	8(9.5%)	54(64.3%)	84(100%)
Total		537(53.3%)	105(10.4%)	366(36.3%)	100%

Source: Field survey (2014)

The results as shown in Table 4.6 disclosed that 47(55.9%) of the teachers in the study disagreed with the statement that, they adapt instructional strategies to meet the learning abilities of all children with special needs in the inclusive class, 8(9.5%)

were undecided and 29(34.5%) agreed with the statement. Also, 43(51.2%) agreed with applying inclusive management skills in controlling behaviour in inclusive classroom, 16(19%) remain undecided and 25(29.8%) of respondents disagreed with the statement.

Concerning the third statement in the table above, the majority, 40(47.6%) agreed with the statement. While 8(9.5%) remained undecided, thirty-six (36) respondents of the study, representing 42.9% disagreed with adapting curriculum contents to make them accessible to the learners with special needs. About the fourth statement, 49, representing 58.3%, agreed on valuing diversity among pupils in class, 4(4.8%) were undecided and 31(36.9%) do not value the diversity among the pupils in class.

Furthermore, 66(78.6%) respondents of the study disagreed on using instructional resources and assistive technology for children with special needs. However, 5(5.9%) remained undecided and 13(15.5%) agreed on the statement. Again, 44(52.4%) disagreed on modifying teaching and learning materials to suit the needs of all children in inclusive class. Meanwhile, 9(10.7%) were undecided and 31(36.9%) have agreed with the statement.

Considering the statement, “I have the knowledge and skills necessary for designing learning programmes and materials for students in the inclusive class”, 55(64.5%) disagreed, 11(13.1%) were undecided and 18(21.4%) agreed. In addition, 37(44%) disagreed on adapting the learning environment to suit the various needs in class. Four (4), representing 4.8%, remained undecided and 51(51.2%) agreed with the statement. Concerning the reduction of barriers to learning in class during teaching, 53(63.1%) of respondents disagreed, 9(10.7%) were undecided and 22(26.2%) agreed with the statement.

Further, 60(71.4%) of respondents disagreed of been capable to teach students with special educational needs and while 10(11.9%) were undecided, 14(16.7%) agreed with the statement. Besides, the findings above revealed that 61(72.6%) respondents disagreed of been able to screen and identify learners with special needs. In contrast, 13(15.5%) respondents were undecided and 10(11.9%) agreed with the statement. Lastly, 54(64.3%) agreed with the statement of been able to tell the importance of early identification of children with special needs. On the other hand, 8(9.5%) respondents remained undecided while 22(26.2%) of respondents disagreed.

In summary, the findings as shown in Table 4.6 revealed that (53.3%) of the respondents felt they are limited in knowledge, skills and competencies in curriculum adaptations needed to handle inclusive classrooms. However, apart from 10.4% of respondents who remained uncertain about their capabilities in adapting curriculum for the diverse learners in the inclusive class, 36.3% of the teachers believe in their competencies of doing so. These results imply that the majority of teachers do not have requisite knowledge, skills and competencies to educate children with special educational needs in the inclusive classroom.

4.3.2 The use of alternative assessment procedures

The responses to the nine (9) framed statements in Table 4.7 below highlights the know-how and practice of teachers on the use of alternative assessments in inclusive classrooms. The statements elicit responses from respondents on research question 2.

Table 4.7: Alternative assessment

SN	Statement	Responses			Total
		Disagree	Undecided	Agree	
13	I do use informal methods of gathering information on pupils' performances.	47(55.9)	13(15.5)	24(28.6%)	84(100%)
14	I alter assessment requirements to suit the performance level and strength of each pupil with special need.	32(38.1%)	7(8.3%)	45(53.6%)	84(100%)
15	I involve students in selecting criteria for assessment of work sample.	52(61.9%)	9(10.7%)	23(27.4%)	84(100%)
16	I involve parents in portfolio assessment process to underscore its importance to pupils.	57(67.9%)	8(9.5%)	19(22.6%)	84(100%)
17	I schedule and conduct portfolio conference with pupils.	51(60.7%)	3(3.6%)	30(35.7%)	84(100%)
18	I do encourage pupils to evaluate their own work against public standards in order for pupils to take responsibility for their portfolios.	46(54.8%)	11(13.1%)	27(32.1%)	84(100%)
19	I can identify observable aspects of pupils' performance or product that can be judged.	19(22.6%)	8(9.5%)	57(67.9%)	84(100%)
20	I provide judgement/score to describe performance.	27(32.1%)	10(11.9%)	47(55.9%)	84(100%)
21	I do design assessments task which are truly representative of performance in the field of study.	38(45.2%)	4(4.8%)	42(50%)	84(100%)
22	I create and maintain appropriate setting for eliciting and judging pupils' performance.	46(54.8%)	8(9.5%)	30(35.7%)	84(100%)
Total		415(49.4%)	81(9.6%)	344 (41%)	100%

Source: Field survey (2014)

The statements in table 4.7 above, elicited from respondents their stand concerning the use of alternative assessment procedures in assessing learners in the inclusive classrooms. Specifically teachers reacted to statements bringing out their views as to whether they do use alternative methods of gathering information on pupils' performances. With this, 24(28.6%) agreed with the statement, 13(15.5%) were undecided and 47(55.9%) disagreed. Also, 45(53.6%) agreed

on altering assessment requirements to suit the performance level and strength of each pupil with special need. However, 7(8.3%) were undecided on the statement and 32(38.9%) disagreed.

Besides, 23(27.4%) agreed with the statements that they involve students in selecting criteria for evaluation of work sample, 9(10.7%) were uncertain but fifty-two (52), representing 61.9% respondents of the study disagreed with the statement. Pertaining to the involvement of parents in portfolio assessment process to underscore its importance to pupils, 57(67.9%) disagreed, 8(9.5%) remained undecided while 19(22.6%) agreed on the statement.

Furthermore, 27(32.1%) agreed on the statement of encouraging pupils to evaluate their own work against public standards in order for pupils to take responsibility for their portfolios. While 11(13.1%) remained undecided, 46(54.8%) disagreed. Additionally, nineteen (19) making-up 22.6% of the respondents disagreed with the statement of whether they could identify observable aspects of pupils' performance or product that can be judged. 8(9.5%) remained uncertain while 57(67.9%) agreed on the statement.

The next statement demanded the respondents to state whether they do design assessments task which are truly representative of performance in the field of study. Regarding this statement, 42(50%) were in agreement, 4(4.8%) remained uncertain about the statement while 38(45.2%) respondents disagreed with the statement. Finally, individual respondents were to declare if he/she is capable of creating and maintaining appropriate setting for eliciting and judging pupils' performance. In reaction, 46(54.8%) respondents disagreed, 8(9.5%) remained uncertain about the statement while 30(35.7%) were in agreement with the statement

A summary of the findings from Table 4.7 reveals that, a little close to half of the respondents (49.4%) disagreed of possessing the competency in using alternative assessment procedures in assessing pupils with special educational needs. While 9.6% of the sampled teachers could not take a stand, 41% of them believe in themselves of being competent in the use of alternative assessment procedures in assessing pupils with special educational needs in the inclusive education setting.

4.3.3 Collaboration with other professionals

Table 4.8 below highlights the response of teachers on whether or not they collaborate with other professionals in educating children with special educational needs in the inclusive setting. The statements seek responses from respondents to address research question 3.

