UNIVERSITY OF CAPE COAST

ASSESSMENT OF MULTIGRADE SCHOOLS IN THE ASUNAFO

NORTH DISTRICT OF THE BRONG AHAFO REGION

BY

ELIZABETH AMEKUETSE DE-SOUZA

Dissertation Submitted to the Institute for Education Planning and Administration

University of Cape Coast, in partial fulfillment of the requirements

for the award of Master of Education Degree

in Educational Administration

FEBRUARY 2009

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: Elizabeth Amekuetse De-Souza

Supervisor's Declaration

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

Supervisor's Signature:...Date: 02/00/09

Name: Dr. Y. A. Ankomah.

ABSTRACT

Multigrade schools refer to schools which combine different classes in the same classroom setting. The Asunafo North District in the Brong Ahafo Region of Ghana has 17 of such schools. Multigrade schools become necessary where teachers are in short supply or where enrolment figures are so low that they cannot justify the appointment of teachers for separate classes especially in the remote and hard-to-reach areas.

The study sought to have an in depth assessment of multigrade schools in the Asunafo North District. The conditions, operations and perceptions of schools having the multigrade system in the district were examined. The descriptive survey design was adopted for the study and data were collected from 153 respondents through questionnaires and interview guides. Dominantly used was the purposive sampling and a limited use of random sampling technique. There were both open-ended and closed-ended items in the questionnaire. Questions with the Likert scale type responses were also used.

Multigrade schools in the district were mainly opened by the District Directorate of Education and the reasons for opening them were similar to those outlined above. Learning resources were woefully inadequate. Both the trained and untrained teachers did not have the requisite pedagogical skills, innovative teaching methods and strategies for running multigrade schools. It was recommended, among others, that the District Directorate of Education should as a matter of urgency train teachers and support the schools with basic learning resources. In addition, sufficient teaching and learning materials for pupils and teachers as well as incentive packages for teachers need to be provided to improve the qualities of these schools.

ACKNOWLEDGEMENTS

DEDICATION

In memory of my father and mother.

TABLE OF CONTENTS

Page

LIST OF TABLES

CHAPTER ONE

INTRODUCTION

Background of the Study

In the "State of the Nation Address" to Parliament in January 2005, His Excellency President John Agyekum Kuffour, the President of the Republic of Ghana, declared that the vision of the Government was to develop the human resource base of the nation and make it an important tool for sustained national development. The above declaration implies that the education sector (Ghana Education Service [GES]), as a matter of duty, should spearhead the national vision by laying a good foundation that would facilitate the development of human resource in Ghana. Since the sector has a direct investment in human capital which is the critical factor for improving the productive capacity of societies as much as their political, economic and technological institutions, there is the need for a good foundation. When children are educated, poverty is reduced, the fertility rate is lowered, health is improved, the national status is raised coupled with higher productivity leading to higher income (Schultz, 1974 & Cohn, 1979). Furthermore, education enhances the status of women, promotes adaptability to technological changes and forges national unity (Juster, 1975 & Antwi, 1992).

As the economic system has become global in scope, the information technology and skills required to fully participate in them become more complex.

The future development of the nation (Ghana) therefore hinges more than ever, on the capacity of the nation and individuals to acquire, adapt and advance in relevant knowledge, skills and attitudes. This capacity depends in turn, to the extent to which the people of Ghana have attained literacy, numeracy and problem solving skills. The achievement of these socially accepted skills rests on a solid foundation of quality primary education. The Free Compulsory Universal Basic Education (FCUBE) programme has, among other things, sought to improve the quality of teaching and learning in primary schools. It is significant to note that the availability of good teachers is central to improving pupil's achievement (Ministry of Education, 2001).

On the basis of the above discussion, one can conclude that Education is the keystone to national development and quality primary education is its foundation. Sir Gordon Guggisberg, then Governor of the Gold Coast announcing his "sixteen principles" to the legislative council in 1925 Observed that: "Primary Education must be thorough and be from bottom to the top" (McWilliam & Kwamena-Poh, 1975, p.57). Kneller, cited in Owolabi (1987) notes that education is the process by which society or the nation through schools, colleges, universities and institutions deliberately transmit its cultural heritage from one generation to another. From the above observation, it can be inferred that there is a process of consciously disseminating knowledge, skills and attitudes which are beneficial to the development of the individual and society, by the school.

Lockheed Verspoor and Associates (1991) state that Primary Education has two main objectives:

1. To produce literate, numerate and reflective children with sound moral attitudes and social skills, who can deal with the problems encountered at home and in the environment and society at large.

2. To serve as a foundation on which further education is built.

The nation has instituted a number of programmes since 1951 to improve access to primary education. The Capitation Grants and the School Feeding Programme are the recent interventions by the government, aimed at improving access to primary education. In the Asunafo North District the enrolment increased from 25,064 in 2005/2006 to 30,736 during the 2006/2007 academic year as a result of the Capitation Grant. However, this quantitative improvement has not led to the desired qualitative achievement, especially in the rural areas. A study of the 1977 Core Welfare Indicators reveals that rural areas lag behind in quality education in this country inspite of increase in enrolment (Daily Graphic October 16, 1988 p. 1) cited in Awuku (2001). The results of the 1992-1994 National Criterion Referenced Tests in BS6 showed how serious the problem of quality schooling was at the primary level. Fewer than five (5) percent of the pupils tested, demonstrated command of English Language and Mathematics at acceptable levels of achievement (Ministry of Education [MOE] Basic Education Sector Improvement Programme).

