

UNIVERSITY OF CAPE COAST

TEACHERS' ATTITUDES TOWARD MAINSTREAMING OF CHILDREN
WITH INTELLECTUAL DISABILITIES: A STUDY OF TEACHERS IN THE
AKROM CLUSTER OF SCHOOLS IN KUMASI, GHANA

MAHAMADU AZARA

2011

UNIVERSITY OF CAPE COAST

TEACHERS' ATTITUDES TOWARD MAINSTREAMING OF CHILDREN
WITH INTELLECTUAL DISABILITIES: A STUDY OF TEACHERS IN THE
AKROM CLUSTER OF SCHOOLS IN KUMASI, GHANA

MAHAMADU AZARA

Dissertation submitted to the Institute for Educational Planning and
Administration, University of Cape Coast, in partial fulfilment of the
Requirements for the award of Master of Education Degree in Educational
Administration

JANUARY 2011

DECLARATION

Candidate's Declaration

I hereby declare that this Dissertation is the result of my own original research and that no part of it has been presented for another degree in this University or elsewhere.

Candidate's Signature..... Date.....

Name: Mahamadu Azara

Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Supervisor's Signature..... Date.....

Name: Dr. A.L. Dare

ABSTRACT

The main focus of this study is the ‘integration’ or ‘inclusion’ of children with intellectual disabilities (mental retardation) in the general classroom system with children without such disabilities. There are growing concerns in both developed and developing countries with regard to changing the orientation in special education towards integration (inclusion), and this study is intended to address such concerns. One of the most important factors that would ensure successful integration is teacher preparedness or positive teacher perception about such a practice or programme. In this study, 71 regular teachers including the Kumasi Metropolitan Peripatetic Officer from the Akrom Circuit schools in Kumasi, were sampled for the administration of questionnaire on “inclusive education” practices.

Responses to the questionnaires indicated that teachers in regular schools (as they exist now) were prepared to teach children with intellectual disabilities in the regular-classroom setting. Such teachers would however require in-service training, adequate teaching aids, smaller class size and other incentives as motivation. The success of inclusion therefore depends largely on the availability and quality of support that is offered in the mainstream programme.

It was also found that ‘integration’ will benefit both handicapped and non-handicapped children, in terms of academic and social pursuits. The study recommends how integration can be implemented in the country, e.g. enacting of relevant laws to provide the required legal framework for successful integration, as well as suggestions for further study into related areas of integration.

ACKNOWLEDGEMENTS

First of all, my sincere thanks go to Dr Albert Dare, my tireless supervisor, whose decimated guidance, constructive criticisms and suggestions made this work a success. I have drawn freely from the works of other researchers, and I wish to acknowledge my indebtedness, particularly for the references and the sources which are quoted in this study.

My thanks also go to the Director and staff of the Institute for Educational Planning and Administration, University of Cape Coast, for their priceless encouragement. Finally, I owe a great debt of gratitude to Mr. Moses K. Akwotugu of Ghana Education Service (Savelugu-Nanton District Education Office), for his brotherly support. He read through all my scripts and carefully corrected typographical and grammatical errors.

DEDICATION

This work is dedicated to my husband and children who were my real source of inspiration and hope, throughout the study.

TABLE OF CONTENTS

	Page
DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	iv
DEDICATION	v
LIST OF TABLES	x
CHAPTER	
ONE: INTRODUCTION	1
Background To The Study	1
Statement of the Problem	8
Purpose of the Study	10
Research Questions	10
Significance of the Study	10
Delimitations of the Study	12
Limitations of the Study	12
Organisation of the Study	12
TWO: REVIEW OF RELATED LITERATURE	14
Development of Special Education	14
Education of Persons with Intellectual	
Disabilities in Ghana	21
Special Education Teacher Training In Ghana	25

	Page
Programme Orientation and Provisions for Persons with Intellectual Disabilities in Ghana	29
Vocational Programmes for Persons with Intellectual Disabilities	33
Institutionalization (Segregation) of Persons with Intellectual Disabilities	35
Integration	38
Definition of “Inclusion”	41
Right to Equal Education	43
Collaboration	45
Research on “Inclusive Education”	47
The Home School	49
Perception and Attitude of Non-Handicapped To- wards the Handicapped	49
Attempts at Mainstreaming	50
THREE: METHODOLOGY	53
Research Design	55
Sampling Procedure	56
Pre-testing of Instruments	60
Administration of the Instruments	60
Data Analysis	62

	Page
FOUR: RESULTS AND DISCUSSION	63
Personal characteristics of respondents	63
Research Question 1	68
Education of Persons with Intellectual Disabilities	68
Research Question 2	70
Teachers' understanding of the concept of intellectual disability	71
Research Question 3	75
Preparedness of teachers to teach 'MR' individuals	75
Research Question 4	77
Demerits of Integration	77
Benefits of integration	78
Research Question 5	80
Perceived Difficulties of Integration	80
Managing Difficulties of Integration	81
FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS	84
Summary	84
Major Findings	87

	Page
Conclusions	90
Recommendations	93
Suggestions for Further Research	94
REFERENCES	96
APPENDICES	101
I Questionnaire	101
II Sampling Formulae	107

LISTS OF TABLES

Table	Page
1 Characteristics of Education Zones - Akrom sub-metro, Kumasi-June, 2003	57
2 Sample Sizes and Staffing of Schools	58
3 Distribution of Respondents by Zone and Gender	64
4 Distribution of Respondents by Zone, Marital status and Gender	65
5 Distribution of Respondents by Age and Gender	65
6 Distribution of Respondents by Professional Status	66
7 Number of Respondents Trained in Special Education	67
8 Teaching Experience of Respondents	68
9 Views of Respondents Regarding Educating Persons with Intellectual Disabilities	69
10 Integrating Persons with Intellectual Disabilities into Regular Schools	76
11 Age Bends of Respondents Who Favoured Education or Integration of Persons with Intellectual Disabilities into Regular Schools	79

CHAPTER ONE

INTRODUCTION

Background to the Study

It was the belief of many that, prior to the introduction of Islamic and Western education in various parts of Africa, communities on the continent had no form of formal education. Undoubtedly, the word “education” was used in a rather restricted sense to mean formal instruction in European type schools. The educated in this sense were those who had received such instructions.

Social science asserts that, in general, education is a function of any society whether simple or complex, traditional or modern, capitalist or communist. On the other hand, education exists in different forms. Among these forms of education are the formal (or modern) system of education, the informal (or traditional) system of education, the non-formal system of education, secular form of education, the religious form of education and many other forms of education, depending on the way that a person views it. It however needs to be noted that the informal (traditional) and formal (modern) systems of education complement each other.

The aims, contents and methods of traditional education were intricately interwoven and rigidly defined as it is in the modern system. In Ghana, as in most communities, people educate their young ones in their own environment of family, social structures and cultural traditional. Just as in any other society in the

World, Ghanaian parents are first educators of the child and they continue to maintain an educative function throughout the child's upbringing.

It must be pointed out that despite all the efforts in line with education in Ghana since the 16th century, there was little or no change at all in the lives of the handicapped. Gadagbui (1998) postulated that there was no record of specific policy made purposely for the handicapped child though many ordinances, committees for education were set. It was not until 1945 that some churches and organizations began instituting a group of persons with disabilities.

Dery (1993) however notes that the development of special education services in any country and for that matter Ghana is the result of the introduction of Universal Primary Education. The enactment of the Fee-Free and Compulsory Education Law (1961) compelled the government of the First Republic to take over existing special schools managed by private bodies as well as consider the establishment of others in fulfilment of its policies with the result that considerable expansion has been achieved here. The provision of formal education for children with mental retardation in Ghana began in 1972. Before then, the Special Education Unit was established within the Ghana Education Service in 1970 (Gadagbui, 1998; Hayford and Baa, 1997).

The initial attempt to establish a special school for these children was made by a group of public-spirited individuals now called "The National Society of Friends of the Mentally Retarded". The society in 1968, selected a small number of abandoned children with "mental defects" from the children's ward of the Accra Psychiatric Hospital. The children were kept at the Accra Community

Centre where the Society intended to provide them with formal education. However, because of the nature of the children's conditions, as well as their status, the Society was compelled to temporarily operate the Centre as a "home", and for four years the children were kept and fed here.

In 1972, the philosophy of the Society shifted to the provision of formal education for children identified with mental retardation. It acquired a piece of land at Dzorwulu, a suburb of Accra and established a permanent special school facility for the children. To avoid repeating the initial mistake, as Hayford (1999) puts it, the selected children with "mental defects" from the Accra Psychiatric Hospital were sent back, and fresh admissions were made. This time, children who had been diagnosed with mental retardation by medical doctors were offered admission. The school gained government recognition in 1974, and attained the status of a "government assisted" school. At the time, regular Certificate "A" teachers were posted to the school to teach the children.

Soon, it was realized that there were many children of school going age, with mental retardation not only in Accra, but throughout the country. The need for more Special Schools for individuals with mental retardation was felt. In the same vein, government did not lose sight of the Accra Psychiatric Hospital. Through the Ministries of Health and Education, a school was attached to the children's ward at the Hospital to cater for children with mental defects who were on admission.

One Mrs. Salome François, who had a child with mental retardation, opened the first and only private school for persons with mental retardation in

Accra in 1972. Outside Accra, two public residential schools for persons with mental retardation were opened at Sekondi in 1976 and Kumasi in 1977 in the Western and Ashanti Regions respectively (Hayford, 1998).

In 1994, a sixth special school was opened at Battor in the Volta Region. It is worth mentioning that this is the first community-based school for persons with mental retardation, located in a rural area. Gadagbui (1998) notes that in 1997 the Catholic Mission opened the Nkoranza Special School at Nkoranza in the Brong Ahafo Region. Besides, special classes were attached to unit schools for the deaf at Koforidua, Hohoe and Wa to serve mentally retarded children as well. Another one was established in Tamale, and plans are underway to open more special schools for the mentally retarded in other parts of the country (Gadagbui, 1998).

Special schools for the mentally retarded share some basic similarities with regular schools. For instance, all special schools, except private ones, are manned by professional teachers who, in addition to the basic teachers certificate, have either diploma or degree, or both, in Special Education. The teachers used relevant portions of the primary school syllabus to instruct the students. Some of the books used are text books published for primary 1-4. Also, the subjects offered to individuals with mental retardation are basic numeracy, functional reading and language skills, art, music and dance, physical education and sports, as well as pre-vocational skills.

Special schools also run the three-term system within an academic year. Thus, these schools break on regular holidays for students to join their families. Apart from the private school, all the special schools for the mentally retarded in

Ghana operate the boarding system. However, a few students are day-students. While cost of running the boarding system is quite high, substantial amount is also expended to convey the day-students to-and-fro, every school day.

The first significant difference between the special schools for the mentally retarded and regular schools is the structure. By on-going educational reforms of 1986, all basic schools now run nine years of training. These nine years comprise six years primary and three years junior high school education. Special schools for the mentally retarded do not have specific duration for training the learners towards graduation. While the regular school child is promoted annually, leading to graduation in the ninth year, the mentally retarded may sometimes stay in a particular class for five to ten years, if not more. Thus, apart from the nursery class, individuals with mental retardation are classified according to their functioning levels, i.e. according to the extent to which they are educable or trainable with education and training, in their various institutions separately from their non-handicapped peers in the regular school setting, which is an aspect of segregation.

The oldest most comprehensive, widely accepted and most expensive service delivery model for children with disabilities is the residential segregated special schools (School, 1986). Segregated schools are provided for specific disability, for instance demonstration school for the deaf, school for the blind or special school for the mentally retarded.

Segregated schools essentially provide the disabled with the following:

- 1) Specially adopted instructional, physical and learning environments;

- 2) Adequate essential learning and teaching and teaching equipment and materials;
- 3) Specialists, aids and other professionals to offer related services;
- 4) Basic health and catering services;
- 5) Essential services such as transportation and other related services;
- 6) Adequate effective professional supervision.

However, education of individuals with mental retardation still looks new to some people in Ghana. The assertion that such persons are senseless, useless, incapable of reasoning and therefore cannot carry out any cognitive functions is still in the minds of many Ghanaians. For these and other reasons many people wonder why people who are labelled mentally retarded should be educated, more so together with non-handicapped children in general education settings. Teachers who are supposed to teach such individuals usually shun the presence of the few that happen to be in their classrooms.

Persons who have disabilities have for some time now been, and continue to be denied equal opportunities to education as compared with their non-handicapped peers. The present level of education delivery for handicapped persons has been taking place in restrictive and segregated boarding institutions. In Ghana, special education services consist of eleven basic education institutions for children with deafness, two for those with blindness and visual impairment, four for those with mental retardation, two senior secondary/technical and vocational schools for children with hearing impairment. In addition, there are three integrated programmes in two teacher training colleges and universities.

Integration of students into mainstream learning institutions was given a boost with the passage of Public Law 94-142 or Education for All Handicapped Children's Act 1975. Over the years, this legislation has been amended several times but has maintained a clear insistence on the right of children to free appropriate formal education in a least restrictive environment. The Law is now called Individuals with Disabilities Education Act (IDEA) (Denkyira, 1987). Doll (1971) agrees that institutionalization no longer represents a viable form of care for many children with special needs. Removal of students with disabilities from the regular classroom should only be done when the nature and severity of the handicap is preferable to other placement options (Ruben, 1989).

Since 1975 inclusion has come in the form of mainstreaming regular education initiative and integration programmes. The general policy of special education is to de-isolate special students and to include them in general education setting from primary school onwards. This policy when properly put in places is expected to improve the conditions and performance of the handicapped. Therefore, teachers who are to educate these children are supposed to develop positive perception towards the handicapped for the success of the programme. If teachers develop positive perception towards these children by accepting them, assisting and identifying their difficulties and by trying to provide better environment for them, and this will enhance their ability to learn. On the other hand, poor or negative attitudes will not make the programme successful. The researcher was therefore motivated to investigate teachers' perceptions of children with special needs who are under their care.

Statement of the Problem

Before a baby is born, the expectation from its parents and the society are normally quite great. Ideally, the baby should be healthy and fine. When, however, parents are faced with the reality of having a mentally retarded child, the situation generally becomes hard to deal with and subsequently the question of attitudes begins to manifest. If these attitudes towards the mentally retarded are different from what is regarded as normal, it becomes difficult for society to accept such children. It takes most parents a long time to accept and love their mentally challenged children. Most often they think that the children have ruined their happiness and fortunes, and therefore become hostile to them. These attitudes of many parents lead to some of them pushing children into institutions where their welfare and well being are entirely forgotten by their negligent parents. This trend partly explains why residential homes emerged as haven for many children with special needs. Brinker and Thorpe (1984) observe that such placements were merely a way of removing the mentally retarded from the society.

There are many people today who hold the view that institutions in general have, in the real sense of the word, become social crimes of our time. Indeed, one of the reasons is that, many institutions have become notorious for substandard conditions, inhuman treatment, violation of basic human rights and bad attitudes by untrained staff and caretakers (Bushaw & Perret, 1992). Mittler (2000) also agrees that institutionalization no longer represents a viable form of care for many children with special needs.