Table 4.8: Teachers' response on collaboration in inclusive setting

SN	Statement	Responses			
		Disagree	Undecided	Agree	Total
22	I do clinical and educational consultations for identifying and assessing learning problems of my pupils.	59(70.2%)	4(4.8%)	21(25%)	84(100%)
23	I offer parents the opportunity to be part of decision making process towards the education all children.	29(34.5%)	9(10.7%)	46(54.8%)	84(100%)
24	I do collaborative lesson planning.	61(72.6%)	10(11.9%)	13(15.5%)	84(100%)
25	I have and practise collaborative teaching skills.	56(66.7%)	5(5.9%)	23(27.4%)	84(100%)
26	I have and practise collaborative skills in lesson evaluation.	52(61.9%)	12(14.3%)	20(23.8%)	84(100%)
27	I team-up with other professionals to form multidisciplinary team in assessing pupils in inclusive setting.	59(70.2%)	8(9.5%)	17(20.2%)	84(100%)
Total		315(62.7%)	36(9.5%)	120(27.8%)	100%

Source: Field survey (2014)

The findings as shown in Table 4.8 above shows that majority 59(71.2%) of the respondents in the study disagreed with the statement that they do clinical and educational consultations for identifying and assessing learning problems of my pupils. However, 4(4.8%) were uncertain about the statement but 21(25%) respondents agreed with the statement. Additionally, the majority 46(55.8%) agreed with the statement of been able to offer parents the opportunity to be part of decision making process towards the education of all children. While 9(10.7%) of the respondents could not take a stand, 29(34.5%) of the respondents disagreed.

Furthermore, with the statement of being able to collaborate in lesson planning. 13(15.5%) of the respondents agreed. While 9(10.7%) remained uncertain, 61(72.6%) of the sampled teachers disagreed with the statement. Also, 13(15.5%) of the respondents agreed with the statement that they have and practise collaborative teaching skills. In contrast, 10(11.9%) were undecided and 61(72.1%) of the teachers disagreed on the statement. Besides, 23(27.4%) agreed with the statement of having and practicing collaborative skills in lesson evaluation. However, 5(5.9%) them could not decide with the statement while 56(66.7%) of the respondents disagreed. Finally, 59(70.2%) of the teachers disagreed with the statement that they team-up with other professionals to form multidisciplinary team in assessing pupils in inclusive setting. On the other hand, 8(9.5%) remained uncertain while 17(20.2%) agreed with the statement.

Cumulatively, the findings from Table 4.8, shows that 62.7% of sampled teachers disagreed of possessing the competency in collaborating with other personnel in educating pupils with special educational needs. While 9.5% of the respondents could not decide their stand, 27.8% of them believe in themselves of being competent in

collaborating with other personnel in attending to the educational needs of pupils with special educational needs in the inclusive education setting.



CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Introduction

In this chapter, the discussions of findings have been done based on the research objectives and questions raised.

5.2 Discussion of Findings

The findings, as spelt out in Chapter Four, have been discussed under each theme of the research questions.

5.2.1 Competencies of regular teachers in curriculum adaptations

With reference to the analysis in Table 4.6, majority of the respondents, 47(55.9%), disagreed with the statement of adapting instructional strategies to meet the learning ability of all children with special needs in inclusive class. Despite the fact that a common curriculum is used to teach all children at the same time in the inclusive classroom, teachers need varied instructional strategies to achieve the goal of a lesson. The failure by the majority of the respondents implies that more children in the inclusive education classrooms are not benefiting from the instructional strategies being used by the teachers. Teachers therefore are not assisting such children to enable them overcome their problems and participate in learning successfully. This is quite a disincentive to the success of inclusion. Avoke (2005) has stressed that for inclusion to be successful, teachers will have to radically change their style of teaching. In line with that Mowes (2007) posits that pre-service teachers should be equipped with adequate knowledge, skills and competencies in the selection of: lesson

contents, types of resources, lesson presentation, teaching style, time allocation and learner activities in order to attend to learning needs of all learners. Adapting instructional strategies makes teaching effective, less tiring, less boring and less difficult for learners. In the case of special needs students in inclusive settings, the use of appropriately adapted teaching strategies and techniques is even of more paramount importance (NCSE, 2010).

The response from the respondents indicated that 43(51.2%) agreed to the statement of applying inclusive management skills in controlling behaviour in the inclusive classroom. This denotes that teachers have adequate knowledge and skills in managing disruptive behaviour in the classroom. Teachers may not have enough problems managing disruptive behaviours in the inclusive classroom. As Lamport (2012) observes, it is essential that teachers are trained in the skills and strategies to support behavior management in the classroom as well as the ability to differentiate instruction for students with special needs. Frequent classroom distractions take away from the learning experience of all students. The teacher is the manager of the classroom and he or she must have rules in place to impede negative behaviors as much as possible. In a study conducted in Turkey, Sucuoglu, Akalin and Sazak-Pinar (2010), concluded that, effective classroom management increased academic achievement and decreased problem behaviors of students.

Also, most of the respondents, 40(47.6%), agreed of being able to adapt curriculum contents to make them accessible to the special need children. This response of the majority of teachers, as compared to number who disagreed 36(42.9%), could be seen as being inconsistent. It could be expected that the majority of the respondents who could not adapt instructional strategies would probably fail to adapt curriculum

content. However, Hoover and Patton (1997) cited in Hayford (2013) posit, adapting curriculum content involves using strategies and materials to make it possible for the special need child to learn the same content to its fullest as expected. These authors further state that teachers, in their endeavour to adapt curriculum content, should concentrate on the pacing of instruction, combined with ongoing review of materials and simplification of tasks. It could be termed a failure that almost half of the respondents and 8(9.5%), who could not decide, do not do much to deliver the content of the curriculum through different means and select different instructional materials as a means of adapting the curriculum content to meet diverse needs in the students.

The majority 49(58.3%) of the respondents agreed on being able to value diversity among pupils in the inclusive class. The paradigm shift of education from exclusivity to inclusivity has opened the doors of schools to all pupils from the society. This therefore presents the class teacher and subject teacher with diverse abilities or group of pupils in the inclusive classroom. Teachers are to value and recognize the presence and capabilities of all learners in the classroom. If teachers fail to value and respect all learners in the classroom, those learners who feel to be devalued and disrespected may turn to be truants and later drop out of school. According to Du Toit and Kruger (1993) the teacher should value diversity among children in the classroom. They further postulated that an effective education situation is characterized by relationships of trust, understanding and authority. If the relationships of trust, understanding and authority are not realized in an inclusive classroom, then the teacher is not adequately prepared to teach effectively.

Over half, (78.6%), of the respondents disagreed on the statement that they could use instructional resources and assistive technology for children with special needs. The

use of instructional technology in teaching motivates and serves diversity of pupils in class. For example the use of a 3 – dimension teaching and learning material like computers serve three senses (hearing, vision and touch). Thus, if a child is deficient in any one or two of these three senses, the use of the computer will assist such child to benefit from the lesson by relying on the other senses left. The finding stands to contrast the assertion of Eaton (1996) that when teachers have knowledge and skills in the use of data-based or outcome-based-instructional models such as mastery learning and computer assisted instruction, as well as a curriculum assessment model, it assists teachers in setting objectives based on individual's needs and ability. This will help the teacher to do individual teaching for all children to benefit from inclusive education.