Furthermore, results from the Criterion Referenced Test (CRT) indicate that only 8.7% of the pupils in the public schools reached a mastery level of 60% in 1999 in English (The Republic of Ghana, 2002). Similarly, in the Performance Monitoring Test (PMT), the percentage of pupils attaining a score of 55 percent and above in English in Primary six (6) in 2000 was 23.4 percent (The Republic of Ghana, 2002). Though these figures represent the best performance since 1992 and 1998 for CRT and PMT respectively, (Refer to Table 1 and 2) they are disturbing and an indictment on the quality of education. This is an indication that for Ghana to achieve the desired quality in primary education, a lot has to be done to improve the performance of teachers and the schools.

Table 1

Criterion Reference Test Results 1992-1999

Subject	School	1992	1993	1994	1995	1996	1997	1998
English	Public	2.0	3.0	3.3	3.6	5.5	6.2	8.7
	Private	-	-	51.4	-	56.5	68.7	-
Mathematics	Public	1.1	1.5	1.5	1.8	1.8	2.7	4.0
	Private	-	-	31.7	31.0	31.0	40.1	-

Source: GES, 2000 in Report on Review of Education Reforms in Ghana, 2002

Table 2

Performance Monitoring Test: Change in Performance

Class	English				Mathematics			
	Mean score		% Satisfactory		Mean score		% Satisfactory	
	1998	2000	1998	2000	1998	2000	1998	2000
P1	20.95	-	12.92	-	39.56	-	42.89	-
P2	32.14	27.29	24.93	20.32	32.73	48.57	30.92	53.78
P3	28.04	34.90	17.28	27.20	24.43	49.03	13.50	56.71
P4	19.63	30.17	8.10	28.08	19.12	32.27	7.39	20.47
P5	28.25	30.80	14.80	22.90	13.94	25.73	4.69	15.89
P6	34.18	34.49	21.84	22.03	13.94	23.41	2.77	10.50

Source: GES, 2000 in Report on Review of Education Reforms in Ghana, 2002

1. Percentage of pupils attaining a score of 55% and above in English

2. Percentage of pupils attaining a score of 55% and above in Mathematics

The importance of efficiency and effectiveness in the educational process cannot be over -emphasized. It is in the school and classroom that educational inputs are transformed into output and outcomes. It is here that formal learning occurs. It is only when the school as an institution is working well that the best efforts in reform strategies have their full intended impacts. Educational efficiency according to Akangbou (1987), is the relationship between the outputs of the education system and the inputs used in producing such outputs. This definition implies that in considering educational efficiency, one is interested in what goes on while inputs are used. In other words we are concerned with how much inputs are used during the process of education, how much outputs have

5

been produced and what outcomes were obtained. Educational efficiency can therefore be assessed from internal and external perspectives (Thomas, 1990). When the internal efficiency of a school is investigated, the concern is with how many pupils were admitted into the school and how many were the outputs. An educational output is the person who successfully completes a given educational cycle. The internally efficient education system therefore is the one which turns out graduates without wasting student's year (Thomas, 1990).

Educational efficiency is the degree to which the educational or school output is adapted to the needs of the economy and society (Thomas, 1990). The graduate of an internally efficient educational system may still not be acceptable to future employers and they may gain little satisfaction from the system's standards. Sometimes a successful completer is not suitably prepared even for the next stage of education within the system. This is usually the case with poor quality education.

Quality education involves quality inputs, quality delivery process and quality outputs (The Republic of Ghana, 2002). It also includes contents that are reflected in relevant curricula materials for the acquisition of basic skills and knowledge especially literacy, numeracy and skills for life. Furthermore, quality education requires that every pupil demonstrates the acquisition or mastery of a minimum level of defined competencies in all subject areas, thereby reducing the failure rate. (Ministry of Education and Sport, 2005).

The question is, how can pupils acquire mastery in defined competencies when they do not have teachers to teach them? Teachers are without doubt, the most important resources in delivering quality education but like all resources,

6

they are scarce and costly (Ministry of Education and Sport, 2005). If the fundamental goal of the primary school is not only to enrol more pupils but also to improve on the quality of its graduates, then how effective are schools which combine two or more classes due to scarcity of teachers? Can pupils from these schools meet the human resource needs of the country?

From Asunafo North District Education Office (2004) report that enrolment increased every academic year from 1998/1999 to 2004/2005. However, the increase in enrolment has not led to a corresponding increase in the number of teachers in the rural and difficult to reach communities. Over the years, the system of teacher deployment has resulted in a mismatch between supply and demand of teachers in schools which are in the remote areas of Ghana (Ministry of Education and Sports, 2005). Teachers normally refuse postings to such areas because of the bad roads and lack of basic necessities of life like decent accommodation and potable *water* supply. It is no wonder that the 1977 Core Welfare Indicators revealed that rural areas fell behind in quality education despite the expansion in enrolment (Awuku, 2001).