Originally, the idea of institutions for the Mentally Retarded (MR) was for them to be housed because many of them were regarded as social outcast and in some countries such as Ghana, they were not allowed to participate in communal activities, many of them were even thrown away. This attitude was not very remarkable, because it appeared to be the order of the day. The Greeks and Romans as early as 449 BC treated children with special needs in the same manner. The Ancient Greeks, for example, regarded them as inhuman and social nuisance, and even assisted them to die. So was the attitude of the Romans to children with special needs. As can be seen, they had very little roles in society, not to even contemplate integrating them into society.

Bushaw and Perret (1992) opine that the work of Jean-March Gaspard Itard with 'Victor, the wild boy of Aveyron' is of particular note because it is a genuine milestone in the history of man's first documented effort to work with the "MR". It was the belief of Itard that Victor could be properly humanized with appropriate environmental conditions. Bushaw and Perret further observe that Itard's work is the first documented effort to work with the "MR" towards attaining adequate social integration. But one must note that proper societal integration of the MR "requires a social sensitivity towards them, and already a look at historical antecedents provides us with sorry testimonies".

The fundamental question then is: "Where do teachers feel is the place of the mentally retarded in our society?" This study therefore investigates the nature and level of the perception of teachers of Akrom Circuit cluster of schools towards educating the mentally retarded in general education settings.

Purpose of the Study

The Purpose of this study principally is to find out the perception of teachers of Akrom Circuit Cluster of Schools regarding the education of individuals with mental retardation in general education setting.

Research Questions

As a result of the on-going discussion on issues relating to the integration of persons with mental retardation into the general education setting, the following research questions were raised:

1. What are the views of teachers in the Akrom Circuit cluster of schools with regard to the education of individuals with mental retardation?
2. How do teachers in the Akrom Circuit cluster of schools understand the concept of mental retardation (intellectual disability)?
3. How prepared are teachers in the Akrom Circuit cluster of schools to teach individuals with mental retardation together with those without?
4. What benefits are handicapped and non-handicapped pupils likely to derive in an integrated school setting?
5. What are the major difficulties associated with integration of persons with intellectual disabilities into the regular school system?

Significance of the Study

The findings of the study would likely provide information on how teachers perceive the child with special needs and teachers' ideas about mainstreaming the education of such children. This information may therefore be

useful to the Ministry of Education, the Ghana Education Service, the Division of Special Education and other agencies whose operations are related to the education of individuals with mental retardation. Besides, the study would possibly reveal the merits and shortcomings of the existing conditions in the special schools for children with mental retardation.

These findings may provide a basis for the administrators of special schools to reconsider whether there is the need to redesign the curricula of special schools for the children with mental retardation. It may also provide a basis for the government to come out with a national policy on integration-which is the best educational strategy (Brinker and Thorpe, 1984) for children with disabilities. This integration is desirable because it is morally and ethnically a correct form of education. Children in integrated setups receive additional educational benefit because of the frequency of interaction with normal children.

Also, it is likely that study will provide guidelines as to how to develop counselling services, in service training programmes and the provision of necessary materials for implementing inclusive programmes. Also, the study will help to sensitize the public, parents and teachers on the need to educate individuals with mental retardation in general education setting.

Finally, the findings of the study would add to existing literature and perhaps serve as resource material for teacher trainees offering special needs education, in some institutions of learning. Special teachers and teachers in the regular schools, as well as policy makers responsible for special education in the country as a whole and the education of children with retardation in particular

may also find this work to be useful.

Delimitations of the Study

The study covers 36 basic schools from the Akrom Circuit cluster of schools in the Kumasi Metropolitan Area of the Ashanti Region of Ghana.

Limitations of the Study

It would have been ideal in a study of this nature to sample views of as many teachers as possible from all the basic schools in Kumasi and its environs. The scope of the study could have also been widened to cover other levels of education in the whole of the Kumasi Metropolis. However due to time and financial constraints, and some difficulties in accessing secondary data, the study did not cover such issues as early identification and intervention services to a much bigger number of children with disabilities. Also excluded from the study is transition of such children after leaving school, as well as their rehabilitation. Similarly, time and financial constraints have made it impossible for the researcher to undertake a broad-based study. Thus, the study covers only 36 basic schools sampled from the Akrom Circuit in Kumasi.

Organisation of the Study

The study is organized into five chapters. Chapter one introduces the study; it covers background to the study, statement of the problem, research questions, purpose or significance of the study, its delimitation and limitations. Chapter two reviews literature derived from known works that relate to the study, with particular reference to issues on mentally retarded pupils, and possibilities of

their integration with non-mentally retarded pupils. The literature is reviewed under nine broad areas including the Development of special education in Ghana, segregation of persons with intellectual disabilities and general attempts at mainstreaming.

The third chapter describes methods used in collecting data for the study, whilst chapter four contains comprehensive analysis of the data collected from the field, and discussions of findings that emanated from the analysis, while a summary of the study, main conclusions deduced from the findings, and recommendations are treated in the fifth chapter.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

In this chapter, literature related to the study is reviewed. The review is organised under the following sub-headings:

- 1) Development of special education;
- 2) Characteristics of Intellectual Disabilities;
- 3) Education of Persons with Intellectual Disabilities in Ghana;
- 4) Special Teacher Training in Ghana;
- 5) The Programme Orientation and Provision of with Intellectual Disabilities in Ghana;
- 6) Vocational Preparation programme for Persons with Intellectual Disabilities;
- 7) Institutionalization (segregation) of Person with Intellectual Disabilities;
- 8) Integration;
- 9) Attempt at Mainstreaming in Ghana.

Development of Special Education

In every society, there are people who, because they deviate markedly from the “norm”, require special skills, services and attention, if they are to make any headway in life. These individuals who have sight, hearing, intellectual, social, physical, emotional and adaptive problems tend to be regarded as misfits in the society and are treated with contempt. Universally, it is presumed and

believed that in the ancient and medieval times, hardly did any society provide structures for handicapped persons. There are rather stories of how people with disabilities were tortured, tormented and killed in the past.

With the development of Special Education, conscious efforts are now being made to open the door of educational opportunity to handicapped persons in almost every society in the world. Though the attitude of society towards the handicapped as well as the gifted (exceptional children) did not drastically change during the Renaissance period, it had a major impact on the thinking and attitude of philosophers and educators that followed. Gearheart (1972) refers to the revolutionary theory known as “tabular rasa” or “blank slate” which states that “all individuals were born with a blank mind, and that our cumulative experience in life determines how we think or behave. Referring to Rousseau’s works, Gearheart explains that the historical roots of Special Education started in the 1800s, when attempts to study and educate individuals with disabilities to function effectively in society began to emerge.

The teaching of persons with disabilities however remained predominantly within established institutions, but emphasis moved from basic care to attempts to rehabilitate the individual as efforts by innovative men such as Ponce de’ Leon and Juan Bonnet indicated; these men were successful in developing teaching methods for persons with hearing impairment.

Avoke (1997), and Hayford and Baah (1997) have stated in their works that Valentin Haüy who lived during the period 1745-1822 also developed teaching methods for the blind in Paris. Hayford and Baah (1997) further indicate

that after the 1800s, pioneers in the field of education for persons with intellectual disabilities sought to teach individuals with intellectual disabilities. Various creative teaching methods and strategies were developed by these individuals and most of their theories and techniques are followed by a wide variety of educators today.

According to Hallahan and Kauffman (1994), Jean Marc-Gaspard Itard was the first to make an attempt at educating a child with intellectual disability. While working in an institution for the deaf-mute, he felt that methods of educating the deaf-mute could be used to educate children with intellectual disabilities. Therefore, in 1798/99, he decided to put into practice the method of educating the deaf-mute when a boy captured in the forest of Aveyron was brought to him. Victor, as the “Wild boy of Aveyron” was called, was the first person with intellectual disabilities to be educated formally. Scheerenberger (1987) says that in the last year of Itard’s life, he was once again requested to educate some children with intellectual disabilities but he could not do it because of old age and ill-health. Although Itard’s efforts did not succeed fully, they stimulated interest in others who later developed instructional methods for handling children with learning problems (Hayford & Baah, 1997).

In Ghana, the law provides for the education of every child including the mentally challenged, as reported by McWilliam (1969). The Compulsory Education Act of 1961 stipulates among other things that every child who has attained the school-going age should attend a course of instruction in a school recognized for that purpose (McWilliam, 1969). Also, the Vision 2020 and

Persons with Disabilities Act gives further proof of the provisions made for the education of mentally and physically challenged persons.

The 1992 Constitution and Vision 2020 documents advocate for the integration of people with disabilities (PWDs) into the mainstream of the economy. In this regard, government will seek to put in place necessary regulatory measures to promote an enabling environment for total integration of PWDs into the Ghanaian society, by improving their access to education and other social amenities, improve their employment opportunities and enhance their income earning capacities. To achieve this requires a clear-cut policy. This policy document seeks to present Government strategies for mobilizing and integrating PWDs into the mainstream of the socio-economic life of the communities in which they live, and by so doing, ensure that PWDs do contribute to achieving the national vision of poverty reduction and improvement of their living conditions.

By the educational provision, children with special needs who are also citizens of the state are entitled to an education tailored to suit their particular needs, difficulties and circumstances. It is in furtherance of achieving these stated objectives that in 1970, the Special Education Division was established in Ghana within the Ghana Education Service. The Purpose of this study is principally to ascertain the perception of teachers of Akrom circuit cluster of schools towards the education of individuals with mental retardation in the general education setting.

The new and current definition of intellectual disability has been given by the American Association of Mental Deficiency (AAMD) in 1992. According to Luckusson et al in Avoke (1997), the AAMD defines Intellectual Disability (Mental Retardation) as substantial limitation in present functioning. It is characterized by significant sub-average intellectual functioning existing concurrently with related limitation in two or more of the following areas: communication, self care, home living, academic, leisure and work, and must manifest before eighteen years of age.

Key elements in this definition which have considerable educational implications include:

- a) Sub-average Intellectual Functioning: This suggests that a child's performance should be between IQ 55-70 (depending on the specific IQ used).
- b) Difficulty in Adaptive Behaviour: This difficulty relates to problems in coping with norms of society or age appropriate behaviour especially those related to maturation.
- c) Developmental Period: This suggests that the onset of intellectual disability (mental retardation) should be before the development period which is from 0-18 years.

According to Avoke (1997), traditional classification of intellectual disability was largely influenced by the IQ factor. Generally, children with IQ scores of 55-70 are considered mildly retarded, while those with IQ 25-40 and below are the severe and profoundly retarded ones. He further explains that the AAMR has given new classification not based on IQ but rather on the unique

strength or weakness, and the need for special support of the individual. The new models of classification are:

1. Intermittent needs: These refer to children who do not need constant support
2. Limited support: This is support for children who need constant support
3. Extensive Support: This is given to children who require daily support .
4. Persuasive Support: This is given to children who require constant and intensive support

Some of the causes of intellectual disabilities can be linked to pre-natal, peri-natal and post-natal factors. Pre-natal causes relate to factors that exist before birth. These include over-exposure to radiation, faetal alcohol effect, sexually transmitted diseases, German measles, malnutrition, and the emotional state of the pregnant mother. Peri-natal factors include anoxia, narrow pelvis, wrong application of the forceps, heavy sedation, breach delivery and fall of the child. Post-natal factors include measles, mumps, blood poisoning, whooping cough, head injuries, and the like.

Persons with intellectual disabilities (mental retardation) have a number of characteristics which have serious implications for their learning and management. According to McCall (1983), persons with intellectual disabilities have inherent cognitive difficulty that makes learning more difficult than normal. Mysak (1980) also states that persons with intellectual disabilities exhibit attention problems. That is, they are not able to focus their attention on one thing as they have a short attention span. Ackerman and Dykmen, in Avoke (1997), are of the view that the attention problems of persons with intellectual disabilities have serious implications for the performance of such-persons in the areas of

writing, reading and even doing some specific school subjects, since they lack concentration.

Children with intellectual disabilities have problems in generalization and transfer of learning. According to Smith, cited in Avoke (1997), these children experience severe difficulties in transferring learning experiences into any other context. Furthermore, they have writing problems due to fine motor problems. They also have poor memory which results in difficulty in recalling past learning experiences due to sensory problems (Bos & Vaughan, cited in Avoke, 1997).

Brown (1993) states that these children have mental cognition problems and as a result, they are not able to rehearse, analyse and solve problems because they do not have the knowledge of “about knowing and about how to know”. As Adima (1985) explains, abstraction is related to the formation of ideas by mental processes, but children with intellectual disabilities have difficulties conceptualizing or thinking in abstract terms.

Other classroom-related characteristics include lack of initiative, slow in learning, lack of creativity and originality, and tendency to be followers rather than leaders. They have poor speech and language abilities (Avoke, 1997). Furthermore, Avoke notes that these children have social and emotional behaviour problems which include violent and destructive behaviour such as breaking and throwing away things; they tend to be hyperactive and as such cannot sit at one place for a reasonable length of time. They exhibit self injurious behaviours like biting body parts and repetitive behaviours such as rocking and showing of temper tantrums. Some of them also pose anti-social problems such as cheating and the like. Avoke adds that the problem of low self concept is a

behaviour problem among these children and it is attributed to erosion of confidence as a result of chronic failure patterns or experience.

Education of Persons with Intellectual Disabilities in Ghana

Development of special education in Ghana is not anything different from what obtains in other parts of the world. Everyone familiar with African history and social structures in Africa knows that before colonial administration began in Africa, and before the introduction of formal education, each society and each group of people carried out a particular type of education.

The training was lodged within the extended family set up and took place under the watchful eyes of experienced male and female adult members of the family over a number of years. This training which covered three aspects of education namely, the moral, utilitarian and political aspects and the norms of the society, formed the structural basis of this system of education (Aboagye, 1997).

Nevertheless, it was the child who was intellectually and physically sound and strong that qualified to peruse this education and training. The intellectually and physically weak children fell out of this programme. Citing Marfo et al, (Avoke, 1993, p. 73) states that:

For persons with disabilities, it was a period of total “darkness”. They were completely excluded from the informal educational programmes. They were either killed or exiled with their mothers to unknown destination.

Colonization then arrived in Ghana and with it came the British type of education. Though this was a new chapter in the educational history of Ghana. Unfortunately, it discouraged productivity and had no provisions for persons with disabilities. Prejudices die hard, and so the anti-social and negative attitudes persisted until the early 1940s (Amo, 1994).

It was in 1945 that the missionaries of the Presbyterian Church of Ghana made the first attempt to break the prejudice against persons with disabilities by establishing the School for the Blind at Akropong-Akuapem. Furthermore, in 1957 an Afro-American Missionary (who, himself was deaf and semi-mute) established the first School for the Deaf at Christiansburg, Accra, which later moved to Mampong Akuapem (Hayford & Baah, 1997; Gadagbui, 1998).

Subsequently, another initiative by the Methodist Church of Ghana, led to the setting up of the Wa School for the Blind in 1958. Today, Akropong and Wa Schools for the blind play an important role in the education of individuals who are visually-impaired in Ghana. Avoke (1997), and Hayford and Baah (1997) note also that between 1965 and 1988, a number of schools for persons with hearing impairment sprang up. Based on recommendations made by the Wilson and Henderson Committee in 1958 and 1962, together with the Accelerated Development Plan of Education in 1961, the plight of persons with disabilities in Ghana was brought to the notice of government which subsequently drew up an elaborate scheme, aimed at rehabilitating as many persons with disabilities as possible.