Again, many of the respondents, 44(52.4%), disagreed of being able to modify teaching and learning materials (TLMs) to suit the needs of all learners in inclusive class. Teaching and learning materials are aids to learning which support and explain further what the teacher put across. Modifying teaching and learning materials is a means of increasing learners' participation which will motivate learners to involve themselves in the teaching and learning process. The incapability of the majority, 52.4%, of the respondents at modifying teaching and learning materials to suit the needs of all children in inclusive class, is in contrast with Mowes (2007) who asserted that the modification of teaching and learning materials would allow for individualized instruction and would take into account the different rates of learning. This revelation therefore indicates the need to supports, train and encourages teachers to learn how to modify teaching and learning materials to serve the diverse needs of children in the inclusive classroom. Inclusion is about the accessibility to all

resources. Thus, if teachers are capable of modifying teaching and learning materials, then they can involve all learners in the teaching and learning process.

Furthermore, the majority 55(64.5%) of the respondents reported that they do not have the knowledge and skills necessary for designing learning programmes and materials for students in the inclusive class. To serve the diversity of learning needs of children in an inclusive setting, teachers have to design and re-design learning programmes to suit the diverse learning needs. Knowledge and skills in construction and selection of teaching and learning materials are pre-requisite for effective teaching in an inclusive setting. Wade (2000), confirms this findings by reiterating that many teachers still tend to think that it is correct to use “one-size tend to all” approach to teaching based on the training they received at colleges. This means that teachers use the same instructional strategies in teaching classes with diversity. In reality, teachers are faced with a group of learners where each and every one has his unique character, pace of learning and working. Curriculum differentiation should not be an exception but rather a central method of ensuring curriculum access (Department of Education and Science, 2007). Thus, if teachers are not capable of designing learning programmes and materials to serve all learners in the inclusive classroom, they will not be in position to handle inclusive class.

In addition, the majority, 43(51.2%), of the respondents agreed to the statement that they could adapt the learning environment to suit the various needs in class. Environment plays a major role in the teaching and learning situations. Environment confirms or denies an existing body of knowledge. The ability of the majority 51.2% teachers of the study to adapt the environment (physical) to suit all learners in the classroom determines the likely prospect of inclusive education. Mowes (2007) supports this argument by postulating that teachers have to create a school

environment that is conducive for inclusive education. Commenting on instructional setting (learning environment), Treffinger and Barton (1989), cited in Mamah (2005) note that certain aspects of a classroom environment may be very important for one learner and inconsequential for another. However, teachers cannot possibly accommodate the preferences of each student at all of the time but an awareness of the preferences allows the teachers to accommodate individual preferences some of the time, while simultaneously developing a student's capacity to work in a variety of environments.

Additionally, 53(63.1%) of the respondents disagreed with the statement that they are capable to strategies in removing barriers to learning in classroom. Majority of the respondents in disagreement implies that learners, especially those with disabilities, are being confronted with barriers to learning in classroom. Certainly, learners face a lot of hindrances to their academic achievements in an inclusive classroom. Due to this, such learners are sometimes classified as non performers. The Disability Peoples' International (1991) supports this assertion by stating that, the limitation or loss of opportunities for special needs people to take part in the normal life of the community on an equal level with others is due to physical or social barriers. The removal of discrimination and barriers to learning requires a change of approach and thinking in the way in which teachers are prepared. Evidently, this then calls for some modification in the content of the curriculum being used in teacher training institutions to prepare teachers for inclusive education.

Moreover, the responses from the respondents indicated that 60(71.4%) disagreed to the statement of being able to teach students with special needs placed in my class how to teach children with disabilities. The physical presence of the children with disabilities or special needs in the classroom is not guarantee for their involvement in

classroom activities. The findings imply that majority of teachers in the inclusive regular classrooms are found teaching without considerations to such children. Thus, if teachers lack the requisite knowledge and skills in involving special need children in their teaching such children will disturb in class and the teacher may subject him/her to punishment. Levitz (1996) states that it is through the curriculum that inclusion truly take place. Teachers therefore need to know how to make the curriculum accessible to all learners to participate effectively in the teaching and learning programme. Teachers need skills, knowledge and competencies in teaching children with disabilities in inclusive classroom.

Furthermore, majority of the respondents indicated that they are not capable to screen and to identify special needs children. The majority, 60(71.4%) of the respondents disagreeing with the statement, implies the teachers are not certain that they are capable of identifying children with special needs as a pre-requisite for meaningful interventions which will lead to management of such needs. According to Kapp (1994), the teacher should be aware of the identification procedures that may be employed, such as screening, and criterion referenced tests. Knowledge in this area will assist the teacher to easily identify those children with hidden disabilities or special needs in the classroom. Thus, if teachers are not capable of identifying children with special needs in their classroom, they will not be in position to offer such children any assistance to enable them to overcome their problems and participate in learning successfully.

Besides, majority of the respondents, 54(64.3%), indicated their acquisition of knowledge on the importance of early identification of learners with special needs. This implies many teachers are prepared to understand the relevance of early identification of children with special needs. Amoako-Gyimah (2007) has noted that

the knowledge of early identification of children with problems is very important and must be of great concern to the teacher. Early identification is very important because if teachers are able to identify the learning problems and needs of pupils early, it leads to early intervention and prevents further deterioration of problems. Furthermore, early identification leads to proper placement. Knowledge in this area will assist the teacher to easily identify those children with hidden disabilities in the classroom. Thus, if teachers are not capable of identifying children with special needs in their classroom, they will not be in position to offer such children any assistance to enable them to overcome their problems and participate in learning successfully

5.2.2 Teachers' ability to use of alternative assessment procedures

From the analysis in Table 4.7, majority of the respondents 47(55.9%) disagreed of using informal methods of gathering information on pupils' performances. Cortiella (2007) indicate that the move towards inclusive education requires novelty in assessment practices to foster participation of all learners. As students with diverse educational needs participate in small and large-scale assessments with the various participation methods, teachers and school administrators must have specific knowledge of each type of assessment and must be familiar with the needs of students who participate (McLaughlin, & Thurlow, 2003). However, the findings imply that many teachers have limited knowledge in the use of alternative method of gathering relevant data on the children they teach. Thus majority of the teachers still make more use of formal types of assessment characterized by standardized tests. This is however in contrast with the call upon the teachers to adopt the creation of flexible assessment options for students with special educational needs through modification and use of

alternate assessment strategies such as authentic, performance-base and portfolio assessments

In addition, 45(53.6%) of the respondents agreed of being capable of altering assessment requirements to suit the performance level and strength of each pupil with special need. Assessments are meant to determine the strength and weakness of the curriculum and the learners. This finding implies that majority of the teachers in the general education classroom have adequate knowledge in assessment practices that involve all learners in the classroom. Teachers are now using both formal and informal methods of assessments in the general education classroom which gives teachers opportunity to assess all learners in the classroom. The finding is consistent with Darling-Hammond's (2005) suggestion that as a result of the inadequacies and biases of formal assessment, emphases have now shifted to the use of alternate assessments. Teachers cannot afford to stick to the use of the standardized tests which alienate most special needs children in this era of inclusive education.

Moreover, 52 (61.9%) of the teachers disagreed with their involvement of students in selecting criteria for assessment and evaluation of work sample. This outcome shows that ultimately, teachers use assessment and evaluation criteria they feel comfortable with. O'Neill and McMahon, 2005 state that by extending this decision-making to 'choice of assessment' methods, it allows students to take some control of their learning and to play to their strengths. The involvement of pupils in selecting criteria for assessment and evaluation can be very beneficial for staff and students when there are students with diverse learning needs within a particular setting. In the classroom, some of the learners may prefer to answer objective questions while others may prefer subjective questions or any other form of assessment. Factors like class size and others compel teachers to choose an evaluation criterion which sometimes

alienates some learners from achieving their maximum performance. Again, this revelation in the majority's response to the statement is contrary to Darling-Hammond (2005) who stated that learners must be involved in the assessment process.