To address the inadequate staffing situation the Asunafo North District as well as other districts in the Brong Ahafo Region of Ghana resort to the mulitgrade classes. The situation of inadequate teachers was aggravated in 2005/2006 academic year when the Capitation Grant was introduced. More pupils were enrolled without adequate teachers to teach. There were over two hundred staff vacancies (Asunafo North Education Office, 2005). The only solution was to combine two or three classes with one teacher to teach. Examples are Anwianwia L/A Kindergarten (KG) 1 and 2 combined, Ahantamo L/A Primary combining

KG I and Basic 1 on one hand and Basic 2 and 3 on the other hand. Alhajikrom L/A Primary sited in a farming settlement has to do with a teacher for Basic 4, 5 and 6 with 12 pupils (Asunafo North District Education Office, 2005).

According to the monitoring and supervision reports and from my own observation as the District Director, the inadequate supply of teachers renders teaching and learning in these schools ineffective. The Ghana Education Service (1997, June 16) stated that primary schools with low enrolment should arrange to transfer pupils to nearby schools within three kilometers (3km). Special concession should be sought for schools to operate where no school exists in the vicinity. It is to be noted that the minimum enrolment for a single class school is twenty.

In the light of the above guidelines, the Asunafo North District Education Oversight Committee decided to merge some of the schools with low enrolments as a way of addressing the inadequate staffing situation in the schools. However, most communities fiercely opposed the merger. In addition, the considerably long distances between some of these primary schools were beyond the GES range norms of three (3) kilometres. Also, natural barriers like streams, rivers, vast forest reserves and conflicts between some communities would not allow for the merger of the schools (Asunafo North District Education Office, 2005).

Consequently, the district had no option than to combine the classes amidst sceptism from some stakeholders. They doubted the effectiveness of the combined classes. Are multigrade classes effective? Are they achieving their goals? The effectiveness of the multigrade schools should be evaluated by the extent to which they achieve the stated goals and objectives - increasing not only

8

access to primary schools but improving the quality of primary education which will serve as a foundation on which further education is built and the development of the human resource for national development.

The report in The Republic of Ghana (2002) describes "Multi-class teaching as a system whereby two or more classes are put together and taught by one teacher due to lack of teachers" (p.34). Brunswic and Valérien (2004), point out that the end of the nineteenth century has seen majority of elementary schools with only one class. However in the late 1960s attempts were made to eliminate the small schools for reasons of increased educational efficiency and better management of resources and the model was gradually replaced by what has now become the conventional model: a school with five or six homogenous grades or mono-grades. From the 1980s the trend was reversed and we have a revival of the small schools. Thus the model of the One-teacher School persisted in both developed and developing countries; in Europe, North America France, Asia Pacific Region, Africa and Latin America.

Since the world declaration on Education for All (EFA) in Jointien in 1990, the percentage of schools having multigrade classes has significantly increased over the last ten years. As Little cites in Brunswic and Valérien (2004), if education for all is to be achieved it is vital to promote the creation and maintenance of schools with multigrade classes. Although Europe and North America achieved universal Primary Education largely through multigrade schools, in developing countries, multigrade schools have developed as a necessity. Ironically, while multigrade schools could be a solution to the education of rural pupils, the government of many African countries tend to focus

9

on improving conventional schools, often leaving the development of multigrade schools to local initiatives (UNESCO 2003).

In Ghana, multigrade classes total 652, constituting 5.3 % in this category (The Republic of Ghana, 2002) Out of the ninety-one primary schools and ninety-two kindergartens, twenty primary and fourty-five kindergartens have some classes combined in 2005/2006 academic year (Asunafo North District Education Office , 2005). In the 2006/2007 academic year, the National Youth Employment Programme employed one hundred and fifteen Community Teaching Assistants. As a result, the multigrade schools have reduced to seventeen. Thus as far as Asunafo North District is concerned the multigrade school system has therefore remained an inescapable feature of schooling in rural and sparsely inhabited and hard to reach environments. In Ghana two conditions necessitate the use of the multigrade school system:

1. Multigrade school system is employed to provide access in rural communities with low or declining populations (Brunswic & Valérien, 2004). As a result of low populations many rural communities do not have sufficient number of pupils to support monograde schools (conventional model). Meanwhile, the school remains an important part of the social life of the community. More importantly, the FCUBE implies that it is unacceptable to deny children basic education, because they are coming from areas which are rural and not easily accessible and where population is thin and scattered as pertains in Alhajikrom L/A Primary School in the Asunafo North District, for example.

2. In addition, multigrade school system is used to maintain full educational success in the light of budgetary and human resource constraints such as inadequate teachers, school infrastructure, and furniture (Brunswic and Valérien, 2004). An example is Anwiawia L/A Kindergarten where almost one hundred pupils of KG I and KG2 are combined in a small classroom with few benches and one teacher (Asunafo North District Education Office, 2006).