In the 1970s, a Special Education Unit was established within the Ghana Education Service. It might as well be said that all these initiatives actually acted as catalysts towards the formation of the Society of Friends of the Mentally Retarded, now known as the National Society of Friends of the Mentally Retarded, in Ghana in 1964. Before this time children and adults with developmental disabilities were grouped with persons with mental illness at the psychiatric Hospital in Accra (Anson-Yevu, 1997).

The Society which is a non-governmental organization interested in the education and welfare of persons with intellectual disabilities therefore took these children from the Psychiatric Hospital and placed them in a Day Care Centre at a community centre in Accra in 1968. On realizing that their numbers were increasing rapidly, the Society acquired a site at Dzorwulu near Accra in 1972 for them to move into and named it Dzorwulu Home and school for the Mentally Retarded under the headship of one Mrs. Sackitey (Gadagbui, 1998). Hayford and Baah (1997) also state that the Dzorwulu School started in 1972 with 13 children with intellectual disabilities. It is worthy of note that Madam Josephine Jekens was very instrumental in establishing the institution which was later taken over by the Ghana Education Service in 1974. The school is now known as Dzorwulu Special School for the Mentally Handicapped. As at September 2003, there were 120 pupils on roll.

With the development of time and increasing level of awareness, other special schools for persons with intellectual disabilities were opened. It must be noted here that presently, there are several public residential institutions for

persons with intellectual disabilities in the country. Such institutions include Garden City Special School (Kumasi), Twin City Special School (Sekondi), Castle Road/Hospital School in Accra, to mention a few. Also, there are privately-owned schools for children with intellectual disabilities, which include New Horizon Special School in Accra, Three Kings Special School at Battor, and Nkoranza Special School at Nkoranza. In addition, there are units for individuals with intellectual disabilities at Schools for the Deaf at Koforidua, Hohoe and Wa.

Admission procedures, as noted by Gadagbui (1998), may not differ much from one special school to the other, as the following procedures are known to exist in all the schools. In the first place, application for admission or registration to the special school is made by a parent or through referrals from peripatetic teachers from the districts and regional education offices, churches, voluntary organizations, hospitals and social welfare offices. Assessment on the other hand, is usually carried out at assessment centres and reports sent to the special schools, while assessment is done by panellists in special schools for admission, placement and appropriate services. Indeed, the first attempt at educating individuals with intellectual disabilities was by Jean_March Gaspard Itard in the 1800s. Avoke (1997) citing Suran and Rizzio attests to this fact.

As at 2003, there were 10 rehabilitation centres under the Department of Social Welfare, while seven special schools and three units were operated for persons with intellectual disabilities (mentally retardation) in Ghana. A number of other services were provided to persons with intellectual disabilities in Ghana. For instance, there were five assessment centres located in Accra, Kumasi,

Hohoe, University of Education (Winneba) and the 37 Military Hospital in Accra. Peripatetic services were equally offered within the Ghana Education Service (GES) at regional, district and circuit levels all over the country (Avoke, 1997; Gadagbui, 1998; Mensah, 1993).

Special Education Teacher Training in Ghana

International and America's laws cried for free and proper education for all individuals with mental retardation (intellectual disabilities). In Ghana, the law provides for the education of every child including the mentally challenged, as reported by McWilliam. The Compulsory Education Act of 1961 stipulates, among other things, that every child who has attained the school-going age should attend a course of instruction in a school recognized for that purpose (McWilliam, 1969). Also, the Vision 2020 and Persons with Disabilities Act gives further proof of the provisions made for the education of mentally and physically challenged persons.

Both the 1992 Constitution and Vision 2020 document advocate for the integration of persons with disabilities into the mainstream economy. In this regard, government will seek to put in place necessary regulatory measures to promote an enabling environment for total integration of PWDs into the Ghanaian society, by improving their access to education and other social amenities, improve their employment opportunities and enhance their income earning capacities. To achieve this requires a clear-cut policy. This policy document seeks to present government strategies for mobilizing and integrating PWDs into the mainstream of the socio-economic life of the communities in which they live

and, by so doing, ensure that PWDs do contribute to achieving the national vision of poverty reduction and improvement of their living conditions.

By the educational provision, children with special needs who are also citizens of the state are entitled to an education tailored to suit their particular needs, difficulties and circumstances. It is in furtherance of achieving these stated objectives that in 1970, the Special Education Division was established in Ghana within the Ghana Education Service.

One of the recommendations made in the Howleth and Henderson report in 1962 was that further expansion of educational services for children with handicapping conditions would depend on the availability of qualified teachers. The rapid expansion of special educational services and facilities which took place between the late 1960s and mid-seventies made it necessary, if not imperative, to set up colleges at home to train specialist teachers, instead of relying on training overseas (Dery, 1993).

In 1965, therefore, a training college for teachers of the deaf was opened at Mampong-Akuapem, in the Eastern Region of Ghana. At the request of the Government of Ghana, the Commonwealth Society for the Deaf seconded Ann Hewitt to the college as Principal. Ten years later, in 1975, a department for training teachers for the visually impaired was opened at the Presbyterian Training College at Akropong-Akuapem. Both Colleges have been offering two-year intensive programmes, as well as courses directly related to assessment and programme development for teachers of persons with hearing and visual impairment. Since their inception, the two colleges have functioned beyond the

fulfilment of domestic manpower needs (in the spirit of regional co-operation in technical and manpower development) as they have trained nationals of other African countries. According to Dery (1993), before it was upgraded to a diploma awarding institution in 1986, the Mampong-Akuapem College had trained teachers from some African Countries like Nigeria, Tanzania, Kenya, Gambia, Swaziland and Seychelles.

Regarding higher level teacher training, it is perhaps appropriate to mention some recommendations made by participants of the first training workshop in the Education and Rehabilitation of the Disabled, held at the University of Cape Coast in 1986 which, among other things, stated that:

The various specialist courses for teachers of the disabled should be combined at Mampong-Akuapem and affiliated to the University of Cape Coast. The resolution called for a three-year course with students reading “general” special education for the disabled in the first two years and specialization in deafness, blindness or mental retardation (now known as intellectual disability) in the final year (Marfo et al Aidoo, Archer, Somuah, & Micah, 1986, p 127).

It therefore did not come as a surprise when these two departments (deaf and blind) were merged to form the College of Special Education at Mampong-Akuapem, with an additional department to train teachers for children with intellectual disabilities. Furthermore, the college was upgraded to a Diploma Awarding Institution and affiliated to the University of Cape Coast in 1986.

With regard to the implementation of the new educational reforms, the College of Special Education at Mampong-Akuapem was upgraded and moved to form the nucleus of the new University College of Education of Winneba in 1992. The College, with all its three departments (hearing impairment, visual impairment and intellectual disabilities) has therefore become one department under the Division of Specialized Professional Studies in Education Studies and Psychology (Avoke, 1997).

It is worth mentioning that the Department of Special Education now runs courses at both the diploma and degree levels. In addition, introduction of Special Education Coded GPD 112, and Contemporary Issues in Special Education coded GPD 412 have been incorporated into the three-year Diploma and the two-year Post Diploma programmes' respectively; that is to say, all students at both levels on Winneba, Kumasi and Mampong-Ashanti campuses offer these courses. It is therefore believed that pedagogical skills of teachers in training are improving, and that more children with learning difficulties would be identified in the course of time.

Avoke (1997) has noted that products of the then College of Special Education, Mampong-Akuapem, and the University College of Education, Winneba, are found in most Special Schools including the Special Schools for Persons with Intellectual Disabilities today, with some of them acting as district peripatetic officers, regional peripatetic co-ordinators as well as teachers in regular schools. With increasing research and training it is generally believed that the quality of instructions for both able-bodied and the disabled is improving significantly (Avoke, 1997).

Marfo et al (1986, p 9) have also noted that:

If Ghana is to meet the needs of its disabled children in every part of the country, the elementary teacher training curriculum should be revised to include courses on developmental disabilities and special education techniques.

This, therefore, called for the need to revise the curriculum in elementary teacher training programmes with the idea of equipping regular classroom teachers with knowledge as to how best they can handle persons with disabilities.

It is against this background that the Ghana Education Service, Special Education Division, thought it wise to incorporate elements of Special Education into the three-year post-secondary teacher training programme in September 1989 as an integral part of the general education programme (Amo, 1994). It is worth mentioning that the first batch of regular teachers who read special education as an integral part of the general education programme at the teacher training college in Ghana, passed out in 1991 and have since been in active service all over the country.

Programme Orientation and Provisions for Persons with Intellectual Disabilities in Ghana

Essentially, curricula for pre-school education, school-age learning and adults with intellectual disability differ from regular educational programmes (not only in content but also in emphasis). Again, early childhood programmes tend to emphasize a developmental model that stresses activities like eating and toilet

training, language development, family awareness, art, music and cooperative play (Cegelca & Prehm, 1987).

In Ghana, there are no organized pre-school programmes for children with intellectual disabilities. In most cases, as a result of late identification, a good number of such children would have been institutionalized after eight years. Therefore, special schools for persons with intellectual disabilities run nursery programmes which are more or less preparatory classes for placement in either the educable, trainable or severe classes. No matter the age of the child, each is placed in the Nursery or Reception Class on admission. The curricula for the Nursery Classes or Reception Classes (as they are sometimes called) stress activities in sensor-motor development, self-help skills (like eating and toileting language development, social skills, fine motor skills, gross motor skills, physical education and music).

Cegelca and Prehm (1987) postulate that school programmes for persons with intellectual disabilities tend to follow a traditional academic model; however, considerable emphasis is placed upon social competency. The subjects of reading, arithmetic, writing and spelling are usually found in this traditional academic model. The school programme for persons with intellectual disabilities includes academic skills which are done through subjects like reading, functional arithmetic, writing and spelling. Also included in the programme are self-help skills, gross and fine motor skills, sex education and health care, verbal and non-verbal communication skills.

In addition to the above-mentioned programmes, pre-vocational skills that stress the development of career awareness, independent and appropriate social behaviour are included. The pre-vocational programmes usually cover courses in basketry, tailoring and dress making, carpentry, leather work, envelope making and door-mat making, among others.

A school programme for the adolescent person with intellectual disabilities and a post-school programme for the adult emphasize a life career model (MacMillan, 1977). It must be noted here that academic subjects taught during earlier school years are applied to practical living and vocational situations.

The teachers use relevant portions of the primary school syllabus to instruct the trainees with intellectual disabilities (Hayford, 1999). Some of the teachers use textbooks published for primary one to four for their classes. Among the subjects offered to individuals with intellectual disabilities are basic numeracy, functional reading activities, art, music and dance, physical education and sports, as well as prevocational skills. Furthermore, special schools run the three-term system within an academic year. Thus, these schools break during the regular holidays for children to join their families.

It is worth noting that the programmes that exist in special schools are also in a way, different from those that exist in the regular schools. Hayford (1999) identified that the first significant difference between special schools for person with intellectual disabilities and regular schools in Ghana as the structure. By the on-going educational reforms of 1986, all basic schools now run nine years of

instruction. These nine years comprise six years primary education and three years junior secondary, prior to graduation. Special schools for persons with intellectual disabilities do not have specified duration for training the children towards graduation. While the regular school child is promoted annually, leading to graduation at the end of the ninth year, the child with intellectual disability may stay in a particular class for five to ten years. Thus, apart from the nursery class, children with intellectual disabilities do not experience upward promotion toward graduation, as it pertains in regular school. Hayford has also noted that in these special schools, pupils are classified according to their functional levels. They are therefore placed in educable, trainable or severe classes depending on the type and degree of their disabilities.

In Ghana, education of individuals with disabilities has been modelled after those practices in Western countries such as the United Kingdom, Scandinavia and the United States (Denkyira, 1987). Perhaps, one legislation that has impacted on special education practices worldwide is the Education for All Handicapped Children's Act of the U.S.A (PL94-142) of 1975. Over the years, PL94-142 has undergone several amendments and it is presently known as the Individuals with Disability Education Act (IDEA), (PL101- 476) of 1990.

All these notwithstanding, the original Act and subsequent amendments clearly indicate the parameters of an Individualized Education Programme (IEP) which should be a written document or statement setting out the details of a years plan for every child with disability in an educational programme and such guidelines in IEP are to ensure that students with disabilities would derive

maximum benefit from educational programmes they receive. The two main parts of IEP requirements described in the Act and Regulations are:

- i. The IEP meeting where parents and school personnel and related agencies together make decision regarding a child with disability, and
- ii. The document (IEP) itself.

Denkyira (1987) has noted that, unfortunately, a number of instances have come up suggesting that some special education practitioners in Ghana appear to be confused about what an IEP is, who must develop and review it, and who must be accountable for ensuring that IEP is used for the purpose it was developed. Citing Bannerman, Denkyira (1987) again states that it has been found that parental participation in the education of children with special needs in special schools in Ghana has not been encouraging. Very few parents bother to participate in programmes organized by schools prior to placement arrangements for their children.

A closer look at the IEP writing situation in Ghana seems to suggest that some practitioners are confusing short-term instructional objectives with the IEP statement. It must however be noted that the short-term objectives are similar to IEP objectives but in other respects, IEP objectives are different from those used in instructional plans, primarily in the amount of details they provide.

Vocational Programmes for Persons with Intellectual Disabilities

There are various vocational training programmes for children and young adults with intellectual disabilities. According to Hallahan and Kauffman (1981), vocational training programmes for persons with intellectual disabilities can be

grouped into two, viz. sheltered workshops and competitive employment.

Sheltered workshops have served as the traditional job training schemes for individuals with severe intellectual disabilities. A sheltered workshop is a structured environment where individuals with severe disabilities receive training and work on jobs that require relatively low skills. It offers only limited job training experiences and repetitive work which do not make use of current industrial technology (Hallahan and Kauffman, 19981).

Beirne-Smith, Patton and Ittenbach (1994) have observed that individuals with severe intellectual disability can make successful adjustment to society and provide useful services to their communities. Some workers with severe intellectual disabilities have been successfully placed in competitive employment performing such jobs as kitchen utility workers, porters, elevator operators, dish washers, ground keepers, janitor and assembly-line workers. It is therefore a fact that even children with severe intellectual disabilities can be exposed to vocational programmes. What is needed to be done is to make the instructional process systematic and practically oriented.