Besides, 57(67.9%) of the respondents disagreed with the statement of involving parents in portfolio assessment process to underscore its importance to pupils. Parents play a very important role in assessment and monitoring of pupils. Children spend most of their time with parents in the homes. Thus, if parents are involved in the portfolio assessment process, they will extend and perform most of the teachers' role in the homes. According to Pleiss, et al., (2003) portfolio gives more reliable and dynamic data about students for teachers, parents and the student himself. Therefore the inability of the majority, 57(67.9%), of the respondents to involve parents in portfolio assessment process to underscore its importance to pupils defeats one merit of parental participation in the education of their wards. As a result, parents will not be given the opportunity to monitor their children's academic growth. Also, 51(60.7%) teachers indicated that they do not conduct portfolio conference with pupils. This could be a reflection that many teachers do not understand the importance of conducting portfolio conference with pupils. Findings of Birgin and Baki, (2007) concluded that students become more engaged in knowing about their own progress if they are able to participate in the on-going assessment process. Hence, the failure of greater number of respondents in organizing portfolio conference for their pupils deprives the pupils of the opportunity to be engaged in knowing about their own progress.

Again, majority of the respondents, 46(54.8%) disagreed on the statement that they do encourage pupils to evaluate their own work against public standards in order for

pupils to take responsibility for their portfolios. This implies that lots of teachers do not give pupils the opportunity to assess and evaluate their own work which in effect may not help develop in children the ability to reflect on their own work to determine their strength and weakness. This is, however, in contrast with O'Neill and McMahon's (2005) assertion that encouraging students to take some responsibility in how and what they learn is in keeping with good practices in student-centred learning. Darling-Hammond (2005) also posit that if teachers encourage pupils opportunity to assess and evaluate their own work against public standard, it builds in them the sense of taking initiative to assess their own progress in class and thereafter.

Furthermore, over half, 57(67.9%), of the respondents indicated that they could identify observable aspects of pupils' performance or product that can be judged. The majority of respondents being in agreement with the statement is in line with Rogers (2010) assertion that observable aspects indicate what concrete actions the student is or should be able to perform as a result of participation in a programme or assessment. Therefore, once the assessment outcomes have been identified by the teacher (assessor), the knowledge and skills necessary for the mastery of these outcomes should be listed. This will allow the desired behaviour of the students to be described, and will eliminate ambiguity concerning demonstration of expected competencies.

Again, half, 42(50%), of the respondents agreed on the statement that they do design assessments task which are truly representative of performance in the field of study. Designing assessment tasks that are truly representative reflect the authenticity of the assessment. Thus they are assessments that are real in terms of processes and products, assessment conditions or the presented context, and true to life beyond school, curriculum and classroom practice or learning and instruction (Palm, 2008 and Wiggins, 2006). The findings, however, indicates that only 50% of the respondents

believed in themselves of been able to design assessments task which are truly representative of performance in the field of study.

5.2.3 Collaboration with other professionals

With reference to the analysis in Table 4.8, 59(70.2%) of respondents disagreed with the statement of being able to do clinical and educational consultations for identifying and assessing learning problems of pupils. The majority's disagreement with the statement implies that most regular education teachers have inadequate knowledge on the need to seek for clinical and educational consultations on learners suspected of having special need. As a result, teachers may continue to make use traditional misconceptions to identify and assess pupils' learning problems. Earlier findings from Engelbrecht and Green (2001) proposed that teachers need knowledge on clinical consultation so that when there is a need for more specialist guidance and intervention, the teacher can draw support from personnel who will be capable of offering support and advice.

In addition, 46(54.8%) of the respondents agreed on offering parents the opportunity to be part of decision making process towards the education all children. The majority (54.8%) of the respondents agreeing that they partner with parents and involve them in decision making concerning the education of children with special needs is a plus for inclusion. Children with disabilities are often viewed by their parents as a source of shame and by the wider society as "problem" in need of separate treatment. The sense of separateness that this engenders, adds to the exclusion and the emotional distress experienced by persons living with disabilities and their parents (Obi-Banku, 2004). This means that, if teachers know how to partner with parents and involve them in their decision making it will create stronger parental involvement in the

schools' activities. According to Obi-Banku (2004), when professionals, and for that matter, schools take decisions single handedly, the non-involvement of parents in decision making about their children usually lead to less commitment to the educational achievement and advancement of children with special needs.

Additionally, 61(72.6%) of teachers disagreed with the statement of being able to do collaborative lesson planning with other teaching professionals. Teaching becomes more effective when it is preplanned by a team as the collaborators shares ideas on contents and methodology. The result implies that teachers in the general education classroom do not consult each other before or during lessons. Thus, teachers who have difficulties in teaching certain aspect of the curriculum may skip over thereby leaving the children to suffer that aspect of the curriculum. The response is incongruent to Vaughn, Bos and Schumm, (2010) findings which concluded that teachers should be trained to use collaborative teaching skills in all collaborative teaching models. The absence of these skills in teachers put them in a very difficult position to co-teach classes and to collaborate with other professionals/teachers to collaboratively teach.

Furthermore, 52 teachers, representing 61.9% of the respondents, disagreed with the statement of having and practicing collaborative skills in lesson evaluation. Since evaluation is multifaceted, it involves multi-disciplinary teams to conduct holistic assessment. The failure of teachers to collaboratively evaluate lessons might be the reason why Vaughn, et al. (2010) posit that teacher training institutions using the “inclusive teacher preparation model” should teach trainees how to do collaborative evaluation. The collaborative teaching component of the teacher preparation is critical because collaborative planning and evaluation of students can be used as a means of demonstrating how inclusive practices can be done effectively. Sharing information

and working as a collaborative team can serve to alleviate concerns and resistance (Downing, 2002). It is apparent from the unfolding discussion that the majority of the teachers do to grasp or notice the necessity of the skills in collaborating with other colleague (professional) teachers in educating special need children.

Finally, 59(70.2%) of respondents disagreed with the statement of teaming-up with other professionals to form multidisciplinary team in assessing pupils in inclusive setting. The findings indicate that teachers in the general education classroom do assess pupils single handedly. In order for a child to be identified and placed into special education, there has to be in place medical, clinical, and educational evaluation. It is after these that a child is finally identified and classified as needing special education service. According to Engelbrecht, (2007), the formation of multidisciplinary team, offers team members opportunity to offer support and specialist advice to class teachers during assessment. Each member of the assessment team has a unique role to play during assessment. Thus, if teachers are not able to form such teams in their respective schools, most children will lose certain supportive and related services which will later affect such children's academic, social and emotional life in the inclusive setting.

CHAPTER SIX

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter covers brief reflection on the methodology, summary of major findings, conclusions, recommendations and suggested areas of further research.

6.2 Reflection on methodology

Descriptive survey was adopted for the study. The population of interest to the study was 153 teachers from basic schools on the inclusive education programme. Purposive and simple random sampling techniques were employed in the selection of sampled schools and 90 teachers respectively. A self constructed closed-ended questionnaire type was the instrument used to collect data for the study. Thirty-five items were contained in the questionnaire. Through a pilot study, the validity and reliability of the instrument was ascertained. Getting access to the respondents in the schools for data collection was facilitated through introductory letters acquired from the University and the Municipal Education Office authorities. Data was analyzed using frequency counts involving simple percentages using themes and data from respondents.