Statement of the Problem

Multigrade teaching is a procedure which aims at making primary education accessible to children in remote underserved and low populated areas. It is also used to promote education in the light of budgetary and human resource constraints. The Asunafo North District in the Brong Ahafo Region of Ghana still has pockets of multigrade schools in some communities which are rural and difficult to reach in some cases, and others with low population. In Alhajikrom and Ahantamo for instance, the multigrade teaching arrangement was made because of poor enrolment. Alhajikrom serves some farming settlements which are scattered. In Ahantamo, the multigrade system was chosen because the community members were not prepared to send their children to Mpamase which is less than three kilometers (GES range norm). In Anwianwia and Edwinase L/A schools the Kindergarten one and two are combined not because of low enrolment but because of budgetary and human resource constraints. Some of the teachers who teach pupils in these multigrade schools are trained while others are not trained. In 2005/2006 the government supplied all schools with the core textbooks and the multigrade schools also benefited from these supplies, except the KGs.

11

Bray (1987), Brunswic and Valérien (2004), Thomas and Shaw (1992) and Schiefelbein (1990) state that operating multigrade system involves more than simply combining more than one class in one classroom under one teacher. The system requires well-trained and qualified teachers who possess an array of pedagogical techniques and must be conscientious. The teachers must have a minimum package of teaching and learning materials and be supported at the national, regional, district and community levels. The schools should also be acceptable to the rural communities for whom the schools were built. The communities should also perceive the schools as capable of providing their children with quality education and not wasting the time of the children. Schools which fail in these respects have little chances of success (Thomas & Shaw, 1992). On the basis of the above measurement, when one looks at the state of the multigrade schools in Asunafo North District in the Brong Ahafo Region of Ghana, one wonders whether the schools measure up to the standards described above. The answer to this question can be ascertained through an indepth assessment into the operation of multigrade schools in the Asunafo North District.

Purpose of the Study

The study sought to have an indepth assessment of multigrade schools in the Asunafo North District. The condition, operations and perceptions of schools having the multigrade system in the district were examined. Specifically the study addressed the following objectives:

1. The rationale for combining classes in Asunafo North District

2. The initiator of multigrades within the district

3. The learning resources committed to the teaching of multigrades in the schools

4. Running/organization of multigrades in the district

5. The perception of people with regard to multigrade teaching arrangements

Research Questions

The study was guided by the following research questions:

1. What is the rationale for combining classes in Asunafo North District?

2. Who initiated the operation of multigrades in the district?

3. What learning resources are committed to the teaching of multigrade in the district?

4. How are multigrade classes organized in the district?

5. What are the major stakeholders' perception of multigrade teaching arrangements?

Significance of the Study

The focus of the study is an examination of the operations of schools with multigrade arrangement in the Asunafo North District. The study will therefore serve as a contribution to the body of existing literature related to multigrade school system in Ghana. This will serve as a guide to researchers and to provide data upon which further studies could be conducted. Furthermore, policy makers and educationists will benefit a great deal from the study. Although the Capitation Grants and School Feeding programme have brought about significant increases in the gross enrolment of schools, the increase in enrolment has brought about its own challenges of getting more teachers, infrastructure and teaching and learning

13

materials to ensure effective education. Policy makers no doubt will have to find solutions to these challenges, and this study will serve as a spring-board for resolving some of the challenges posed by the Capitation Grant policy. Europe and North America were able to achieve universal primary education through multigrade schools. Many countries in Latin America and Asia are achieving successes with the multigrade approach, which is increasing not only enrolment, but also improving performance and reducing absenteeism among pupils in rural areas (Brunswic & Valérien, 2004).

In Ghana, the Youth Employment Scheme has been launched to fill some of the staff vacancies in the classrooms. One wonders how these untrained teachers who also do not have any form of orientation, could teach effectively. Ironically, while multigrade classes could be a solution for educating rural people, in many African countries, governments tend to focus on improving conventional schools, often leaving the development of multigrade schools to local initiatives (Brunswic & Valérien,, 2004).

This study will therefore bring to the forefront, the conditions and prospects of these multigrade schools and this will facilitate not only educational policy decisions on multigrade schools but will also justify its inclusion in the curriculum of teacher training institutions and finally leading to the building of more effective multigrade schools. Although the study is limited to the Asunafo North district in the Brong Ahafo Region, other districts, regions or the entire nation, together with countries of the West African sub-region with similar conditions will find the results useful in their education planning and delivery programmes.

14

Delimitation of the Study

In the Asunafo North educational set up, it is the KGs and primary schools (BS1 - BS6) that operate the multigrade classes. Therefore the study is limited to the primary schools in the district. As a result of the introduction of the National Youth Employment Programme and the National Service Volunteer Teachers' Scheme, most staff vacancies that existed in the schools have been filled with 115 untrained teachers and five retired teachers. The number of multigrade schools has therefore reduced drastically in the district. Thus the remaining seventeen schools situated mainly in the underserved committees would be used for the study. Also, most of the members of community structures like the District Education Oversight Committee (DEOC), District Education Planning Team (DEPT) and School Management Committees (SMCs) which were instituted during the 1987 Educational reforms were dormant. Thus a few of them who were around were used instead of using all the members.