Hallahan and Kauffman (1981) state that the current practice is the competitive employment setting which enables individuals with intellectual disabilities to integrate with those without disabilities. By competitive employment setting is meant the regular work place. The child with intellectual disability is thus offered the types of programmes or jobs that are available to the non-disabled at the regular work place. Another opinion worth mentioning is the supported competitive employment. In this arrangement, the child with

intellectual disability is offered a competitive employment position but receives ongoing assistance, often from a job coach (Hallahan and Kauffman, 1981). When individuals with intellectual disabilities have been trained in these settings over a period of time, they are either offered permanent employment or referred for placement in other relevant jobs. Such programmes for the children with intellectual disabilities are non-existent in Ghana. Special schools have therefore turned into safe haven for such children where they have settled over the years without graduating

Institutionalization (Segregation) of Persons with Intellectual Disabilities

Traditionally, children with special needs, particularly those with various physical, sensory, intellectual and emotional difficulties have been placed in segregated special schools. The general view has been that children with disabilities are special and consequently require specialized treatment (special education) to address their educational needs. Segregated schools have thus been provided for specific disabilities. For instance, one often hears of Demonstration School for the Deaf; School for the Blind or Special School for the Mentally Retarded. Segregated school have essentially provided the disabled with the following:

1. Specially adopted instructional, physical and learning environment
2. Adequate essential learning an detaching equipment and materials
3. Availability of specialists, aids and other professionals to offer related services.
4. Basic health and catering services

5. Essential services such as transportation and related services.
6. Effective professional supervision.

Although the idea behind the provision of special residential schools has been laudable, serious problems have emerged in those schools. Some of the problems are:

- i. It has been realized that most disabled children do not require full-time intensive services (Lewis & Doorlag, 1995), but that disabled they could benefit from contact with typical (normal) children.
- ii. Because of the global economic stagnation many nations cannot afford the cost of providing essential services, equipment and infrastructure required for the effective training of children with disabilities. In Ghana, for instance, all the special schools are ill-equipped.
- iii. Lack of maintenance culture has rendered most of the equipment installed dysfunctional and non-operational. The few operational ones have become obsolete and need to be replaced.
- iv. Segregated institutions cut disabled children completely away from the mainstreams of society; these children do not get any opportunity to interact with typical peers. Hallahan and Kauffman (1981) observe that segregation was merely meant to remove disabled children from the society. Such children were “warehoused” in special residential institutional units or classes.
- v. Suran and Rizzo (1979) have reiterated that service delivery in special

residential schools has become substandard and the attitude towards the children has become indifferent, resulting in inhuman treatment. Thus, the basic human rights of disabled children have been consistently abused.

- vi. Institutionalization tends to reaffirm the fact that such children are different and being different buttresses the point of their being labelled.
- vii. In Ghana, an additional problem is the number and location of special schools. Most of these schools are sited at the urban centres. The rural majority do not have access to them.
- viii. Some parents too have been using the schools as dumping grounds where they deposit their unwanted children with special needs and refuse to visit them or go for them during vacations.

These and other problems have compelled professionals to continue with the search for more appropriate educational placement for the disabled. As more and more information becomes available, the prevailing educational philosophy is beginning to change. Normalization or the belief that children with disabilities have the right to as normal an existence as possible has become an accepted goal of special services (Wolfensberger, 1972). The pendulum has swung away from segregation of special children in separate special schools and classes towards inclusion in the mainstream of education. This view was endorsed by the mother of all laws for the handicapped (PL 94-142), i.e. the Education for All Handicapped Children Act of 1975, and later the Individuals with Disabilities Education Act (IDEA) of 1990, in the United States of America.

Integration

Of late, 'integration' has become a popular concept in the field of special education. It appears to be synonymous with mainstreaming. Integration means "a joint effort by regular education and special education to enrol exceptional children in regular classes, with support services from special education. Kirk et al (1993), for example, opine that mainstreaming is the concept of serving the handicapped within the regular school programme, with support personnel and services, rather than placing children in self-contained special classes. The move to integration in special education is based, to an important extent, on beliefs within the profession of educators of the handicapped that there are positive benefits, academic and social, in mainstream education (Kirk et al, 1993). Thus, integration means, in its basic sense, "moving out from institutions into normal environment". "Inclusion" is another term often used to refer to the same system of education.

In this era of significant rhetoric and action characterized as "education reforms," the term "inclusion" or "inclusionary practices" has become perhaps the most hotly and widely discussed topic in special education; as a result, a commonly used phrase for highlighting the need not to exclude students with disabilities, those from disadvantaged backgrounds and different cultures, but to put them together so that they can be successful (Ysseldyke, Algozzine and Thurlow, 1995).

At the Jomtien (Thailand) World Conference on Education for All (EFA) in 2000, a more inclusive model of special needs education was adopted. The

new concept of special needs includes:

1. Children who are currently enrolled in primary schools, but for various reasons do not achieve adequately.
2. Children who are currently not enrolled in primary schools, but who could be enrolled if schools were responsive.
3. The relatively smaller group of children with more severe impairments who have special education needs that are not being met.

The World Conference on EFA in 2000 recognized that in many cases special needs are created by environmental variables such as poverty, chronic malnutrition, homelessness, violence and situations where the language spoken in the home differs from the language of instruction. As these factors persist and grow in unacceptable proportions, the population of children with special needs will also increase proportionately.

At a World Conference on Education for All (EFA) in 2000, UNESCO reported that over 100 million children in the world had no access to primary schooling (at least 60 million of them being girls). Furthermore, UN estimates suggest that, of the 600 million disabled people in the world, 150 million are children less than 15 years of age. Less than two percent of these children are receiving any education or training (UNESCO, 1999). Besides, an estimated one child in ten is born with or acquires a serious impairment which, if no attention is given, could impede the child's development. It is estimated that if the large number of out of school children is added to this equation, the present education systems are failing some 200 million children.

This global picture might be gloomier in developing countries because these countries suffer a paucity of resources, and education of children with disabilities could be deferred until other targets deemed more pressing have been met (Ivey et al, 1987). To address these issues, the World Conference on Education for All and Framework for action to Meet Basic Learning Needs stated that:

1. Basic education should be provided to all children. To this end, basic education services of quality should be expanded, and consistent measures must be taken to reduce disparities.
2. Steps need to be taken to provide equal access to education as an integral part of the education system (UNESCO, 1999).

Avoke et al (1998) have reiterated that the 1993 United Nations Standard Rules on the Equalization of Opportunities for persons with disabilities require that member states provide education for individuals with disabilities in integrated settings (ie inclusion). Also, countries should ensure that the education of children with disabilities form an integral part of the education system. Inclusive education and community-based rehabilitation programmes should be seen as complementary approaches to cost effective education and training for people with disabilities.

Further discussions as regards education of individuals with intellectual disabilities in general education settings should, therefore, be centred around issues such as the right of all children to equal general education in least restrictive environment, and collaboration among teachers, parents and other professionals or supporting members. In other words, a network of

communication among team members, the home, school, perception of teachers and non-handicapped students and measures to be put in place to get facilitators prepare for better implementation of the programme should be part of the main issues under inclusion.

It is agreed that successful inclusion will depend mostly on the personnel who will be directly responsible for its implementation. Therefore, general education or classroom teachers should be receptive to the principles and demands of inclusion (Sanderson, 2003).

Definition of “Inclusion”

Lynas (1993) considers “inclusion” as a movement to merge special or regular education to include children with disabilities fully into the mainstream of education. Cruicksmank and Johnson (1978) suggest that inclusive education is the type of education where the aim is to restructure schools in order to respond to the needs of children. Similarly, Ivey et al (1987, p 47) state that the issue of inclusion seems simple, i.e. “to enrol disabled students no matter the severity of handicap in regular classes in neighbourhood schools where they can interact with normal peers”. According to Will (1985), inclusion is the integration of children with learning, difficulties and/or physical problems, unless the problems are so severe that they cannot be accommodated in regular programmes. Sanderson (2003) explains that inclusion also refers to “maximum integration of students with disabilities into general classes, and its conceptual base has six major components” as follows:

1. All students receive education in the school they would attend if they had no disability.
2. A natural proportion (i.e. representative of the school district at large) of students with disabilities occurs at each school site.
3. A zero –reject philosophy exists so that typically no student will be excluded on the basis of type or extent of disability.
4. School and general education placements are age and grade- appropriate so that no self-contained special education will exist.
5. Co-operative learning and peer instruction are the preferred instructional methods.
6. Special education supports exist within the general educational class and in other integrated environments.

Inclusive education has also been defined by the Council for Exceptional Children (1996) as “a belief which involves an educational placement procedure and process for exceptional children, based on the conviction that such children should be educated in the least restrictive environment in which their educational and related needs can be satisfactorily provided” (Sanderson, 2003, p. 12).

Referring to another definition of inclusive education by the National Association of States Board of Education (NASBE), Hewson (1992, p. 12) explains that inclusive education is a practice where “all students attend their home school with their peers. Included students are not isolated into special classes or wings within the school. To the maximum extent possible, included students should receive their in-school educational services in the general education classroom with appropriate in-school support”.

Right to Equal Education

Keeping pace with the rapid evolution of education practices and services for students with challenging needs, the concept of inclusive education has attracted a great deal of attention and has become the topic for discussion. More than ever before, this “one system for all” mentality has become the driving force in bringing special and general education together (McCall, 1983).

It is quite true that in the USA, at least in the last decade, segregation has seriously been challenged even by court decisions as well as educational philosophy of mainstreaming and normalization. In July, 1990, President Bush formally endorsed a legislation that banned discrimination against all categories of the handicapped at working places in the United States. Before this time a great deal had been done particularly with respect to providing free appropriate education for many children with disabilities who were previously denied access to education (Hayford & Baah, 1997).

Hayford and Baah (1997) further explain that the passage of the Education for All Handicapped Children’s Act of 1975 (PL94-142) stands out as a critical starting point of inclusive education. The Law stipulates that, as far as possible, persons with disabilities should be educated in the least restrictive environment. The least restrictive environment, as stated in the Federal Register (1981, p 17) means that:

“...to the maximum extent appropriate, children with disabilities be educated with children without disabilities.

In severe handicap, the educational agency may remove a student from regular class when instruction in that class with supplementary aids and services cannot be achieved satisfactorily. To accommodate these children, therefore a continuum of alternative placement must be available to the extent necessary to implement IEP.”

The Law therefore grants the child who has handicap conditions free, appropriate public education that is to take place in an environment where they are not restricted or isolated from society. Youngsters who have disabilities are therefore to be educated with their peers who are non-handicapped, to the maximum extent possible (UNESCO, 2000). This means that inclusive education for all handicapped children is the most appropriate placement. Even though this Law has been amended several times, it has maintained the insistence on the right of children to be given a free appropriate education in the least restrictive environment.

Advocates of full inclusion believe that the current system of removing students from full participation in regular education fails to serve their individual purposes and is therefore unnecessary as it deprives students of what is necessary for their academic and social development (Will, 1985).

On the contrary, others argue that teachers are not appropriately trained to work with students with disabilities, and that much of the clamour for full

inclusion is based, not on empirical evidence, but on the feeling that “it is right to do so” (Yssaldyke & Algozzine, 1995). Yet, others also argue in favour of retaining continuum of educational placement while advocating for educating the children in the environment which is more appropriate for individual student needs (Cartwright et al, 1981). Generally, advocates of integration argue that integration is the best educational strategy.

Collaboration

Collaboration can be seen as one of the important components that promote successful inclusion. Collaboration has been defined in the Longman’s Dictionary of Contemporary English as “an act of co-operating or working together with someone else for a special purpose”.

MacKinnon (1978) describes collaboration as a complex network of communication among team members. This term has been used to describe the interactions among teachers, parents, professionals and specialists (McLaughlin & Lewis, 1990).

Evidence from the literature suggests that lack of collaboration can hinder the success of inclusion. Will (1985), Secretary at the Office of Special Education and Rehabilitation Services, has set forth a new type of relationship between general and special educators to promote work in partnership to meet the needs of all students, particularly, those who have learning problems.

According to Yssaldyke and Algozzine (1995), the teacher need not be the only instructional resource in the classroom. With proper training and instructional aids, adult volunteers and peer tutors can substantially increase a

given classroom's capability to provide students with opportunities to learn effectively. For this to occur, educators must recognize that direct delivery of instructions is not the only valid role of the teacher; management of instructions delivered by others is also appropriate and may be a more efficient method to guarantee appropriate education to all students in inclusive settings.

One source of resistance to integration stems from the fact that teachers work under conditions, described by Laing (1967) as "autonomous isolation", i.e. they are used to working and making decisions alone with few links to other teachers. Therefore, teachers assume that any change will have to be accomplished independently resulting in increased workload for them. Quick (1995) has said that, support work requires collaboration where each teacher is giving and receiving in an aura of mutual professional role. In her view, any teacher who is not in the habit of receiving any feedback runs the danger of not doing a thorough follow-up or monitoring of children's performance, as well as the performance of teachers in relationship to their daily classroom problems. Besides, collaborative consultancy has radically shifted from "expert" model to one of mutualism which requires inter-change between all professionals. Quick (1995) further explains that collaboration which is key to successful inclusion can be facilitated if teachers have good interpersonal relationships with other professionals. She is of the view that when teachers acquire the skills of receiving and giving feedback, it will go a long way to create a favourable atmosphere for effective collaboration.

Research on “Inclusive Education”

Studies conducted on “Inclusive Education” provide reasons why the concept is gaining more recognition. Many professionals say that available research studies support the claim that students with disabilities educated in integrated environment display social, academic and independent living skills superior to their peers in segregated environment (Lynas, 1993).

The literature indicates that integration actually helps children with special needs to adjust like normal people to form their personalities and self respect through relationships with others (Voeltz, 1984). Such children (in integrated set ups) receive additional educational benefits because of their frequent interaction with normal children. In addition, they acquire:

- i. Age- appropriate skills by observing and initiating some better accepted behaviour of normal children.
- ii. Communicative skills, especially in being in the same classroom setting.

Referring to Wehman Hill’s experiment with individuals with intellectual disabilities who had been integrated, Hallahan and Kauffman (1994) conclude that students with mental retardation, as regards acquisition of knowledge, can be conveniently compared with their non-disabled school mates. Ysseldyke and Algozzine (1995) also cite Gadestrom’s experiment with integrated pupils with intellectual disabilities which highlighted the importance of teacher training and attitude of school. They observe that some teachers are at a loss and confused when they see children with special needs in their classrooms. This, they conclude, might be because, very frequently, teachers are not very sure as to how

to manage such children. Referring to Gaylord-Ross and Peck, Hodge and Jansma (1998) have proved that integrating children with intellectual disabilities into the regular education setting positively changes the attitude, not only of non-handicapped children, but even those with intellectual disabilities as well. It is obvious then that there are great educational and social benefits for both students with special needs and disabled students especially when the educational strategies are mapped out to enhance interaction. Brinker and Thorpe (1984) also observed that the frequency and quality of integration between students with special needs non-disabled peers is actually improved by inclusion.

It is interesting to note that some writers like McLaughlin and Lewis (1990) do not accept the assertion that the closer the child with intellectual disability is to the community, the more automatic developmental benefits to the child are enhanced. Mittler (2000) however counters this view of McLaughlin and Lewis', and points out that there is enough evidence that placement in large institutions can be more beneficial to children with special needs.

Lerner (1989) conducted a study on the future direction of persons in deinstitutionalization and education of persons with disabilities. The study involved 33 panellists who predicted that the deinstitutionalization movement would continue and that community-based residential services would increasingly become available to all people with disabilities. The panellists in the Lerner study also observed that education and human service professions would attract more college entrance if working conditions like salaries and benefits relating to the job are improved. Referring to the work of Grunewald, Lynas (1993) also observes

that in future, children would receive education, recreation, domestic living and vocational training in the normal community schools rather than in institutions reserved solely for handicapped persons or in segregated settings.

The Home School

A home school is a local, public community school where the individual with a handicapping condition would have attended if they were not handicapped. In this school setting,, students with and without handicapping conditions have the same opportunity to learn together in the same environment. Wolfensenberger (1972) stressed that people with disabilities would enjoy patterns of life and everyday experience similar to those of non-disabled students in the home school.

The home school provides opportunities for children who have handicapping conditions to be accepted, not on passive basis, but as an integral part of the society since the concept of equality is very relevant here for all human beings (Voeltz, 1984). Findings of many studies seem to support the rationale put forward in Denkyira (1987), for educating students with disabilities in their home school.