6.3 Summary

The aim of the study was to assess the capabilities of regular teachers in educating children with special educational needs in the pilot inclusive basic schools in the Nzema East Municipality. The outcomes of the study were as follows:

- **Curriculum adaptations:** The findings, in respect of whether the regular teachers have the competencies to make the curriculum accessible for the learners with special educational needs in the inclusive setting through curriculum adaptations and differentiation indicated that majority (53.3%) of the sampled teachers believe they have not acquired the necessary capabilities it takes to adapt and differentiate the curriculum to meet the diverse learning needs of children with special needs in the inclusive classrooms. However, apart from 10.4% of respondents who remained uncertain about their capabilities, 36.3% of the teachers believe in their competencies of doing so.
- **Use of alternative assessment:** Results in view of the regular teachers' competency in using alternative assessment procedures in assessing pupils with special educational needs revealed that the majority of teachers, 49.4% thought they could not competently use alternative assessment procedures in assessing pupils with special educational needs in the inclusive setting. While 9.6% of the sampled teachers could not take a stand, 41% of them believe in themselves of being competent in the use of alternative assessment procedures in assessing pupils with special educational needs in the inclusive education setting.
- **Collaboration with other professionals:** Majority of the teachers (62.7%) also thought they were not able to collaborate with other professionals towards the enhancement of the learning ability of students with special needs. While 9.5% of the respondents remained undecided, 27.8% of them trusted in themselves of being competent in collaborating with other personnel in

attending to the educational needs of pupils with special educational needs in the inclusive education setting.

6.4 Conclusions

From the study, the findings and discussions have some implications for the successful implementation of inclusive educational practices and promoting better outcomes for students with special needs in Nzema East Municipality.

The result of the study sheds light on the fact that most children with special educational needs, who should have been receiving better education, are thus missing out because majority of the regular teachers are inadequately competent about best curriculum adaptations, differentiations and inclusive educational practices. Correspondingly, most of the piloting inclusive schools are providing inadequate services to optimize learning for students with special needs. This suggests that there is disconnect between the espoused policies of the inclusive schools and their practices in the Nzema East Municipality.

Again, education for students with special needs in inclusive settings is the current approach to educating students with exceptionalities. International organizations such as UNESCO, (1994) have declared in favour of the inclusive approach. The Government of Ghana, through the Ministry of Education, Science and Sports (MESS), now Ministry of Education (MoE) and the Ghana Education Service (GES) have adopted inclusion as part of the official education strategic plan for educating special needs students.

However, as the findings of the study indicated, not much has been done by way of capacity building for the teachers through orientation and training towards making general education teachers capable and ready for inclusion. Inadequate training of

teachers resulting in their lack of competencies and confidence to effectively handle students with special needs in the inclusive setting negatively affects the performance of the teachers and the success of the inclusive education.

6.5 Recommendations

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

The Special Education Division of Ghana Education Service (GES) should collaborate with the District Education Directorate to provide adequate and intensive in-service training for teachers to enhance their knowledge of strategies and skills for adapting and differentiating the curriculum for learners with special needs in the inclusive setting. These kinds of in-service training and awareness creation programmes should be periodically organized right at the district levels in order to reach the teachers directly. This will go a long way to equip teachers with the requisite knowledge and sharpen the skills needed for welcoming and celebrating the diversity in their classrooms.

Also, there is a need to do curriculum analysis and evaluation to ascertain whether or not the curriculum used in the Colleges of Education and other teacher training/education institutions in Ghana prepares pre-service and university graduate teachers adequately for inclusive education in Ghana.

Finally, the districts which are practising the inclusive education programme should be prioritized to receive posting of professionally trained and special education resource teachers. This is highly recommended because, as at the time of conducting this study, no special education resource teacher had been posted to collaboratively work with regular teachers in any of the pilot inclusive schools in the municipality.

6.6 Suggested areas for further research

Considering the findings of the study, the following areas have been suggested for further studies:

- Research can be carried out on the challenges hampering the implementation of inclusive education in the Nzema East Municipality of Ghana.
- There is a need to seek the views of beginning teachers on curriculum for teacher training to ascertain whether or not the curriculum used for teacher training programmes in Ghana prepares them adequately for inclusive education in Ghana.



REFERENCES

- Ainscow, M.; Dyson, A, and Weiner, S (2013). *From exclusion to inclusion: Ways of responding in schools to students with special educational needs*. Centre for Equity in Education, University of Manchester.
- Aitken, E. N., & Pungur, L. (2005). *Literature synopsis: Authentic assessment*. Retrieved 27/10/2013. Available from:
http://edc.gov.ab.ca/k_12/special/aisi/pdfs/Authentic_Assessment_UofAb_UofL.pdf
- Amoako-Gyimah, S. K. (2007). *Educating pre-school children with special educational needs*. Department of Special Education; University of Education, Winneba.
- Arnesen, A., Allen, J., & Simonsen, E. (2009). *Policies and practices for teaching socio- cultural diversity. Concept, principles and challenges in teacher education*. Strasbourg: Council of Europe.
- Avoke, M. (2005), *Special education needs in Ghana: Policy, practice and research*. Special Educational Books, Winneba.
- Avoke, M., Hayford, S., Ihenacho, I. J., & Ocloo, M. (1998). *Issues in special education*, Accra: Prime.
- Ballard, K. (2003). *Developing inclusive teacher education*. London: Routledge, Falmer..
- Bandura, A. (1977a). Self-efficacy: Toward a Unifying theory of behavioral change. *Psychological Review*. 84(2), 191-215.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.

- Beissel-Durrant, G. (2004). *A typology of research methods within the social sciences*. University of Southampton, Southampton, SO 17 1BJ, United Kingdom.
- Birgin, O., & Baki, A. (2007). The use of portfolio to assess students' performance. *Journal of Turkish Science Education*. 4 (2), 75 – 90.
- Brinkman, W.P. (2009). *Design of a questionnaire instrument: Handbook of mobile technology research methods*. Nova Publisher.
- Bryant, S. L., & Timmins, A. A (2002). *Portfolio assessment: Instructional guide*. Hong Kong Institute of Education, Tai Po; Hong Kong.
- Brownell, M. T., Adams, A., Sindelar, P., Waldron, N., & Vanhover, S. (2006). Learning from collaboration: The role of teacher qualities. *Exceptional Children*. 72, (2), 169-185.
- Cohen L., Manion L. and Morrison K. (2007). *Research methods in education*. Routledge Taylor & Francis Group Madison Avenue, New York.
- Corbett, J. (2001). *Supportive inclusive education: a connective pedagogy*. New York: Routledge.
- Cortiella, C. (2007). *Learning opportunities for your child through alternate assessments: Alternate assessments based on modified academic achievement standards*. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications Inc. Los Angeles.

- Darling-Hammond, L & Pecheone, R., (2009). Reframing accountability: Using performance assessments to focus learning on higher order skills. In L. Pinkus (ed). *Measuring performance in high school*. Washington, DC: Alliance for Excellent Education.
- Darling-Hammond, L. (2005). *Preparing teachers for the changing world: what teachers should learn and be able to do*. Sam Francisco: Jossey Bass.
- Darling-Hammond, L., & Adamson, F. (2010). *Beyond basic skills: The role of performance assessment in achieving 21st century standards of learning*. Stanford, CA: Stanford Center for Opportunity Policy in Education.
- Deiker, L. A. (2006) *The co-teaching lesson plan book (3rd ed.)*. Whitefish Bay, WI: Knowledge by Design.
- Dellinger, A. B., Bobbett, J. J., Olivier, D.F., & Ellett, C.D. (2007). *Measuring teachers' self efficacy beliefs: Development and the use of the TEBS-Self teaching and teacher education*. Retrieved, 04/10/ 2013; Available from <http://www.sciencedirect.com>
- Department of Education and Science (2007). *Special educational needs: A continuum support*. Marlborough, Dublin.
- Department of National Education (2002). *Draft conceptual and operation guidelines for implementation of inclusive education (2nd Ed.)*. Pretoria: Government Printer.
- Downing, J.E.(2002). *Including students with severe and multiple disabilities in typical classrooms*. Baltimore: Paul Brooks Publishing Company.
- Du Toit, S. J. & Kruger, N. (1993). *The child: an educational perspective*. Durban: Butherworths.
- Eaton, V. (1996). *Inclusive schools*. Alberta: Omninclus.