Limitations

This study has certain limitations resulting from constraint of time and funds. Asutifi and Asunafo South Districts which were carved out of Asunafo North District and share boundaries with the district still have pockets of multigrade schools which could be added but because of the limitation of funds and time the study was restricted to Asunafo North. Also, one year duration should have been the best to assess thoroughly the state of multigrade schools in the district but due to the constraint of time, only the third term of the 2006/2007 academic year was used for the assessment. More parents of pupils in the multigrade schools should also have been interviewed but since most of them are

15

illiterates and unavailable during the day time because of their rural occupations, the number of parents were reduced to forty-four Another limitation is that the pilot test data was not subjected to any rigorous statistical data analysis. Seriously missing is the data on multigrade schools in the district. Statistical data on multigrade schools is limited as they have not been catered for in the school census and even though it is practised in the district there is no data on them. Finally, it will also be of interest to compare the performance of multigrade schools and monograde schools in the district; however, these were not possible due to limitation of time, funds and also because of poor record keeping; scores for continuous assessment for previous terms were not available. This could be another area to be studied altogether.

Definition of Terms

Capitation Grant - is money paid by the state for the school fees of each pupil in the Basic school to ensure that all pupils of school going age go to school as enshrined in the Constitution of Ghana , under the Free Compulsory Universal Basic Education. Presently GH 3 is paid per each child in Basic school.

Criterion Referenced Test (CRT) - The Ministry of Education conducted this test from 1992-97 in Mathematics and English to measure and monitor the performance of pupils in Primary 6. The test was administered to 5% sample of Primary Class 6 pupils in both public and private schools.

Heterogeneous/Monograde/Single Grade School – A school in which one teacher takes one class.

Management Unit – This refers to the Administrative System or Authority which runs the school. For example Local Authority, Presbyterian, A.M.E. Zion Armed Forces and Police.

Multigrade School – A School in which two or more classes are combined under the direction of one teacher because there are fewer teachers than the number of classes available in the school.

Performance Monitoring Test (PMT)- It is an instrument used to measure and monitor literacy and numeracy of pupils. GES used PMT to measure performance of primary school pupils from Class 1 – 6 and to find out whether the minimum standard set in Mathematics and English has been attained. This test was introduced in 1998.

Organization of the Study

The study is organized into five chapters. Chapter one deals with the background to the study followed by the statement of the problem. Other items embodied in this chapter include purpose of the study, research questions, significance of the study, delimitations, limitations and definitions of terms. The organization of the study ends the chapter.

Chapter Two focuses on the review of related literature. The first aspect deals with the introduction to the chapter followed by overview of multigrade schools. The next aspect discusses the rationale for multigrade schools, then the merits and demerits of multigrade schools also followed. Alternatives to multigrade school system and perceptions of people on multigrade class

17

arrangement in the world today was also included. This chapter ends with the summary of the literature review.

The methods used for the study is found in Chapter Three. This chapter follows the following pattern: an introduction, research design, population, sample and sampling technique, research instrument, pilot testing of instrument, data collection procedure and data analysis. Chapter Four consisted of results and discussions while Chapter Five is devoted to the summary, conclusions and recommendations.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

The implementation of the Education for All (EFA) programme adopted at Jomtien in 1990 which was assessed and confirmed by the world Education Forum in Dakar in 2000 entails among other things, finding appropriate solution to the provision of primary education in rural areas where the population is thin and scattered and in areas that are not easily accessible (Brunswic & Valérien, 2004). He further emphasises that multigrade schools are often the only way to ensure quality education in rural and remote areas with low and scattered population. Ghana is committed to the Millennium Development Goals of EFA and has a vision of achieving universal primary completion by 2015 and the Ministry of Education Science and Sports (MoESS) is therefore under increasing pressure to use result-oriented approaches to demonstrate and produce results that will improve quality delivery of education especially in public Basic Schools in the country most of which are found in rural areas (Ankomah, 2006).

Brunswic and Valérian (2004) stressed that multigrade schools are not a second class solution but are often the only way to ensure quality education in rural and remote areas. However in developing countries multigrade classes generally have a poor image because they are under-endowed with physical and human resources and no consideration has been given to their specific nature. The underlying consideration of the study is that, if multigrade teaching is seen not only as improving access to education but also as a solution to bring quality

19

education to rural population, then multigrade schools as they exist in the country should be examined. The review of literature therefore attempted to cover examination of theoretical and empirical consideration of the following.

i.   Overview of multigrade schools.

ii.   Rationale for multigrade schools.

iii.   Merits and demerits of multigrade schools.

iv.   Operating effective multigrade Schools.

v.   Alternatives to multigrade school system.

vi.   Perceptions of multigrade classes is the world today.