Wehman (1996) maintains that if home schools could provide recreational activities that offer a conducive atmosphere for students with disabilities to build their competence and provide social interaction, positive attitude that non-disabled peers will develop towards those with disabilities will be unprecedented. Mittler (2000) is of the view that when persons with handicapping conditions are allowed to attend their neighbourhood school such categorical labels like learning disabled and intellectual disability, used to classify people with mild retardation in

special education, will be considered of little value and unjustifiable.

On the other hand, opponents of home school education for all students argue that it is detrimental to the academic performance of students without disabilities (Hallahan and Kauffman, 1994). Another group of advocates of continued segregation also hold the view that:

1. The cost involved in home school delivery services (especially, in developing countries) is high since there will be the need to provide certain equipment and materials for the benefit of the children with disabilities;
2. There is lack of acceptance of persons with disabilities by non-disabled ones;
3. The quality and intensity of services provided in special schools cannot be equated to those in the home school (Lynas, 1993).

Perception and Attitude of Non-Handicapped towards the Handicapped

Most of the research on non-handicapped student's attitude towards their disabled peers consists of sociometric studies to mildly retarded children in the school setting (MacMillan, 1977). When children with intellectual disabilities remain in regular classes, the evidence is consistent that they enjoy lower social status than do their non-handicapped peers (Kirk et al, 1993). Miller, cited in Kirk (1972), points out that while persons who are intellectually disabled are not accepted, neither are they overtly rejected. The cause of their non-acceptance appears to be the undesirable behaviour they usually exhibit, rather than their low intelligence.

Where children with intellectual disabilities have been integrated into regular classes, there has been some hope. For example, Voeltz (1984) found out

that the attitude of children without disabilities towards those with disabilities in general would improve as a result of contact. He compared neighbourhood relationships of persons with intellectual disabilities in segregated settings and those in regular classes and observed that regardless of educational placement, those with intellectual disabilities were isolated socially in the neighbourhood. So the apparent lack of acceptance of those with intellectual disabilities in the school setting appeared to extend to the neighbourhood. The willingness of non-handicapped peers to accept those who are handicapped is also influenced by their popularity and sex (Voeltz, 1984).

In another study, Voeltz (1984) examined the correlation of social status of children with mild intellectual disabilities integrated into regular classes and reported different patterns of correlates for acceptance and rejection. According to the authors both peers' and teachers' perceptions of the target child's cognitive competence were related to acceptance scores, where as peer and teacher perception appeared to be determined by the child's cognitive and academic status. However rejection was determined by whether the child was regarded as having a behaviour problem. Hodge and Jansma (1998) conducted a similar experiment to find out non-handicapped children's level of acceptance of those with disabilities using three groups of 10th -12th grade students. Some of the group had already been exposed to children with disabilities, others had not. In attempting to assess the behaviour of non-disabled children they left a child with intellectual disabilities in a room at a time with a non-disabled peer. Each non-disabled child had to wait for five minutes before participating in an interview.

The findings showed that the children who were already familiar with handicapping conditions were able to easily initiate conversation and contact. In other words, Hodge and his colleagues were trying to demonstrate that integrated school settings with social interaction tends to produce positive behavioural and attitudinal growth among non-disabled students towards their disabled peers.

Even though inclusion is seen as laudable in so many circles, its implementation will not be easy in a developing country like Ghana. For example, at an Education for All (EFA) conference (UNESCO, 2000, pp 3, 9), Lena Saleh, Chief of Special Needs Education Programme, is reported as having stated that, “despite the positive trends so far, making a school more inclusive is not an easy task”. The document stated that most important barriers to inclusive education are the negative attitudes and habits that prevail within schools and in the education system as a whole. Many headteachers and students in regular schools might not readily accept students with disabilities in the classrooms. For example, a report from a basic school in Winneba where some children with disabilities have been offered admission indicated that some key figures in the society have been complaining that the school was being turned into a special school.

Besides, a report from a sub-regional African Workshop in support of inclusion (UNESCO, 1999), outlined the following as barriers to inclusive schooling (particularly in Africa):

1. A lack of a clear understanding of inclusion (integration)
2. Political instability

3. Chronic financial constraints
4. Attitudes of the decision makers
5. Lack of policies and support from Government and education authorities
6. Low teachers salaries
7. Large class sizes
8. Inadequate access to physical environment and non-educational factors such as religious, cultural and ethnic belief, poor nutritional status of learners, chronic illness and poverty.

Attempts at Mainstreaming in Ghana

According to Avoke (1991), attempts at mainstreaming the handicapped in Ghana date back to 1954, when a blind student learned side-by-side the sighted at the Presbyterian Training College (PTC) at Akropong. This means the said blind student might have gone through the basic education earlier than 1954, possibly around 1940s.

Officially in 1968, Wenchi Senior High School in the Brong Ahafo Region was selected as a mainstream school for the blind. The first batch of mainstream blind students passed out in 1974. Most of those students and subsequent batches have been doing so well that some entered the Universities for their first degrees. Before the Wenchi model, other schools had opened their doors to the blind. For example, Accra Academy, Bishop Herman at Kpando and Achimota had blind students passing through one year or the other. Their enrolment was however not as consistent as at Wenchi.

With the hearing impaired, the initial attempt at formal mainstreaming was made in the Eastern Region at Kibi and Koforidua units system in 1975. Also, in

the late 1990s, mainstreaming for the intellectually disabled and the deaf together began in the Volta Region (i.e., the Volta School for the Deaf and the Koforidua Unit School for the Deaf and Mentally Retarded). Avoke, Hayford and Ocloo (1998) have cautioned policy makers and school authorities to note that these schools offer special class models which are the most restrictive of all placement options where the child spends time in the regular education environment.

However, as Avoke (1991, p.10) indicates, “though benefits from mainstreaming the handicapped have not been fully realized in the school system in Ghana”, many special educators and student teachers seem to be in love with the principle of mainstreaming. This view was given all the necessary encouragement in September 1993 at a Conference of Heads of Special Schools with the theme “integrating the handicapped against the background of the new educational reforms in Ghana,” where there were serious deliberations on the need for mainstreaming in Ghana. Conscious of the obvious problems that a full-scale implementation of mainstreaming would face, there is the need for advanced planning and preparation of both human and material resources to facilitate excellent result and smooth implementation.

The divergent views about mainstreaming expressed in the literature were taken into account in designing the questionnaires as it expected that teachers in the Akrom Circuit cluster of schools, (on which the study was based) were likely to have similar divergent views. The Researcher was also interested in finding out whether the reasons for accepting or rejecting “Integration” would be the same as or different from those found in the literature review.

CHAPTER THREE

METHODOLOGY

This chapter describes the method employed in carrying out the study. Details about the research design, population of study, the sampling techniques used and the instruments designed for the survey are described. Also described are the methods of data collection and data analysis.

Research Design

Teachers and other educational workers in the Akrom sub-metropolitan educational area of the Kumasi Metropolitan Education Directorate were the target group in this study. A total of 50 schools and 397 persons were involved (Table 1). Only basic schools (primary and junior high schools) were covered.

The heterogeneous nature of the population in terms of gender, age, education, profession and working experience were considered relevant for the survey. For instance, preliminary investigations showed that there were both male and female teachers in the area; there was a peripatetic officer, zonal supervisors, elderly teachers (50 years or more) and young teachers of 29 years or less. There were also professionally trained teachers, uncerified teachers, specialists and other educational workers within the sub-metropolitan education directorate. This diversity in the population under study was very evident as one moved from one school to the other and from the urbanized parts to the peri-urban and rural sections of the sub-metro

Sampling Procedure

A stratified sampling technique was adopted in determining where to base the research on so as to have a representative group whose characteristics and attributes would reflect those of the general population. The strata were, as observed by Mittler (2000, p. 73), “a generalization from a well-designed sample to a population that provides the advantage of economy in terms of time and other resources, even though inferences made from the sample are scientifically accepted as being representative of the characteristics of the entire population”.

The four zones (A, B, C, D) of the sub-metro were considered as separate entities (and for that matter, sub-sets) of the entire population. These zones had characteristics shown in Table 1. The largest and most urbanized zone was zone A, whilst the smallest and most rural was zone D. The peripatetic officer was purposively selected because of her background, expertise and schedule of work relative to the topic of the research. The number of teachers to be in the sample was 99, being 25% of the teacher population. To determine how many teachers to select from each zone, the population of each zone was divided by the population of sub-metro and multiplied by the desired sample size (i.e. 99).

Table 1

Characteristics of Education Zones - Akrom sub-metro, Kumasi-June, 2003

Zone	Location	Nature	No of schools	No. of teachers
A	North	Urban	20	150
B	South	Urban	15	110
C	East	Rural	10	100
D	West	Rural	5	37
Total			50	397

Source: Records at Akrom Sub-Metro Education Office, Kumasi

To arrive at the desired sample sizes of schools and teachers in the sub-metro, 25% of the number of schools and number of teachers were computed to be 13 and 99 respectively. Details of the computation of sample sizes are shown in Appendix II.

Table 2 shows the various sub-samples that were purposively sampled. Based on these sub-sample sizes that had been computed, a random sampling technique was adopted for each zone of the sub-metro to determine the schools to be covered in the survey.

Table 2

Sample Sizes and Staffing of Schools

Zone	No of schools of teachers	Sample size of school	No of teachers	Sample size
A	20	5	150	37
B	15	4	110	27
C	10	3	100	25
D	5	1	37	11
Total	50	13	397	100

This was done by re-arranging the school list in each zone according to the numerical strength of teachers in a descending order of magnitude and picking every fourth school in the list. The sampling procedure was adopted if a school in the sample had more teachers than the sample size to be covered there.

This procedure was adopted so as to ensure that there was a reasonable balance between large and small schools in terms of the number of teachers, and also to ensure fairness as well as to eliminate any element of bias in the sampling techniques used for the survey.

Instrument Design

The sample of respondents comprised mostly classroom teachers in basic schools. It was therefore considered appropriate to use questionnaires as the main instrument for data collection since the respondents were many from several different locations and, above all, were literate. Some of the respondents also

openly declared their preference for the use of questionnaires as they could use any little time available for instance, break periods) to answer the questions.

The interview schedule was however the instrument used for the peripatetic officer because earlier contact with her suggested that she preferred being interviewed to completing questionnaires. She liked being probed so that she could acquire much experience and confidence with researchers.

All the same, both questionnaires and interview schedules were structured along the same lines so as to provide data that were relevant to the topic.

Twenty-four items were listed in the questionnaires which had two distinct parts.

In the first part, respondents were expected to provide demographic data about themselves in the areas of age, gender, marital status, qualification, number of years in the profession, name of school, class being taught and number of pupils in the class. The rest of the questionnaires formed the second part and this contained items on views of respondents regarding the education of persons with intellectual disabilities, the reasons for their integration or otherwise, what should be done to enhance teaching and learning, curricula changes required, changes in school structures needed and general knowledge about educational reforms and policies in Ghana. The relevance and appropriateness of each item of the questionnaires were discussed with experienced researchers. The instrument design also took account of recommended steps of experts like Puris, cited by Cozby (1998).

Pre-testing of Instruments

In order to test the suitability and relevance of the items of the questionnaires, a pilot-test was carried out in April, 2003. The pilot-test helped the researcher to assess the actual volume of work involved in the survey, characteristics of the entire population, and to determine possible weaknesses, inadequacies and challenges to be encountered (Cozby, 1998).

The pilot-test involved two distinct schools (one large school and one small school) randomly selected from the whole list of schools in the sub-metro. This happened to be the fourth school from the top of the school list and the fourth school from the bottom of the list since the schools were arranged according to their numerical staff strength (in a descending order). It was the view of the researcher that since the survey was randomly done in a scientific manner, the results would be similar to those of the main study. The administration of the questionnaires in this pilot-test took two days.

The pilot-test led to a revision of the questionnaires for the main study. All ambiguous and inconsistent items, as well as statements which looked like double-barrelled items, were noted and rectified. The validity and reliability of the instruments were determined through the use of split-half method. Split-half reliability coefficient showing the internal consistency of the items on the instruments was computed to be 0.79%.

Administration of the Instruments

After the pilot-test the questionnaires were revised appropriately to ensure their practical application in the field, before copies were produced and

administered to respondents. The questionnaires were personally administered by the researcher to respondents after copies of an introductory letter had been obtained from the Department of Educational Planning and Administration (EPA), University of Cape Coast, and the Metro Director of Education in Kumasi, to be given to heads of schools and organisations concerned.

At each of the sampled schools, the researcher first called on the headteacher and presented the introductory letter. The heads, then introduced the researcher to the respondents and after some explanation, the respondents were given copies of the questionnaires for completion. A week after the distribution of copies of the questionnaires, the researcher personally contacted the respondents to assist those in difficulty and also to collect the completed questionnaires (as a few had been completed by then).

Since the respondents had been given a maximum of two weeks to complete and return the questionnaires, the researcher went round the schools concerned, exactly a fortnight later, to collect the completed questionnaires. Fortunately, nearly all the questionnaires had been completed and returned to the researcher, except those of two respondents who were taken ill during the period. They were contacted at their houses for their completed questionnaires, thus leading to 100% completion of the questionnaires.

Meanwhile, on the tenth day of the distribution of the questionnaires the peripatetic officer, the only respondent to be interviewed, was interviewed in her office. The officer co-operated well, and this made the exercise very interesting, lasting over an hour.

Data Analysis

Analysis of the responses received began immediately after all data had been assembled and edited. The editing took the form of checking to ensure that all questions had been answered and clear responses provided as respondents had been required to provide. Sorting of questionnaires was then done on the basis of demographic data like gender, age and educational background through the use of codes.

CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter presents an analysis and discussion of results of the study. To a great extent, as recommended by Boyle and Rodocy (1987), the Statistical Package for Social Sciences (SPSS) was used to obtain the summary statistics presented in this chapter. This is because the package has proven to be very effective as an analytical tool for analysing even complex data (Harrison, 1990). Also included in the chapter are personal characteristics and views of respondents, as regards the education of persons with intellectual disabilities, their integration into the regular education, and merits and demerits of such integration.

Personal characteristics of respondents

Table 3 shows the distribution of the respondents by gender. In the Akrom cluster of schools under study, there is a concentration of female teachers in the urban areas (i.e. Zones A and B) of the sub-metro, whilst the outlandish (rural) Zones C and D had very few female teachers. Also, in the four zones, Zones A & B constitute 65.5% of the total teacher population. Out of a total of 397 teachers, nearly 58% are female. The ratio of female to male teacher is about 3:1, and this explains why the sample was heavily weighted in favour of female teachers.

Table 3

Distribution of Respondents by Zone and Gender

	Total Population	Teachers		Sample Size	Teachers/Officers	
		M	F		M	F
A	20	56	94	5	14	23
B	15	50	60	3	12	15
C	10	47	53	3	12	13
D	5	16	21	2	4	7*
Total	50	169	228	13	42	58

*Including one purposively chosen female peripatetic officer.

In Table 4, it is shown that 80% of the female respondents were married, whilst only 60% of their male counterparts were married. Seventy-one per cent of the married female respondents were found in the urban sections (i.e. Zones A and B) of the sub-metro, whilst only two of the married female respondents were found in zone D which was considered very rural. On the other hand, six out of the 14 (43%) single female respondents were found in the rural part (zone D) of the sub-metro.