- Engelbrecht, P. & Green, L. (2001). *Promoting learner development*. Pretoria: Van Schaik.
- Engelbrecht, P.(2007). Creating collaborative partnerships in inclusive education. In P. Engelbrecht and L. Green (Eds.). *Responding to the challenges of inclusive education in Southern Africa*. Pretoria: Van Schaik, pp. 175-185.
- Etsey, Y.K. (2005). *Educational measurement and evaluation*. UCC. (Unpublished lecture notes).
- Farrell, P., Alborz, A., Howes, A., & Pearson, D. (2010) *The impact of teaching assistants on improving pupils' academic achievement in mainstream schools: a review of the literature*. Manchester, UK: University of Manchester.
- Farrell, P., & Ainscow, M. (2002). *Making special education inclusive: From research to practice*. London: David Fulton Publishers.
- Flavell, L. (2001). *Preparing to include special children in mainstream schools: A practical guide*. London: David Futon.
- Foreman, P. (2001). *Integration and inclusion in action*. London: Harcourt Brace.
- Fraenkel, J. R., & Wallen, N.E. (2009). *How to design and evaluate research in education*: New York: Mc Graw-Hiv Inc.
- Frankfort-Nachmias, C., & Nachmias, D. (2008). *Research methods in the social sciences*. Worth Publishers, New York.
- Frederickson, N., & Cline, T. (2006). *Special educational needs, inclusion and diversity*. Buckingham: Open Universality Press.
- Frempong, E. (2011). *Factors contributing to poor performance of students in the basic education certificate examination in selected public junior high schools in Effutu Municipality*. Department of Special Education, UEW, Winneba.

- Friend, M. (2005). *The power of 2: Making a difference through co-teaching (2nd ed.)*. Bloomington, IN: Indiana University.
- Friend, M. (2008). *Co-teach: A handbook for creating and sustaining effective partnerships in inclusive schools*. Greensboro, NC: Marilyn Friend, Inc.
- Friend, M., & Cook, L.(2012).*Interactions: Collaboration skills for school professionals*. Columbus, OH: Pearson Merrill.
- Fullan, M. (2005). *Change forces: Probing the depths of educational reform*. London: Falmer Press.
- Gadagbui, G.Y. (2013). *Exceptionalities, inclusive education, personality disorders and gerontology-the aged*. Winneba: Department of Special Education, U.E.W.
- Gay, L. R., Mills, G., & Airasian, P. W. (2005). *Educational research: Competencies for analysis and applications (8th ed.)*. Upper Saddle River, NJ: Merrill.
- Ghana Education Service (2011). *Pilot inclusive schools in Ghana*. Special Education Division Document, Accra: Ministry of Education.
- Ghana Government. (2006). *Persons with disability act, 2006*. Accra: GPC/ Assembly Press.
- Giangreco, M. F., Dennis, R., Cloninger, C, Edelman, S., & Schattman, R. (1993). "I've counted jon": Transformational experiences of teachers educating students with disabilities. *Exceptional Children*. 59 (4), 359-372.
- Goddard, A. (1995). From product to process in curriculum planning: A view from Britain. *Journal of Learning Disabilities*. 289 (5) 258-263.
- Government of Ghana. (1996). *FCUBE*. Accra: Ghana.
- Government of Ireland. (2004). *Education for persons with special educational needs act*. Dublin: The Stationery Office.

- Gulikers, J., Bastiaens, T., & Kirschner, P. (2005). *Perceptions of authentic assessment and the impact on student learning*. Paper presented at The First International Conference on Enhancing Teaching and Learning through Assessment. Hong Kong Polytechnic University, Hong Kong.
- Guski, L. F. (2008). *Secondary teachers' assessment and grading practices in inclusive classrooms. A thesis submitted to Department of Education Psychology and Special Education*. University of Saskatchewan, Saskatoon.
- Hay, J. F. (2004). Implementation of the inclusive education paradigm shift in South African education support services. *South African Journal of Education*, 23(2): 135 - 138.
- Hayford K. S. (2013). *Special educational needs and quality education for all*. Winneba: Department of Special Education, U.E.W.
- Hoover, J. J., & Patton, J.R (2004). *Differentiating standards-based education for students with diverse needs*. Hammill Institute on Disabilities and SAGE Publications. Retrieved on 20/10/2013. Available from:
<http://rse.sagepub.com/cgi/content/abstract/25/2/74>
- Hoover, J. J., & Patton, J. R. (2005). *Curriculum adaptations for students with learning and behavior problems: Differentiating instruction to meet diverse needs*. TX: Pro-Ed, Austin.
- Hyam, M. (2004). *Advanced certificate in inclusive education – theoretical framework*. Melville: Rand Afrikaans University.
- Kampwirth, T. J. (2006). *Collaborative consultation in the schools: Effective practices for students with learning and behavior problems*. Columbus, OH: Pearson Merrill.

- Kapp, J. A. (1994). *Children with problems: An orthopedagogical perspective*. Pretoria: Van Schaik.
- Khaira, H.G. & Yambo, D. (2005). *The practicality of authentic assessment*. Paper presented at The First International Conference on Enhancing Teaching and Learning Through Assessment. The Hong Kong Polytechnic University.
- Khan, M. S. (1990). *Educational research*. New Delhi: Ashish Publishing House
- King-Sear, M. E. (2001). *Three steps for gaining access to the general education curriculum for learners with disabilities*. *Intervention in School and Clinic*, 37 (2), 67-76.
- King-Sears, M (2008). *Facts and fallacies: differentiation and the general education curriculum for students with special educational needs*. *Support for Learning* 2(23), 55–62.
- Koga, N., & Hall, T. (2004). *Curriculum modification*. Wakefield, MA: National Center on Accessing the General Curriculum. Retrieved 20/02/2013 from http://aim.cast.org/learn/historyarchive/backgroundpapers/curriculum_mod.
- Lampert, M. A. (2012). Special needs students in inclusive classrooms: The impact of social interaction on educational outcomes for learners with emotional and behavioral disabilities. *European Journal of Business and Social Sciences*. 1 (5), 54-69. Available from: <http://www.ejbss.com/recent.aspx> accessed on 20/10/2013.
- Lane, S., & Stone, C. A. (2006). Performance assessment. In R. L. Brennan (Ed.). *Educational measurement* (4th Ed.) (pp. 387-424). Westport, CT: Praeger
- Levitz, E. (1996, June 7-10). *Specialised education-the way forward*. Publico.
- Lu, T. E. (2012). Maths curriculum adaptation for disadvantaged student in an inclusive classroom. *Special Education Bulletin*. 12. 25-50.