Overview of Multigrade Schools

The multigrade structure is known by various names in different countries; these include composite classes, unitary or combination classes, double classes and mixed-age classes, one-room schools multi level classes and family class. (Bray, 1987; Châu, 1969; Thomas & Shaw, 1992; Veenman, 1995). Thomas and Shaw (1992) define multigrade schools as: "those which combine students of different ages and different abilities in one classroom. They take a wide variety of organizational forms ranging from groupings of several formal grade divisions under the direction of one teacher to a completely non- graded learning environment" (p.1)

Shafritz, Kroeppe and Soper (1988) state that multigrade is a class including more than one grade in which pupils may be identified by grade level. From the above definitions, it can be deduced that multigrade is a class in which pupils of two or more adjacent grade levels are taught in one classroom by one teacher for most if not all of the day. For instance a teacher combining classes two

20

and three. Whereas a teacher in a school with six homogenous grades is responsible for pupils in the same class with almost the same age, a teacher in multigrade is responsible for pupils of different classes, ages, capabilities and levels of attainment. There is therefore an obvious contrast between the school with six homogenous grades and the school with multigrade classes.

Multigrade schools occupy a unique place in the history of education. Barnard (1971) gives on account of the large and organized scale of the multigrade teaching. He contends that, in the late 18th century, there was a growing recognition of the neglect and danger into which the children of the poor in England had fallen, and a search for some means to remedy this situation began. A solution to the problem was discovered in the 19th century. A scheme which uses the method known as monitorial or mutual system was developed to provide popular education on a large scale in England. In its essence, the method consisted in setting children to teach children. He argues further that the system was not entirely new and must have been used in families from time immemorial and put into practice at the public schools (Barnard, 1971). But the introduction on a large and organized scale is due to the influence of Andrew Bell and Joseph Lancaster (Barnard, 1971).

History also recounts that Bell (1753 – 1832) a reverend minister serving as a missionary in Madras was forced by shortage of staff in his school to put senior pupils in charge of junior classes. When he returned to England his ideas on his experiments were tried successfully in some parochial charity schools. Meanwhile, Joseph Lancaster who was a Quaker opened a private school in Southward in 1898, as the numbers increased, he moved to larger premises in

21

Borough Road and because of lack of finance he had to use monitors as a means of helping to keep all pupil occupied. A monitor was in charge of a group/class of nine pupils. The duties of the monitors included among other things, checking on incidence and causes of absenteeism of pupils, periodic teaching and promotion of pupils and distribution and repair of materials – slates, writing pads and pens. There was a monitor general for the school; he was the headmaster and was in sole charge of the school. He taught the monitors only and they passed on the instruction which they received. Models of the original school of Lancaster which one can describe as a single teacher school became popular in the United States (Barnard, 1971).

At the end of the 19th century the majority of elementary schools had only one teacher. In the 20th century this model was gradually replaced by what has now become the conventional model: a school with five or six homogenous levels or grades. Attempts were made in the late 1960s to eliminate the small schools for reasons of increased educational efficiency and better management of resources, but as from the 1980s the trend was reversed and there is now a revival of small schools all over the world (Brunswic & Valérien, 2004). In the second half of the 19th century in both Europe and North America, multigrade was the dominant organizational model in primary education. With the advent of the industrial revolution and urbanization, the school with the single teacher was gradually replaced by the education system that has become the norm, with enrolments by age and homogeneous grades. However the school with the multigrade or the one teacher school persisted in rural areas (Brunswic & Valérien, 2004).

22

France instituted universal primary education in the late 19th century. Compulsory primary education was established by the Act of 16th June 1881 which laid down the principle of free public education (Brunswic & Valérien, 2004). Of the near total of 52,000 public schools in existence at the turn of the century, 45,000 (nearly 90%) were one teacher schools. This percentage dropped only slowly in 1939, it was still close to 60%. In 1940 the one-teacher school contained all the levels from kindergarten to the division of pupils reaching completion of their elementary education. By 1990 such schools accounted for about 22% of French schools (Brunswic & Valérien, 2004). The International Bureau of Education (IBE) comparative research on access to education in rural areas conducted from 1959 to 1960 confirmed the worldwide importance of small schools in the 1950s. The research showed that 58 countries used the one-teacher school system which is a very high proportion (Brunswic & Valérien,, 2004).

Global statistics are not easily obtained because in many countries multigrade classes have a low profile and do not appear as such in school statistics. Nonetheless, there is prevalence of multigrade classes in the world, even though they are underestimated (Brunswic & Valérien, 2004). A recent overview by Little (2001) in (Brunswic & Valérien, 2004) posits the presence of multigrade classes in various countries in Europe, North America, Asia-Pacific region, Africa and Latin America. The percentage of multigrade schools was put at 30%.

The multigrade school is still important as an organizational form in both developed and developing countries. Multigrade schools provide quality service in rural and small communities of Scotland, the Scandinavian countries, Canada

23

the mountainous areas of Pakistan, in France, United States, Britain, Netherlands, Guinea, Zambia, and Niger. There are about 420,000 multigrade schools in China, 20,000 in Indonesia and 1540 in Malaysia. Eight percent of schools in Philippines are multigrade; 61% of primary schools in India have only one or two teachers. Twenty percent of Mexican primary schools are unitary offering all six grades but one teacher (Thomas & Shaw, 1992).

In Burkina Faso, multigrade schools were introduced in 1992 and it accounts for 36.0% of all schools in the country. Equitorial Guinea currently has 586 one teacher schools. In Zambia the most important impact of multigrade schools has been to provide a complete primary education in places where there were no schools at all and to improve the pass rate between the two highest levels. In Lesotho 50 to 60% of primary schools have a single teacher and multigrade classes (Brunswic & Valérien,, 2004).