Table 4

Distribution of Respondents by Zone, Marital status and Gender

	Married		Single		
	Male	Female	Male	Female	
A	9	26	1	1	37
B	5	14	5	3	27
C	3	14	4	4	25
D	1	2	2	6	11
Total	18	56	12	14	100

Table 5 shows the age profile of the 100 respondents; here it may be observed that 60% respondents (comprising 20 males and 40 females) were aged 50 or more years, while 17% (i.e. 4 males and 13 females) were aged 40 years, or more.

Table 5

Distribution of Respondents by Age and Gender

	No of Respondents										
			20-29 yrs		30-39 yrs		40-49 yrs		50 yrs & above		
	M	F	M	F	M	F	M	F	M	F	
A	10	27	37	0	1	1	2	1	4	8	20
B	10	17	27	1	1	1	3	2	4	6	8
C	7	18	25	1	3	1	4	1	4	4	7
D	3	8	11	1	2	0	1	0	0	2	5
Total	30	70	100	3	7	3	10	4	13	20	40

Another observation made from the results of the study was that 80 (23 males and 57 females) out of the 100 respondents were professionally-trained teachers as shown in Table 6. This represents 80% of the number surveyed. Most of the trained teachers (57%) were found in the urban schools (zones A and B) and, while 57 out of the 80 trained teachers were females.

Table 6

Distribution of Respondents by Professional Status

Zone	No of		Total	Trained		Untrained	
	Respondents			M	F	M	F
	M	F					
A	10	27	37	8	25	2	2
B	10	17	27	8	16	2	1
C	7	18	25	5	10	2	8
D	3	8	11	2	6	1	2
Total	30	70	100	23	57	7	13

The study has revealed that teachers trained in special education were very few in the sub-metro. Apart from the peripatetic officer, there were only four other respondents who had been trained in special education. Together with the peripatetic officer, they were five (i.e. 2 males and 3 females) who had trained in special education.

Table 7

Number of Respondents Trained in Special Education

Zone	No of respondents		Total	Trained in special education		Not trained in special education	
	M	F		M	F	M	F
A	10	27	37	2	1	8	26
B	10	17	27	0	1	10	16
C	7	18	25	0	0	7	18
D	3	8	11	0	1	3	7
Total	30	70	100	2	3	28	67

It can be observed also that 95% respondents did not have training in special education, and casual interactions with respondents and other teachers on the issue indicated that the study-leave policy of the Ghana Education Service did not encourage the pursuit of further courses in special education.

In the area of teaching experience, it was observed that 60% of the respondents (i.e. 20 males and 40 females) had taught for 20 or more years (Table 8). Most of the respondents could thus be described as experienced teachers, and their views on educational matters like the topic of this study need to be respected.

Table 8

Teaching Experience of Respondents

Zone	No of Years of Teaching Experience					
	Less than 20 Yrs			20 Years and Above		
	M	F	Total	M	F	Total
A	2	7	9	8	20	28
B	4	9	13	6	8	14
C	3	11	14	4	7	11
D	1	3	4	2	5	7
Total	10	30	40	20	40	60

Research Question 1: What are the views of teachers in the Akrom Circuit cluster of schools with regard to the education of individuals with mental retardation?

Education of Persons with Intellectual Disabilities

Research Question 1 sought respondents' views as to whether children with intellectual disabilities should be educated. Overall, 90% of the respondents favoured the education of persons with intellectual disabilities, while 10% did not.

Table 9

**Views of Respondents Regarding Educating Persons with
Intellectual Disabilities**

Zone	Persons With Intellectual Disabilities											
	Should be Educated						Should not be Educated					
	Male		Female		Total		Male		Female		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
A	9	40.9	27	39.7	36	40.0	1	12.5	-	-	1	10
B	8	36.4	17	25	25	27.8	2	25	-	-	2	20
C	4	18.2	17	25	21	23.3	3	37.5	1	50	4	40
D	1	4.5	7	10.3	8	8.9	2	25.0	1	50	3	30
Total	22	100	68	100	90	100	8	100	2	100	10	100

From Table 9, one clearly sees a trend which indicates that a greater percentage (i.e. 75.6%) of female respondents favoured the education of persons with intellectual disabilities than male respondents (24.4%); the trend also shows that people in the urban zones (A and B) tended to favour the education of persons with intellectual disabilities (61%) than those in the rural zones (C and D) (29%).

The respondents who were in favour of educating persons with intellectual disabilities gave the reasons for their stand as follows:

- 1) Education is a fundamental human right;
- 2) Education would equip such persons with employable and other skills;

- 3) Education would teach handicapped persons good social practices and social norms;
- 4) Education would give persons with intellectual disabilities the requisite knowledge to solve certain problems;
- 5) If handicapped persons are educated their general outlook would be broadened and enhanced.
- 6) If handicapped persons are educated, they would contribute their quota towards national development.
- 7) Education would teach handicapped persons personal and environmental hygiene and thus improve their health and the health of the community at large.
- 8) Education of persons with intellectual disabilities would accord them self respect and economic independence.

On the other hand, the few respondents (10%) who were not in favour of educating persons with intellectual disabilities were of the view that the nation's resources were limited and should not be used on persons whose contributions to the national economy would be very negligible. Some of the opponents of the education of handicapped persons were also of the view that such persons could not acquire any useful skills, so they should be left at home and taken proper care of by their parents.

Research Question 2: How do teachers in the Akrom Circuit cluster of schools understand the concept of mental retardation (intellectual disability)?

Teachers' Understanding of the Concept of Intellectual Disability

Whilst, inevitably, teaching is partly about organising large numbers of learners (particularly huge numbers in certain schools), the task of the teacher necessarily includes finding ways of managing the learning environment, while taking reasonable account of individual class members. In this regard, there is need for commitment on the part of the teacher to be able to recognise and understand the individuality of each child and find out if it is a positive quality that can be used to enrich planned classroom encounters. It is also necessary to find ways of making sure that tasks presented to children have meaning for them at a personal level.

Responses as to whether teachers had adequate knowledge about persons with mental retardation, and whether such pupils could be identified easily, were quite positive and helpful as was indicated by 87% of the respondents, while 13% did not know what to say. There is therefore a clear indication that respondents quite understood the explanation given by the researcher as regards mental retardation or intellectual impairment, and identification of persons with mental retardation. Similarly, respondents were unanimous in their understanding of the necessity to identify pupils with mental retardation. It was generally noted that identifying pupils with mental problems would enable teachers do proper placement of pupils in their appropriate groupings where they could be offered special attention. Their approach to the issue is clearly at variance with the philosophy of integration whose proponents include Gaylord-Ross, Peck, Hodge and Jansma (1998) who, through series of experiments, proved that integrating

children with intellectual disabilities into the regular education setting positively changes the attitude of intellectually handicapped and non-handicapped children.

When guided to discuss important setbacks in handling pupils experiencing difficulty in school, respondents generally noted that teachers may either fail to understand pupils' condition, or take for granted that all pupils in the class will learn successfully at the same rate as a result of their participation in the curriculum provided. In this case teachers of integrated classes are not encouraged to give consideration to pupils with special needs. Sometimes teachers may be discouraged from doing so because teaching children with special needs is seen as a job for experts in special schools. Although respondents did not subscribe to the principle of "integration", they were aware that strict categorisation of pupils in all classes might unduly emphasize the causes of children's state of mental deficiency, which may tend to distract attention from very important factors that might help pupils to succeed.

As to whether pupils with mental retardation truly lack the necessary capabilities to learn school subjects, respondents were unanimously positive. It therefore became evident that respondents clearly understood the concept of "mental retardation" (MR). Asked whether learning styles of children with mental retardation are similar to those without disabilities, majority respondents (90%) strongly disputed the idea, which was an indication that most respondents were aware of the cognitive deficit nature of persons with mental retardation.

In an attempt to further explore why teachers of pupils of regular classes might not accept to integrate with MR pupils, respondents were asked whether

individuals with MR in regular classes would pose any health problems to teachers and non-disabled pupils. Respondents unanimously answered in the negative. This implied that teachers of pupils of regular classes are aware that MR is not contagious, hence poses no health threats to other pupils.

Also, respondents were asked whether it was possible for normal pupils in a class to understand MR pupils, and whether they would be prepared to accept the MR pupils. The responses were unanimously negative, and this trend implied that MR pupils might not be warmly welcomed by their peers if they were integrated into the regular school system.

Following the observation that MR pupils might not be warmly welcomed by their peers if they were integrated into the regular school system, the researcher then raised the question as to whether mentally retarded persons should be educated only in special schools. Nearly all respondents (82%) strongly agreed that such pupils must be educated not only in special schools, but should also be taught by special teachers. It may be deduced from their responses that respondents are opposed to any attempt at integration.

Referring to the question whether persons with mental retardation would socialise better if they were integrated into regular schools, 50% respondents agreed to the proposal while an equal figure refuted it. This implied that respondents were not sure of whether mentally challenged students would be well understood by their intellectually fortunate peers, or not.

To address a question as to whether teaching and learning materials are adequate for handling pupils with MR, majority (70%) of respondents answered

in the negative. They explained further that basic teaching does not even exist in some classrooms, while those that are available are hardly suited to teaching MR pupils.

Majority respondents (85%) agreed to a question that sought to address the issue of whether students with mental disabilities would require special aid in general education classrooms. This signifies the teachers' awareness of the learning styles of pupils with mental retardation. One of the major characteristics of mentally retarded pupils is that they are slow learners, have short attention span, and poor verbal communication, among others, which respondents are aware of (Avoke, 1997). For this and other reasons, respondents felt that such pupils would require additional support in the regular classroom since they cannot learn at the same pace as the normal pupils.

Answering a question on whether mentally retarded pupils would require more teaching time than their counterparts who are normal, respondents unanimously agreed that MR pupils would require additional teaching time outside the normal class period if they are included in their classes. The reason for such a great positive response may be attributed to the fact that not all skills could be taught in the classroom, e.g. toilet training. It would therefore be necessary for an outside-the-normal class tuition.

When the question as to whether teachers would need in-service training, or even special training, to be able to teach persons with MR in inclusive classes, the response from respondents was again unanimous. Respondents' stand was in conformity with the views of Aboagye (1997) and UNESCO (2000) which

explained that, despite all attempts to conform to human rights declarations, making education totally inclusive would not be an easy task. This implied that respondents are aware that their present training is not sufficient to enable them handle special children who would require special teaching methodologies to learn effectively.

Research Question 3: How prepared are teachers in the Akrom circuit cluster of schools to teach with individuals mental retardation together with those without?

Preparedness of Teachers to Teach 'MR' Individuals

Asked whether there are children with mental retardation among the pupils in their classes, majority respondents (85%) disagreed, while (10%) were positive; that was ample evidence that most teachers are unwilling to teach pupils with mental retardation; however 5% clearly expressed their preparedness to teach pupils with mental retardation. Teachers' unwillingness to handle pupils with mental retardation may be attributable to the fact that they have received little training in the area of mental retardation.

Respondents generally observed that regular teachers would require teacher aids and/or special educators in the classroom if children with mental retardation were to be included. From this submission, it could be deduced that due to teachers heavy workload and the generally heavy enrolment of classes, to include pupils who are unable to study at the rate that regular pupils do would affect the effective discharge of their duties. Invariably, the responses generally indicated that teaching pupils with MR in the normal school setting would cause

academic retrogression on the part of non-handicapped pupils. All respondents agreed to the question, showing that teachers would prefer that children with mental retardation be educated apart from those without the problem.

Responding to a direct question on whether or not they are willing to teach MR pupils together with normal pupils, 62% respondents rejected the idea, as against 38% who favoured integration of persons with intellectual disabilities into regular schools. Of the 38% who favoured integration, 28% were females while 10% were males (Table 10). However, of the respondents who were against the integration of persons with disabilities in regular schools, 50% were males while only 12% were females. Thus, in terms of absolute numbers, many more males were opposed to issue of integration than females. The trend of responses indicates the tenderness of mothers towards disabled children in general.

Table 10

Integrating Persons with Intellectual Disabilities into Regular Schools

Zone	Persons With Intellectual Disabilities					
	Should be integrated			Should Not be integrated		
	M (%)	F (%)	Total (%)	M (%)	F (%)	Total (%)
A	2	12	14	6	7	13
B	2	6	8	5	7	12
C	3	5	8	4	6	10
D	3	5	8	2	3	5
Total	10	28	38	50	12	62

One can see from Table 10 above that those who favoured integration were mostly in the urban areas of zones A and B where 22% out of the 38% respondents who favoured integration were found.

Research Question 4: What benefits are handicapped and non-handicapped pupils likely to derive in an integrated school setting?

Demerits of Integration

Majority of respondents 60% who were of the view that persons with intellectual disabilities should not be integrated into the general educational system provided the following reasons which could be regarded as demerits of integration.

- 1) Integration will retard the progress of education as teachers would tend to concentrate on persons with intellectual disabilities, to the neglect of other pupils and students, thus leading to a fall in educational standards.
- 2) Integration would make the work of teachers more difficult as they would have to provide the needs of those with intellectual disabilities as well as those without these disabilities.
- 3) There would be fast depletion of the inadequate resources in the general school setting if there is going to be integration.
- 4) Virtually every teacher would need to be trained in special education before integration of persons with intellectual disabilities into the regular school system would be practicable and beneficial. Since this would not be possible in the short term, a vacuum would be created.

Benefits of Integration

In spite of the 60% respondents who emphasised the demerits of integration, other respondents (40%) who advocated integration gave the following reasons which could be regarded as benefits of integration.

- 1) Persons with intellectual disabilities would be afforded the chance of learning good social habits and skills from persons who do not have these disabilities.
- 2) Persons with intellectual disabilities would feel that they are part of the large community through integration, and would thus feel challenged to contribute their quota for the good of society.
- 3) Integration would boost the morale of persons with intellectual disabilities and make them happy, thus changing their general outlook and relations with other people.
- 4) Integration would make persons without disabilities appreciate the difficulties encountered by persons with intellectual disabilities and thus tend to adopt positive and caring attitudes towards such handicapped persons.
- 5) Integration would lead to better understanding of the needs of persons with disabilities and challenge policy makers to address those needs.
- 6) Integrating children with intellectual disabilities into the regular education setting positively changes the attitude, not only of non-handicapped children, but even those with intellectual disabilities as well (Hodge and Jansma (1998).

The general trend of the survey suggests that both categories of respondents (young and old) supported education of mentally retarded children. For instance, Table 11 illustrates that 60% younger adults (aged below 40 years) favoured education of MR children, while 96% older adults (aged above 40 years) supported the idea.

Table 11

Age Bends of Respondents Who Favoured Education or Integration of Persons with Intellectual Disabilities into Regular Schools

Variables	Younger Adults (20 – 39 years)	Older Adults (40 or more years)
Education of Persons with intellectual disabilities	60%	96%
Integration of Persons with intellectual disabilities	25%	37%

Similarly, 75% younger adults and 63% older adults were against integration; this means that only 25% and 37% of the two categories respectively supported integration. In both instances, however, older adults seemed to be more sympathetic with the mentally handicapped than their younger counterparts. It is however clear from the statistics that both categories of respondents would favour education of the mentally handicapped, rather than integration. In a focus group discussion (FGD) with some teachers, many of them explained that it is the right

of all Ghanaian children (including the mentally handicapped) to be educated to the best of their ability. This may be understood to mean that mentally retarded children who are educable should be given as much education as they can cope. However, integrating such less fortunate children with their more naturally favoured counterparts would be like pairing a tortoise and a rabbit in a race. Also, the statistics also suggest that older people (particularly women) are more sympathetic towards the plight of the handicapped in society than their younger counterparts. This is however subject to further verification through more detailed studies. In any case, it is quite apparent that both categories of respondents strongly favour education of all MR children which, they opine, should be done in special schools.