- Lunenburg, F. C. (2011). Self-efficacy in the workplace: Implications for motivation and performance. *International Journal of Management, Business, and Administration* 14, (1).
- Mamah, V. (2005). Curriculum adaptation for the visually impaired. In M. Avoke (2005). *Rudiments of special education*. Special Educational Books. University of Education, Winneba. Ghana.
- Mastropieri, M. A., & Scruggs, T. E. (2007). *The inclusive classroom: Strategies for effective instruction* (3rd ed.). Upper Saddle River, NJ: Pearson/Merrill-Prentice Hall.
- McLaughlin, M. J., & Thurlow, M. (2003). Educational accountability and students with disabilities: Issues and challenges. *Journal of Educational Policy*. 17(4), 431-451.
- McMillan, J. H., & Schumacher, S. (2010). *Research in education: Evidence-based inquiry*. Pearson; Boston.
- Meadan, H., & Monda-Amaya, L. (2008). Collaboration to promote social competence for students with mild disabilities in the general classroom: A Structure for Providing Social Support. *Intervention in School and Clinic*, 43(3), 158-167.
- Ministry of Education Youth and Sport. (2003). *Education strategic plan 2003-2015: Policies, targets and strategies*. Ministry of Education. Accra.
- Ministry of Education (2010). *Education strategic plan 2010-2020: Policies, targets and strategies*. Ministry of Education, Accra.
- Ministry of Education, Youth and Sport (2004). *White paper on the report of the education reform review committee*. Ghana Government.

- Möwes, A.D., (2007). *Namibian educators views regarding teacher training and competence to teach in inclusive classrooms*. Namibian Development Journal.
- Mueller, J. (2006). *Authentic assessment toolbox*. Retrieved on 22/10/2013. Available from <http://jonathan.mueller.faculty.noctrl.edu/toolbox/whatisit.htm#looklike>
- National Council for Curriculum and Assessment (2007) *Guidelines for teachers of students with general learning disabilities*. Dublin: NCCA.
- National Council for Curriculum and Assessment (NCCA) (2012). *Curriculum and curriculum access issues for students with special educational needs in post-primary settings: An international review*. ICEP Europe
- National Council for Special Education (2010). *Literature review of the principles and practices relating to inclusive education for children with special educational needs*. ICEP Europe.
- National Council for Special Education (2011). *Access to the curriculum for pupils with a variety of special educational needs in mainstream classes: An exploration of the experiences of young pupils in primary school*. 1–2 Mill Street Trim Co. Meath.
- National Council for Special Education. (2012). *Curriculum and curriculum access issues for students with special educational needs in post-primary settings: An international review*. 1–2 Mill Street Trim Co. Meath.
- Obi-Banku, F. (2004). *An effective parenting of children with special needs. A guidebook for parents, special educators, counselors and related professional*. Winneba: Department of Special Education, U.E.W.
- Okumbe, M. A., & Tshenko, G. N. (n.d.). *The need for curriculum modifications for special needs learners in Botswana*. Department of Education; University of Botswana.

- Osuala, E.C (1993). *Introduction to Research Methodology*. Onitsha: African FEP Publishers Limited.
- Ouane, A. (2008, November, 25-28). *Creating education systems which offer opportunities for lifelong learning*. Paper presented at UNESCO International Conference on Education. 'Inclusive education: The way of the future' 48th session. Geneva.
- Palm, T. (2008). Performance assessment and authentic assessment: A conceptual analysis of the literature. *Practical Assessment, Research and Evaluation*. 13, 4. 1-11.
- Pajares, F. (2002). *Self-efficacy beliefs in academic contexts: An outline*. Retrieved 20/01/2014, Available from:
<http://www.emory.edu/EDUCATION/mfp/efftalk.html>
- Perez, K. (2014) *The New Inclusion: Differentiated Strategies to Engage ALL Students*. Teachers College Press, Amsterdam Avenue, New York.
- Perkins, T. & Wajrak, M. (2005). *Authentic assessment: Mission possible or mission impossible*. Paper presented at The First International Conference on Enhancing Teaching and Learning Through Assessment, Hong Kong Polytechnic University, Hong Kong SAR, China.
- Plessis, J., Prouty, D., Schubert, J., Habib, M., & George, E. (2003). *Continuous assessment: A practical guide for teachers*. American Institutes for Research; Washington, DC.
- Potmesilova, P. Potmesil, M., & Roubalova M. F. (2014) Possibilities and limits of supervision used in integrated education *The Online Journal of Counseling and Education*. 3(1), 11-27.
- Pugach, M. C., Johnson, L. J., Drame, E.R., & Williamson, P. (2012). *Collaborative practitioners, collaborative schools* (3rd Ed.). Denver, CO: Love.

- Salkind, D. J. (2009). *Exploring research*. New Jersey: Pearson Education, Inc.
- Sidhu, K. S. (2011). *Methodology of Research in Education*. Sterling Publishers Private Limited, New Delhi.
- Skaalvik, E. M., & Skaalvik, S. (2008). Teacher self-efficacy: Conceptual analysis and relations with teacher burnout and perceived school context. In R Craven, H. W. Marsh, & D. McInerney (Eds.). *Self-processes, learning, and enabling human potential* (pp. 223-247). Connecticut: Information Age Publishing.
- Skaalvik, S., & Skaalvik, E. M. (2005). Self-concept, motivational orientation, and help-seeking behavior in mathematics: A study of adults returning to high school. *Social Psychology of Education*. 8, 285--302.
- Smith, D. (2009). *Introduction to special education: teaching in an age of challenges*. Boston: Allyn and Bacon.
- Smith, L., & Koshy, S. (2005). *Improving students' learning through authentic assessment*. Paper presented at The First International Conference on Enhancing Teaching and Learning Through Assessment, Hong Kong Polytechnic University, Hong Kong SAR, China.
- Stuart, S. K., & Rinaldi, C. (2009). A collaborative planning framework for teachers implementing tiered instruction. *Teaching Exceptional Children*. 42 (2), 52-57.
- Sucuoglu, B., Akalin, S., & Pinar-Sazak, E. (2010). The effects of classroom management of the behaviors of students with disabilities in inclusive classrooms in Turkey. *The Journal of Emotional International Association of Special Education*. 9 (1), 64- 74.
- Tamakloe, E. K., Amedahe, F. K., & Atta, E. T. (2005). *Principles and methods of teaching*. Accra: Ghana University press.

- Thomas, G., Walker, D., & Webb, J. (2005). *Inclusive education: the ideals and the practice*. In K. Topping, & S. Maloney (Eds.), *The RoutledgeFalmer Reader in Inclusive Education*. New York: RoutledgeFalmer.
- Thompson, S. A., & Baumgartner, L. (2008). Exploring portfolios in the elementary classroom with students with disabilities/exceptionalities: Timely or time-consuming? *Exceptionality Education International*. 18 (3) 148-165
- Tomlinson, C. A., & Allan, S. D. (2000). *Leadership for differentiating schools and classrooms*. Alexandria, VA: ASCD.
- Tomlinson, C. A., & McTighe, J. (2006). *Integrating Differentiated Instruction and Understanding by Design: Connecting Content and Kids*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Tomlinson, C. A., & Imbeau, M. B. (2010). *Leading and Managing a Differentiated Classroom*. Alexandria, VA: ASCD.
- Tremblay, P. (2007). *Team work and special needs*. Université Libre de Bruxelles Tivat, Montenegro.
- Tschannen-Moran, M., & Woolfolk Hoy, A. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education*. 23, 944-956.
- UNESCO (1994). *The Salamanca statement and framework for action on special needs education*. Paris: Ministry of Education, Spain.
- UNESCO (2004). *Changing teaching practices: Using curriculum differentiation to respond to students' diversity*. Paris: UNESCO.
- UNESCO. (2006). *International Standard Classification of Education, ISCED 1997*. Paris.