In Ghana, it can be said that multigrade schools have been in existence as far back as the introduction of formal education in this country. It is referred to as multi-class teaching whereby two or more classes are put together and taught by one teacher due to lack of teachers. In many cases, untrained teachers taught such classes. Even though some educationists regard this system as ineffective use of contact hours, multigrade schools constitute 5.3% in Ghana (The Republic of Ghana, 2002) In Ghana there are also special situations such as that of nomadic peoples or migratory communities where the teacher travels with the group, a mobile school with a single class called the shepherds' school (The Republic of Ghana, 2002).

Rationale for Multigrade Schools

Thomas and Shaw (1992) outline four interrelated factors that necessitate the use of multigrade schools. These include:

i.   To maintain educational services in small towns or villages with declining intakes

ii. To provide completed primary education cycle.

iii. To make efficient use of scarce inputs.

iv. To improve the effectiveness of educational delivery.

In Ghana, the minimum class size for primary school should not be less than 20 pupils (Ghana Education Service, 1997,). The guidelines also state "where there is low enrolment with less that 20 pupils per class in primaries 2, 3, 4, and 5 should be combined to have a teacher". This is to maintain educational services in small towns and villages with declining student intakes and also to provide completed primary education cycle. As a result of declining population many small towns and villages (particularly in the industrialized nations) no longer have a sufficient number of students to support single grade schools. Yet the school remains an important part of the social and cultural life of the towns (Thomas & Shaw, 1992, Bray, 1987). Multigrade Schools are therefore viable options in areas of low population density. Multigrade schools offer economy in the above situation by promoting combination of grades under the direction of one teacher in one classroom. Both Veenman (1995) and Mason and Burns (1996) view multigrade structures as arising from administrative and economic necessity.

To make efficient use of scarce inputs, multigrade may be used to maintain full educational services in the light of budgetary and manpower

25

constraints. Many schools in the districts of U.S. combine classrooms as cost-cutting measures. In countries where shortages of teachers and classroom space exist, multigrade-teaching techniques can help assure that, maximum use is made of resources. At the same time Multigrade schooling provides an opportunity to re-allocate teacher resources from complete schools which can no longer attract sufficient students due to migrations in some areas (Commonwealth Secretariat, 2005). This is usually the case in Ghana when migrant farmers leave an area to another location sending away their children (Asunafo North District Education Office 2004). Multigrade classes are therefore cost effective. MOE in most countries have set a ratio of Pupils to a Teacher (PTR). In Ghana the PTR for KG is 1:30, Primary 1:35 and JSS 1:22 (Ministry of Education and Sprots, 2005).

To improve effectiveness of education delivery, Multigrade teaching techniques have been used to improve the quality of education in both multigrade and single grade schools. For instance Columbia's Escuela Nueva Programme was successful in raising primary students' achievement in Mathematics and Spanish as well as positively affecting indicators of creativity, self image and socio-civic behavior (Psacharopoulos, Rojas & Velvez, 1993). It is important to note that the conditions discussed above are also applicable to Ghana.

The 1997 GES Guidelines on school and class size, norms have pegged the minimum school enrolment for a multiple class single-stream school at 40, while for a single-class school the number is 20. The norms for a class are 46 for a maximum size and 20 for a minimum size (Ghana Education Service, 1997). According to the guidelines, schools with very low enrolments should arrange to transfer pupils to nearby schools within three (3) kilometers. Where no school

exists in the vicinity a special concession should be sought for the school to operate (Ghana Education Service, 1997). It is significant to note that though the nation has trained and continues to train a lot of teachers, teacher supply is still inadequate especially in rural districts and there is the need to distribute teachers equitably among the schools. Furthermore, sometimes rural schools do not have the basic amenities and so many teachers do not want to work in such areas. Thus, in these areas, there is often a severe shortage of teachers (Commonwealth Secretariat, 2005).

Some small communities also do not want the children to leave home because members are afraid that the children will lose some of their community's traditions and values (Commonwealth Secretariat, 2005). Minority cultures often prefer to educate their children in their own environment so that they can maintain and safeguard their cultural practices, language, religion and political parties. (Commonwealth Secretariat, 2005). Where children are too young to travel to the larger school on their own and transportation to distant schools is a problem due to high cost, limited availability and/or bad roads multigrade teaching is a good alternative. Even though Multigrades in most cases are established as a result of necessity, sometimes they are established due to deliberate choice made for political or educational reasons (Brunswic & Valérien, 2004). Political reasons for establishing multigrade relate to regional development and efforts to stop the flight to the cities (that is the desire to maintain a school site in a given locality (Brunswic & Valérien, 2004). When the choice is made for educational reasons it is made by teams of innovative teachers (Brunswic & Valérien, 2004). Multigrades are found regardless of the status of the school: public or private.

Multigrade teaching may be governed by an overall plan adopted by the political and administrative authority and embodied in statutory instruments or it may be a matter that concerns schools individually either in a statutory or on their own initiative (Brunswic & Valérien, 2004).