Research Question 5: What are the major difficulties associated with integration of persons with intellectual disabilities into the regular school system?

Perceived Difficulties of Integration

Regarding the issue of difficulties associated with integration of persons with intellectual disabilities into the regular school setting, almost all respondents identified the following difficulties.

- 1) Inadequate classroom and other infrastructure;
- 2) Insufficient numbers of teachers trained in special education
- 3) Inadequate logistical support and other facilities
- 4) Expensive and unreliable transportation system that would not facilitate transportation of handicapped persons to and from school.

Managing Difficulties of Integration

Measures suggested by respondents to be taken to overcome the difficulties enumerated above include the following:

1. Expansion of educational facilities like classrooms, dormitories, laboratories, workshops, playgrounds and other recreational facilities;
2. Training of teachers in special education needs to be stepped up;
3. Adequate provision of equipment for laboratories, workshops and classrooms is required;
4. Provision of cheap, effective and efficient transportation facilities need to be provided.

It was also the view of some of the respondents that effective integration of persons with intellectual disabilities into the regular school setting would require legislation as well as the proper re-orientation of teachers, school authorities, pupils, students and the general public in order to ensure its acceptance and success.

Integration, according to some respondents in the survey, would require curricular and structural changes in the general education system so as to meet the needs of both the handicapped and the rest of the people in the school community. For instance, facilities like stairwells, roads, drains and stationery for various handicapping conditions (e.g. visual, hearing and physical impairment) would need be adequately provided in all schools and educational institutions.

The survey revealed that about 98% of respondents knew that there was a programme in Ghana that guaranteed free education for all children. As to what

this programme was, the respondents were unanimous in mentioning the “Free Compulsory Universal Basic Education (FCUBE)” programme. As to why they know of this programme and yet opposed the idea of educating persons with intellectual disabilities, respondents who were not in favour of this idea, stated that the FCUBE programme was over ambitious and that it was not realizable in present day Ghana.

Nevertheless, 80% of respondents indicated that they did not know of any educational policy in Ghana that encourages the integration of persons with intellectual disabilities into the regular schools system. This was in response to Question 16 of the Questionnaires, demanding policy in Ghana that encouraged the integration of handicapped children into regular schools. A few respondents (less than 20%) however indicated that they were aware of the individuals with Disabilities Bill but indicated that it was yet to be laid in parliament and wondered why the passage of the bill was delayed so much.

Two respondents indicated that there was such a policy which encouraged integration of handicapped persons into the regular school system. The respondents referred to the education of some visually-impaired persons in some educational institutions in the country to support their claim. They also quoted the Free Compulsory Universal Basic Education (FCUBE) programme as the educational policy encouraging integration in Ghana. This showed that they did not quite understand the issue at stake.

Observations that need to be made from the survey include the following:

1. Seventy-seven per cent of the respondents were aged 40 years and above.
 2. A total of 80% of the respondents were professionally-trained teachers.
 3. On the issues of educating persons with intellectual disabilities, as many as 90(that is 90%) of the respondents indicated that persons with intellectual disabilities needed to be educated.
 4. Regarding the issues of integration, 60% of the respondents favoured the integration of persons with intellectual disabilities into the regular school setting whilst as many as 40(40%) out of the 100 respondents were not in favour of integration because of the anticipated difficulties associated with integration.
 5. As to whether respondents knew about any programme in Ghana that guarantees free education for all, 98% knew about the Free Compulsory Universal Basic Education (FCUBE) programme.
 6. In response to a question as to whether there was a policy in Ghana that encouraged the integration of handicapped persons into regular schools, 80% of respondents indicated that they did not know of any such policy in Ghana.
- These findings could thus form the basis of other surveys, or guide policy makers in education to address specific issues of public concern, especially in the areas of training for teachers, educational reforms and provision of adequate resources for schools.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

A summary of major issues raised in the survey is presented in this chapter so as to conclude the report. In this chapter, deductions based on the research findings are made. Recommendations are also made in this chapter for the attention of policy makers whilst areas for further research are indicated.

Summary

It would be recalled that the purpose of this study was provided in the first chapter of this report as being an attempt made to determine the perception of teachers (and other educational workers) in the Akrom sub-metropolitan education directorate of the Kumasi Metropolitan Assembly (KMA). This was with regard to the integration of persons with Intellectual Disabilities into the regular school setting in Ghana.

Before embarking on the survey, the researcher had to consider the publications and other works related to the topic. A review was thus made of relevant literature with a view to establishing the historical perspectives of the study as well as presenting what other researchers and authorities in special education had written or said about the issue at stake.

From the literature review in Chapter Two it could be observed that in the past (i.e. before the twentieth century), there were all kinds of negative beliefs and perceptions about persons with intellectual disabilities (and, indeed, handicapped persons in general) in almost every community. Such disabled persons were despised, tortured, killed or treated in various harmful ways.

The literature review showed that some individuals began to condemn these negative practices in the second half of the twentieth century. Such individuals indicated that persons with intellectual disabilities (and other disabled persons) would be assisted to become useful citizens through education and skills acquisition. Attitude of people then gradually began to change towards the disabled in society, with the introduction of institutions meant for such handicapped persons as the twentieth century were on.

Initially, these handicapped persons were sent to monasteries, hospitals, charitable homes and other care-giving institutions. Later, public residential special schools were established for such disabled people, thus giving birth to the institutionalization of persons with disabilities.

According to Dery (1993), the enactment of the Fee-Free and Compulsory Education Law of 1961 led to the Government of Ghana (i.e. the First Republic) taking over existing special schools that were being managed by private bodies. Hayford and Baah (1997) as well as Gadagbui (1998) have indicated that it was when a Special Education Unit was established within the Ghana Education Service in 1970 that serious encouragement could be said to have been given to special education in the country.

Since the focus of the study was the perception of teachers in the Akrom Sub-Metro regarding the topic under discussion, preliminary studies were based on teachers in the sub-metro as the target population. With a total population of fifty (50) basic schools and three hundred and ninety-seven (397) teachers, the sub-metro was however considered to be too large for the survey and hence the need for sampling to be adopted.

The diversity and heterogeneous nature of the characteristics of the population in the areas of gender, age marital status, educational background, training and other competencies informed our choice of a stratified sampling technique to be adopted. It was expected that, as stated by Mittler (2000), one could use the characteristics of a well-designed sample, as a representative group, to make inferences for the entire population.

As explained in chapter 3, the sampling procedure adopted led to a sample size of thirteen (13) schools, ninety-nine (99) teachers which represented 25% of the total population. Together with the peripatetic officer, there were therefore one hundred (100) respondents for the four zones (A, B, C, D) of the sub-metro.

Both the questionnaires and interview schedules that were employed (as the research instruments) were designed in two main parts with twenty-four items each for administration. After a pre-survey to pilot-test the instruments had been carried out with a high internal reliability co-efficient of 0.915, the instruments were considered appropriate for administration despite some minor amendments that had to be made as a result of the pre-test.

After the amendments as well as the vetting and approval by the researcher's supervisor, the instruments were ready for administration. This administration covered two weeks (i.e. from 6th to 20th June, 2003), and the co-operation of all respondents was quite absolute and very satisfactory.

Having collected all completed questionnaires back and having sorted and edited all the questionnaires, the researcher analyzed the data into detail and obtained the following results as indicated in chapter 4 of this report:

1. All sets of questionnaires (i.e. 100%) were duly completed and collected back by the researcher.
2. Seventy per cent of the respondents were female, and 30% male.
3. While 64% of the respondents were in the urban parts of the sub-metro, and 77% were aged forty or more years.
4. Whereas 80% of the respondents were professionally trained teachers, 60% had teaching experience of up to 20 years or more.
5. Respondents were generally in support of educating persons with intellectual disabilities.

Major Findings

In the case of support for the integration of persons with intellectual disabilities into the general school setting, the following results were recorded:

One could thus deduce from the general trend that the idea of integrating persons with intellectual disabilities into the general school setting was rejected by majority of respondents in the survey. Guided by the ideas of Mittler (2000),² regarding general population sampling, it could then be deduced that, although

several teachers in the Akrom Sub-Metro support the idea of educating the mentally retarded, majority of them either do not understand the principle of integration, or do not accept the concept at all.

Respondents who supported integration made the following suggestions to buttress their stand:

1. Integration would help person with intellectual disabilities to learn good social habits and skills from colleges who do not have disabilities.
2. Integrating children with intellectual disabilities into the regular education system would positively change the attitude of both non-handicapped children and those with intellectual disabilities (Hodge & Jansma (1998). Inclusive education would possibly minimise the stigma that handicapped pupils generally suffer through the attitude and behaviour of their non-handicapped peers.
3. Persons with intellectual disabilities would feel challenged to contribute their quota for the good of the community (as active members of the community) if they were integrated into regular schools and made to feel like being part of the community.
4. Integration would boost the moral of persons with intellectual disabilities, making them happy and changing their general outlook and relations with other people.
5. Through integration, persons without disabilities would appreciate the difficulties encountered by persons with intellectual disabilities and would thus tend to adopt positive and caring attitude towards such handicapped

persons.

6. Integration would lead to better understanding of the needs of persons with disabilities and challenge policy makers to address those needs.

Respondents who were opposed to the principle of integration complained about a number of its demerits or disadvantages, especially in areas where resources are scarce or would be depleted within a very short time. They also expressed fears that educational standards would fall drastically as a result of integration.

Obstacles to (or difficulties to be encountered) in the event of integration were identified as follows:

- a) Inadequate educational infrastructure like classrooms, workshops, laboratories and playing fields
- b) Insufficient numbers of trained special education teachers to cope with the volume of work required under integration.
- c) Lack of adequate logistical supplies in educational institutions
- d) Expensive and unreliable transportation system that would not be able to support movement of persons with disabilities to and from school on regular basis.

Among measures suggested (by respondents) to overcome obstacles to integration included the following.

- 1) There would be the need to expand educational facilities such as classrooms, dormitories, laboratories, workshops, playgrounds and other infrastructure facilities.

- 2) Training of teachers in special education would need to be stepped up
- 3) Adequate provision of furniture and equipment for workshops, laboratories and classrooms would be required
- 4) Cheap, effective and efficient transportation facilities would need to be provided.
- 5) Educational curriculum and structural changes would be required to facilitate integration.
- 6) A legislative framework would be required for successful integration.

Conclusions

- 1) There were more female teachers than male teachers in the urban sections (i.e. Zones A and B) of the sub-metro and this trend confirms the perception of members of the public that female teachers tend to dominate in urban schools at the basic level.
- 2) Many more female than male respondents favoured the integration of persons with intellectual disabilities. This situation tends to lend credence to the popular view that women are more sympathetic towards handicapped persons than men.
- 3) Majority of the respondents in the study area were in support of formal education of mentally retarded children, but rather sceptical of possibilities or success of their integration with their naturally normal counterparts in the regular school system; by implication, society of the Twenty-First Century empathizes with handicapped persons more than was the case in the past (i.e. in the Twentieth Century, or earlier (Avoke, 1991).

- 4) More urban respondents (67.8%) favoured the education of persons with intellectual disabilities than rural respondents who recorded 32.2%, possibly because the level of education in urban communities is higher than that of the rural communities, as far as teachers are concerned. This probably presupposes that education strongly influences people's sense of judgement and emotions.
- 5) Most respondents did not subscribe to the principle of "integration". They felt that teaching children with special needs would require very special skills, and so it should be done by experts in special schools.
- 7) Even though inclusion is seen as laudable in so many circles, its implementation will not be easy in a developing country like Ghana. This observation strongly supports a UNESCO report in 2000 that "despite the positive trends so far, making a school more inclusive is not an easy task".
- 8) Respondents declared teachers' unpreparedness to teach pupils with mental retardation; it was observed that teachers in regular schools would require teacher aids and/or special educators in every class with mentally retarded children.
- 9) Teachers are not appropriately trained to work with students with disabilities, and much of the clamour for full inclusion is based, not on empirical evidence, but on the feeling that "it is right to do so" (Yssaldyke & Algozzine, 1995).

- 10) Majority of the respondents intimated that children with mental retardation have very dissimilar learning styles from those without disabilities; this was an indication that most respondents were aware of the cognitive deficit nature of persons with mental retardation.
- 11) Teaching pupils with MR together with non-handicapped pupils in the normal school setting would cause academic retrogression on the part of the latter, as teachers would tend to concentrate on the persons with intellectual disabilities to the neglect of other pupils and students.
- 12) Older respondents favoured integration more than younger respondents. One may be tempted to feel that, as people grow older, the more sympathetic they become towards people with disabilities.
- 13) Respondents generally felt that there are many obstacles to integration, and that stringent measures are required to overcome these obstacles for the concept to gain grounds. This means that integration would require greater commitment on the part of the educational policy makers and government, if it is to be successfully implemented.
- 14) Education would equip intellectually disabled persons with employable skills, and thus make them financially and economically useful in their families.
- 15) If intellectually handicapped persons could be given formal education, they would contribute their quota to national development, no matter how insignificant..
- 16) Education would give persons with intellectual disabilities the requisite

basic knowledge to solve essential problems in their lives, e.g. going to toilet, brushing their teeth, and washing their hands before meals, so as not to pose any social nuisance.

- 17) Education of persons with intellectual disabilities would enable them enjoy self respect and economic independence in their societies.

Recommendations

From the survey conducted, one can easily deduce from respondents' responses that majority of them strongly support the formal education of mentally retarded persons, but do not support their integration into the regular school setting in the Akrom Educational Circuit. Nevertheless, for the programme to succeed in future, some measures need to be considered. Some measures suggested by respondents included the following:

- a. Educational facilities such as classrooms, dormitories, laboratories, workshops, playgrounds and general infrastructure would need to be adequately provided.
- b. There would be an urgent need to provide adequate quantities of furniture and equipment for classrooms, workshops and laboratories in all schools for integration to succeed.
- c. Teachers would need to be professionally trained in special education to enable them cope with the needs of persons with disabilities, in the event of a possible legislation making integration mandatory in all schools in Ghana.

- d. Integration would require cheap, effective and efficient transportation facilities to facilitate movement to and from all schools.
- e. Educational planners would need to embark on educational curriculum and structural changes to accommodate persons with intellectual disabilities (in particular) and the disabled (in general) for successful integration to take place.

In conclusion, the results of the survey have revealed a lot of issues concerning education and integration of persons with intellectual disabilities into the regular school setting, and it is hoped that society would benefit immensely if some or all the recommendations and suggestions made in this report could be implemented. Of special mention is the fact that teachers in the Akrom Sub-Metro Directorate of Education in the Kumasi Metropolis have demonstrated their support for the idea of educating persons with intellectual disabilities.

While not dismissing completely the possibility of “integration,” majority of respondents feel that the moment is not yet for the event to occur. Manpower requirements and teaching and learning equipment are not yet adequate for handling pupils with MR. For the phenomenon of integration to be practicable and succeed in future, special education should necessarily form part of the teacher training curriculum. It is therefore up to policy makers in education to see to its implementation in Ghana.