- UNESCO. (2009). *Teaching children with disabilities in inclusive settings*. Bangkok: UNESCO.
- UNESCO/UNICEF (2007). *A human right base approach to education for all*. UNICEF, New York.
- Vaughn, S., & Bos, C. S., & Schumm, J. S. (2010). *Teaching students who are exceptional, diverse, and at risk in the general education classroom* (5th ed.). San Francisco, CA: Pearson.
- Villa, R. A, & Thousand, J. S. (2005). *Creating an inclusive school* (2nd ed.). Alexandria, VA: Association of Supervision and Curriculum Development.
- Wade, S. E. (2000). *Inclusive education: A casebook and reading for prospective and practicing educators*. New Jersey: Lawrence Erlbaum Associates.
- Walther-Thomas, C. S., Korinek, L., McLaughlin, V. L., & Williams, B. T. (2000). *Collaboration for inclusive education: Developing successful programs*. Boston: Allyn and Bacon.
- Wiggins, G. P., & McTighe, J. (2005) *Understanding by design*. (Expanded 2nd ed.). Upper Saddle River, NJ: Merrill/ASCD.
- Wright, D. B. (2005). *Teaching and learning*. Bloomington, India.

likert scale of 1, 2, 3, 4 and 5. The figures stand for the following: 1= Strongly Disagree (**SD**), 2= Disagree (**D**), 3= Undecided (**U**), 4= Agree (**A**) and 5= Strongly Agree (**SA**).

For each statement, indicate with a tick (✓) the one that best reflect your judgments.

S/N	Statement	5 SD	4 D	3 U	2 A	1 SA
1	I adapt instructional strategies to meet the learning ability of all children with special needs in inclusive class.					
2	I apply inclusive management skills in controlling behaviour in the inclusive classroom.					
3	I adapt curriculum contents to make them accessible to the special need children.					
4	I value the diversity among pupils in class.					
5	I use instructional resources and assistive technology for children with special needs.					
6	I modify teaching and learning materials to suit the needs of all children in inclusive class.					
7	I have the knowledge and skills necessary for designing learning programmes and materials for students in the inclusive class.					
8	I adapt the learning environment to suit the various needs in class.					
9	I remove barriers to learning in class.					
10	I consider myself capable to teach students with special needs placed in my class.					
11	I can screen and identify learners with special needs.					
12	I can tell the importance of early identification of children with special needs					

SECTION C: Alternative assessment

Instruction: Below is a table to be completed. It involves statements about your judgement on how capable you are in using alternative assessment procedures in inclusive class. Your judgement is based on a 5-point likert scale of 1, 2, 3, 4 and 5. The figures stand for the following: 1= Strongly Disagree (**SD**), 2= Disagree (**D**), 3= Undecided (**U**), 4= Agree (**A**) and 5= Strongly Agree (**SA**).

For each statement, indicate with a tick (✓) the one that best reflect your judgments.

S/N	Statement	5 SD	4 D	3 U	2 A	1 SA
13	I do use informal methods of gathering information on pupils' performances.					
14	I alter assessment requirements to suit the performance level and strength of each pupil with special need.					
15	I involve students in selecting criteria for evaluation of work sample.					
16	I involve parents in portfolio assessment process to underscore its importance to pupils.					
17	I schedule and conduct portfolio conference with pupils.					
18	I do encourage pupils to evaluate their own work against public standards in order for pupils to take responsibility for their portfolios.					
19	I can identify observable aspects of pupils' performance or product that can be judged.					
20	I provide judgement/score to describe performance.					
21	I do design assessments task which are truly representative of performance in the field of study.					
22	I create and maintain appropriate setting for eliciting and judging pupils' performance.					

SECTION D: Collaboration and support in inclusive setting.

Instructional: Below is a table to be completed. It involves statements about your judgement on how you jointly seek support for learners with special needs in the inclusive setting. Your judgement is based on a 5-point likert scale of 1, 2, 3, 4 and 5. The figures stand for the following: 1= Strongly Disagree (**SD**), 2= Disagree (**D**), 3= Undecided (**U**), 4= Agree (**A**) and 5= Strongly Agree (**SA**).

For each statement, indicate with a tick (✓) the one that best reflect your judgments.

S/N	Statement	5 SD	4 D	3 U	2 A	1 SA
23	I do clinical and educational consultations for identifying and assessing learning problems of my pupils.					
24	I offer parents the opportunity to be part of decision making process towards the education all children.					
25	I do collaborative lesson planning.					
26	I have and practise collaborative teaching skills.					
27	I have and practise collaborative skills in lesson evaluation.					
28	I team-up with other professionals to form multidisciplinary team in assessing pupils in inclusive setting.					

APPENDIX B



DEPARTMENT OF SPECIAL EDUCATION
UNIVERSITY OF EDUCATION, WINNEBA (UEW)

July 21, 2014

THE DIRECTOR
MUNICIPAL EDUCATION OFFICE
P.O. BOX 36
N. ZIM.

Dear Sir/Madam,

LETTER OF INTRODUCTION

I write to introduce to you Bernard Lumer Hodofe a master student at the Department of Special Education of the University of Education, Winneba.

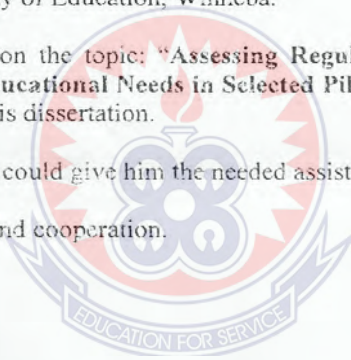
He is currently working on the topic: "Assessing Regular Teachers' Capacity in Educating children with Special Educational Needs in Selected Pilot Inclusive Basic Schools in Nzema-East Municipality", for his dissertation.

I should be grateful if you could give him the needed assistance to enable him carry out his study.

Thank you for your time and cooperation.

Yours faithfully,


SAMUEL HAYFORD (PhD)
Ag. HEAD OF DEPARTMENT



APPENDIX C

GHANA EDUCATION
SERVICE
P.O. BOX 35
NKROFUL.
AUGUST 19, 2014.

THE MUNICIPAL DIRECTOR
GHANA EDUCATION SERVICE
P.O. BOX 30
AXIM.

Dear Sir,

**REQUEST FOR PERMISSION TO CONDUCT A STUDY IN YOUR
DISTRICT**

I am a student in the Department of Special Education at the University of Education, Winneba, and currently in the process of conducting a survey designed to collect information on Regular Teachers' Capacity in Educating Children with Special Educational Needs in Pilot Inclusive Basic Schools.

Since Ghana adopted Inclusive Education and Special Educational Needs as a sub-sector policy as stated in the Ghana Education Strategic Plan 2003-2015 (now 2010-2020), an assessment and appreciation of teacher capacity needed for the successful implementation of the policy is valuable in order to determine their acceptance and concerns.

I am requesting permission to conduct this study in selected schools in your municipality because it is one of the selected districts on the pilot inclusive education project. If permission is granted, a number of teachers in schools selected for the

inclusive school programme in your district will be selected, using appropriate sampling techniques, and a set of questionnaire will be given to them to complete.

Information provided by teachers in this study will be treated confidential, and will be used to generate a summary of data that can be used by districts or teacher training institutions to design effective programmes relevant to teachers' needs. Additionally, the questionnaire developed could be used to identify the strengths and areas of training at the district, regional or even national levels.

I hope my request would kindly be considered.

Thanks.



Yours faithfully,

(BERNARD LUMOR HODOFE)

Reg. No. 1485/2003

Mob. No. 0246973972/0509051947