Suggestions for Further Research

The following findings that were made during the survey may require further research to establish the truth, or otherwise, of the issues involved:

1. Majority of teachers in urban schools were females, thus confirming the general view that female teachers tend to prefer urban to rural schools; this needs to be investigated further for corrective measures to be effected.
2. Most of the old and experienced teachers were found in urban schools whilst the rural schools had mostly young and untrained teachers. This would require further research in order to address the issue.
3. The correlation between gender and support for the integration of persons with intellectual disabilities into regular schools was found to be high in the area surveyed and may require further research.
4. Support for integration was found to be high among older respondents and one may need further investigations to establish the relationship between age and support for integration.
5. More research is required to determine the volume and type of resources that would be required in order to achieve success in integration.
6. It would not be out of place to conduct research in other selected areas of the country to ascertain the actual level of acceptance of the concept of integration in Ghana so as to guide educational policy makers and the government.
7. Further studies into other areas of integration such as transition services and rehabilitation of persons with intellectual disabilities are also very much recommended.

REFERENCES

- Aboagye, J. K. (1997). *The school curriculum, social change and national development*. UCEW: Unpublished Manuscript.
- Adima, E. (1985). *Current perspectives in mental retardation*. University of Ibadan: Unpublished Momeograph,
- Amo, R.K. (1994). *The influence of special education on teachers from training colleges in Ghana from 1991 to 1993*. UCEW: Unpublished Long Essay.
- Anson-Yevu, C. V. (1997). *History and development of services for the handicapped in Ghana*. Accra: Unpublished Momeograph.
- Avoke, M. (1997). *Introduction to Special Education for universities and Colleges*. Accra: City Publishers.
- Avoke, M. (1993a). *A theoretical approach to the study of mental retardation for universities and colleges of Ghana*. UCEW: Unpublished Monograph.
- Avoke, M. (1993b). *Special education without tears for universities and Colleges*, 1. Winneba: UCEW.
- Avoke, M. (1991). *Integrating the mentally retarded into society: Problems in the process*. University of Ibadan: Unpublished Masters Thesis.
- Avoke, M. Hayford, S., Ihenacho, I., & Ocloo, M. (1998). *Issues in special education*. Accra: The City Publishers.
- Avoke, M. Hayford, S. & Ocloo, M. (1999). *Principles and methods in special education*. Winneba: Dept of Special Education, UCEW.
- Beine-Smith, M., Patton, J. R., & Ittenbach, R. (1994). *Mental retardation*. New York: MacMillan College Publishing Co.
- Brinker, L., & Thorpe, L. (1984). *Evaluation of the integration of handicapped students in regular education and community setting*. New York: Princeton Publishing Company Ltd.

- Brown, D. (1993). *An investigation of imagery and mathematical in understanding elementary school children*. Unpublished masters thesis, Florida State University, Tallahassee.
- Brown, L., Shariga, B., York, J., Kessler, K., Strohm, B., Sweet, M., Zanella, K., Vandeventer, P., & Loomis, R. (1984). Integrated work opportunities for Persons with severe handicaps: The extended training option. *Journal of Association of Persons with Several Handicap*. 2, 262-269.
- Bushaw, M. L., & Perret, Y. M. (1992). *Children with disabilities: A medical primer*. Baltimore: Brooks Publishing Company.
- Cartwright, G. P., Cartwright, C. A., & Ward, M. (1981). *Educating special learners*. Belmont: CA Wadsworth
- Cegelka, P.T., & Prehm, H.J. (1987). *Mental retardation: From categories to people*. London: Charles E. Merrill Publishing Company.
- Chapman, E. K. (1959). *Educating handicapped children and young people*. London: University of Birmingham.
- Cozby, P. C. (1998). *Research methods in human development*. California: Mayfield Publishing Company.
- Cronin, M. E., & Patton, M. E. (1993). *Life skills instruction for all students with special needs*. Austin TX: PRO-ED.
- Cruicksmank P., & Johnson, I.J. (1978). *Education of exceptional youth*. Englewood Cliffs: Princetice Hall Inc.
- Denkyira, A. M. (1987). Individualised education programme, what is it? *Ghanaian Journal of Special Education*. 1 (2), 11-14.
- Dery, S.E. (1993). *Foundation in special education in Ghana*. UCEW: Unpublished Manuscript.
- Doll, E.A. (1971). The Essential of the Inclusive Concept of Mental Deficiency. *American Journal of Mental Deficiency*, 215, 55-64.
- Federal Government of Nigeria (1981). *National policy of education*. Lagos: Federal Government Press.
- Gadagbui, G.Y. (1996). Hearing impairment and its implications in classroom learning. *Ghanaian Journal of Special Education*, 1 (1), 23 – 30.

- Gadagbui, G. Y. (1998). *Education in Ghana and special needs of children*. Accra: The City Publishers.
- Gearheart, B. R. (1972). *Education of the exceptional child (History, present practices and trends)*. New York: University Press of America.
- Hallahan, D. P., & Kauffman, J. M. (1981). *Behaviour disorder: Handbook of special education*. Englewood Cliff, NJ: Prentice Hall Inc.
- Hallahan, D. P., & Kauffman, J. M. (1994). *Exceptional children: An introduction to special education*. Englewood Cliff, NJ: Prentice-Hall Inc.
- Hayford, S.K. (1999). *An evaluation of vocational preparation programmes of special schools for children with mental retardation in Ghana*. University of Cape Coast: Unpublished Masters Thesis.
- Hayford, S.K., & Baah, S.K. (1997). *Trends in special education*. University of Education, Winneba: Unpublished Manuscript.
- Hodge, S. R., & Jansma, P. (1998). Attitude change of physical education majors toward teaching students with varied disability types. *Clinical Kinesiology*, 51(4), 72-79
- Ivey, A., Irey, M., & Simiek-Downing, L. (1987). *Counselling and psychology*. Englewood Cliff, NJ: Prentice Hall Inc.
- Kirk, S.A. (1972). *Exceptional children*. Boston: Houghton Mifflin Co.
- Kirk, S. A., Gallagher, J. J., & Anastasiow, N. (1993). *Educating exceptional children* (7th ed.). Boston: Houghton Mifflin Co.
- Laing, R. (1967). *The politics of experience*. London: Penguin, p 64.
- Lerner, J. (1989). *Learning disabilities: Diagnosis and teaching strategies* (5th ed.). Bristol: Houghton Mufflin Company.
- Lewis, R. B., & Doorlag, D. H. (1995). *Teaching special students in the mainstream*. Englewood, New Jersey: C.E. Merrill.
- Lynas, W. (1993). *Integrating the handicapped into ordinary schools*. London: Croom.
- MacMillan, D. (1977). *Mental retardation in schools and society*. Boston: Little Brown Press.

- MacKinnon, D.W. (1978). *In search of human effectiveness*. Buffalo, New York: Creative Education Foundation.
- Marfo, K., Aidoo, R. K., Archer, M., Somuah, J., & Micah, B. (1986). *Childhood disability in developing countries (Issues in rehabilitation and special education)*. New York: Praeger Publishers.
- McCall, C. (1983). *Classroom grouping for special needs*. Stranford Upon Avon: National Council for Special Education.
- McLaughlin, J. A., & Lewis, R. B. (1990). *Assessing special students*. Ohio: Merrill Publishing Company.
- McWilliam, H. O. A. (1969). *The development of education in Ghana*. London: Longman.
- Mensah, A. (1993). *The effectiveness of peripatetic service to the mentally handicapped child*. UCEW: Unpublished Long Essay.
- Mittler, P. (2000). *Working towards inclusive education*. London: David Fulton Publishers Ltd.
- Mysak, D. (1980). *Neuro-speech therapy for the cerebral palsied: A neuro-evolutional approach*. New York City: Teachers College Press.
- Quick, T. (1995). 'Initial Teacher Training and the role of support agencies'. In Sayer, J., and Jones, W. (Eds) *Teacher training and special education needs*. London: Croon Helen Becclenham.
- Sanderson, S. (2003). 'The role of the education psychologist in the inclusive process'. In Tilsone, C., and Rose, R. (Eds) *Strategies to promote inclusive practice*. London: Routledge Falmer.
- Scheerenberger, R.C. (1987). Treatment from ancient times to the present. In Cegelka, P. T. and Prehm, H. J. (Eds) *Mental retardation: from categories to people*, pp44 – 750. London: Charles E. Merrill Publishing Company.
- Smith, R. (1993). *Children with mental retardation*. London: Woodbine House.
- Suran, B., & Rizzio, J. (1979). *Special children: an integrated approach*. London: Scott Foreman and Co.
- UNESCO (1999a). Shortage of school teachers, *International Bureau of Education*, 302, 64 – 73.

UNESCO (1999a). *Education for all*. Background documents. Dakar Framework for Action FAR

UNESCO (2000). *Including the excluded: One school for all*. Paris: Education for All (EFA).

Voeltz, R. (1984). Children's attitude towards handicapped persons. *America Journal on Mental Deficiency*, 2.

Wehman, P. (1996). *Life beyond the classroom transition strategies for young people with disabilities*. Baltimore: Paul H. Brookes.

Will, M. (1985). *Transition: Linking disabled youth to a productive future*. In *OSERS News*.

Wolfensberger, W. (1972). *The principles of normalisation in human service*. Toronto: National Institute of Mental Retardation.

Yssaldyke, J. E., & Algozzine, B. (1995). *Special education: A practical approach for teachers*, p 271. Toronto: Houghton Mifflin Company.

APPENDICES

APPENDIX 1

QUESTIONNAIRES

INTRODUCTION:

This questionnaire is about teachers’ attitudes toward mainstreaming of children with intellectual disability, and the Akrom Circuit cluster of schools in Kumasi is case studied in this regard. It aims at finding out the Perception of Teachers towards educating persons with Intellectual Disabilities in the General Education System.

You are kindly requested to respond to each of the statements (or questions) below, to the best of your knowledge. Your responses shall be treated with utmost confidentiality.

SECTION A

1. Name of School
2. Class being taught
3. Class size
4. Age
5. Gender
6. Marital Status
7. Qualification

8. Number of years in teaching

.....

9. Are you a professionally trained teacher? (a) Yes (b) No

10. Number of years in training in 'Special Education'

11. Please state in your opinion whether persons with intellectual disabilities

(IDs) should be given formal education

.....

.....

.....

12. State in your opinion whether persons with intellectual disabilities (IDs)

should be integrated with persons without

IDs.....

.....

.....

13. State two reasons why persons with intellectual disabilities should be

educated.

a)

b)

14. Explain (briefly) why persons with intellectual disabilities should not be

educated.

.....

.....

15. How many schools have solely been set up for the education of persons with intellectual disabilities in the Ashanti Region?

- (a) None (b) One (c) Two (d) Three (e) No idea

SECTION B

16. State whether persons with intellectual disabilities should or should not be integrated into the general school setting?

(a) They should be integrated(Give reasons)

(b) They should not be integrated(Give reasons)

17. What benefits are persons with intellectual disabilities likely to enjoy when they are integrated into the general education setting?

.....

18. What benefits are persons without intellectual disabilities likely to derive from learning together with children with intellectual disabilities?

(a)

(b)

19. Give two (2) disadvantages of integrating handicapped children into general education.

(a)

.....

(b)

.....

20. Indicate any two difficulties that a teacher is likely to encounter when teaching both handicapped and non-handicapped students together.

- (a)
-
- (b)
-

21. How can these difficulties in Question 14 be overcome?

- (a).....
- (b)

22. Is it necessary for a special teacher to be attached to a regular school?

- (a)
- (b)

23. State two ways in which the competence of teachers should be enhanced before integrating students with intellectual disabilities into the general education setting.

24. What conflicts are likely to arise between special educators and regular teachers when students are integrated?

.....

25. Should non-special teachers have basic knowledge of special education and why?

.....
.....

26. Suggest any two curriculum changes that will be needed if handicapped persons are to be integrated into general education?

i.
.....

ii.

27. What changes will be needed in school structures and organization if there is going to be any integration?

.....
.....

28. What name is given to the programme in Ghana that guarantees children free basic education?

.....

29. State any specific educational policy in Ghana that encourages the integration of handicapped children into regular schools.

.....
.....
.....

SECTION C

**TEACHERS' UNDERSTANDING OF THE PROBLEM OF MENTAL
RETARDATION**

30. Do all teachers have basic knowledge of special education?

- a) Yes
- b) No

31. Are teachers able to identify children with mental retardation?

b) Yes

b) No

32. Why is it necessary to identify pupils with mental retardation?
33. How do teachers attend to children with mental retardation in the classroom?
34. What is a most likely negative effect of using categories or labels to describe mentally retarded children?
35. Mention one important setback in handling pupils experiencing difficulty in school.

SECTION D

BENEFITS OF INTEGRATION

36. Would normal pupils be prepared to accept persons with MR in the same class?
37. Should persons with mental retardation be educated in special schools?
38. Will mentally retarded pupils pose any health threat to teachers and non-disabled pupils in an integrated class?
39. What benefits are non-handicapped pupils likely to derive from an integrated school setting?
40. What benefits are handicapped pupils likely to derive from an integrated school setting?

APPENDIX II

SAMPLING FORMULAE

(i) Zone A

(a) Sample size of schools

$$\begin{aligned}({}^{20}/_{50} \times 13) &= ({}^{20}/_{50} \times {}^{13}/_{1}) \\ &= {}^{26}/_{5} \\ &= 5\frac{1}{5} \\ &= 5\end{aligned}$$

(b) Sample size of teachers

$$\begin{aligned}{}^{150}/_{400} \times 99 &= {}^{150}/_{397} \times {}^{99}/_{1} \\ &= {}^{14850}/_{397} \\ &= 37\frac{1}{8} \\ &= \underline{37}\end{aligned}$$

(ii) Zone B

(a) Sample size of schools

$$\begin{aligned}{}^{15}/_{50} \times 13 &= {}^{15}/_{50} \times {}^{13}/_{1} \\ &= {}^{39}/_{10} \\ &= {}^{39}/_{10} \\ &= \underline{4}\end{aligned}$$

(b) Sample size of Teachers

$$\begin{aligned} {}^{11}/_{397} \times 99 &= {}^{110}/_{397} \times {}^{99}/_1 \\ &= {}^{10890}/_{397} \\ &= \underline{27} \end{aligned}$$

(iii) Zone C

(a) Sample size of schools

$$\begin{aligned} {}^{10}/_{50} \times 13 &= {}^{10}/_{50} \times {}^{13}/_1 \\ &= {}^{13}/_5 \\ &= 2\frac{3}{5} \\ &= 3 \end{aligned}$$

(b) Sample size of teachers

$$\begin{aligned} {}^{100}/_{397} \times 99 &= {}^{100}/_{397} \times {}^{99}/_1 \\ &= {}^{9900}/_{397} \\ &= 24.9 \\ &= \underline{25} \end{aligned}$$

(iv) Zone D

(a) Sample size of schools

$$\begin{aligned} {}^5/_50 \times 13 &= {}^5/_50 \times {}^{13}/_1 \\ &= 1.3 \\ &= \underline{2} \end{aligned}$$

(b) Sample size of teachers

$${}^{37}/_{397} \times 99 = {}^{37}/_{397} \times {}^{99}/_1$$

$$= {}^{3663}/_{397}$$

$$= 9.2$$

$$\underline{\underline{= 10}}$$