Multigrades are also used to cope with a provisional situation when a primary school first opens. It does not offer all of the grades planned, and the completed grade structure is generally established little by little (Brunswic & Valérien, 2004). In practice, to open a new school offering all grades with monogrades, a number of conditions must be met such as a large school-age population in the area, strong social demand for education and availability of premises and teachers. Thus in a locality, three-class schools will be set up in which each class covers two consecutive grades with recruitment every two years or two consecutive grades recruited annually co-exist in the same (twinned classes), in another a single level will be recruited every six or seven years in order to retain the one-class, one –level structure. The term multigrades thus covers a great variety of situations and the way pupils are grouped depends on various factors according to the nature of activities (age, height, and sex for singing, physical education, crafts or according to the subjects taught).

Merits and Demerits of Multigrade Schools

A number of arguments have been advanced in favour of the multigrade school. Schools are always major centers for social development and maintaining rural schools is important in building village identity and cultural life (Bray 1987, Thomas & Shaw, 1992). Multigrade schools are efficient means of providing basic education in thinly populated areas and therefore efficient means of utilizing

28

scarce educational inputs such as teachers, classroom and teaching and learning materials. If pupils have to travel long distances each day to attend a large school they have to spend money on transport and they get exhausted. In the rural areas they have to walk for long distances through forests and sometimes crossing rivers or streams which could be dangerous. In an area without a good transportation system it may be only possible to run large schools if boarding facilities are available. Small schools are nearer the homes of pupils so there will be no need for boarding facilities (Bray, 1987; Thomas & Shaw, 1992). But in the rural setting the boarding schools are not affordable.

Multigrade school system ensures a better distribution of schools so that, no child is denied initial access to school or is discouraged enough to drop out because her home is not within easy reach of the schools. Multigrade schools can benefit girls by expanding available school spaces and by helping to ensure that schools are located closer to home (Thomas & Shaw, 1992) and as such are not open to any hazard, for instance, sexual harassment. Through the multigrade school system pupils "Learn to Learn" and learn to teach through independent inquiry and peer tutoring. Stressing the importance of peer tutoring, Commonwealth Secretariat (2005) assert that student teaching promotes social and political development. The student directs at a particular time and at another time he is directed. Also as a result of the smallness of the size of the school and class, individual pupils and teachers assess the students and adopt appropriate teaching strategies. Gutloff (Ed) (1995) recalls that multigrades put kids in settings that mimic real life. There is the development of social skills. The student

29

learn to interact positively with peers at different age and ability levels and this understanding prepares students for real life situations.

Commonwealth Secretariat (2005) takes a positive view of multigrades. It echoes that although critics may point out the disadvantages of teaching in a multigrade setting, there are positive achievements by dedicated and enthusiastic teachers. "Multigrade teaching allows teachers to make use of techniques that build on the strengths of pupils in those classes and that help them to work independently at their own pace" (Unit 1 p. 16). It added that this technique can increase learning achievement and can provide opportunities for pupils to feel secure and appreciated. Thus low achieving as well as high achieving, younger children and older children can gain in a multigrade setting. The low achieving pupils have continuity in teaching which is not possible in a single grade setting where pupils move to another class with a new teacher at the end of the year. Cross-age grouping can provide a challenge for bright pupils particularly if the teacher provides opportunities for independent work. Commonwealth Secretariat (2005) explains further that younger children are able to absorb knowledge from older pupils as they are being taught. Also it remarks that when older pupils are with younger pupils they are encouraged to work harder to "stay ahead" of younger classmates. The older pupils also gain confidence when the teacher occasionally gives them a responsibility to help younger or less able pupils in their classroom. Europe and North America were able to achieve universal primary education, largely through multigrade schools. Many countries in Latin America and Asia are achieving success with the multigrade approach which is increasing enrolment, improving performance and reducing absenteeism in rural

30

areas. One example is the Escuela Nueva programme in Colombia, which increased enrolment in rural areas by 45 % between 1988 and 1996 (Brunswic & Valérien, 2004).

The major arguments raised against the mutigrade schools are: Demands on teacher's time and organizational capabilities are high. Mason and Burns (1996) make reference to greater stress experienced by teachers as a result of the greater work load and time consuming planning. They need special training and materials to perform their jobs effectively. Opening effective multigrade school system therefore requires special efforts. If these are lacking, student achievement may fall (Bray, 1987; Thomas & Shaw, 1992). Multigrade schools may tend to concentrate on only some subjects in the curriculum because of time constraints. This makes the curriculum become limited (Bray, 1987). In this situation there could be deficit effect on the pupils when they get to the Junior Secondary School. Bray (1987) asserts that in small schools, the quality of education is more dependent on the quality of individual teachers than is the case in big schools. In big schools the combination of the good and bad teachers results in an average quality of teaching, but in a single-teacher school the personality of that individual makes or breaks the whole educational process". There is also much pressure on pupils to work independently. In a situation where most pupils cannot read and write, it becomes more difficult to operate effective multigrade school system.

Furthermore teachers often feel isolated both professionally and socially (Commonwealth Secretariat, 2005). Multigrade schools have few teachers and are often located in isolated communities. Teachers in these schools may have very

31

little contact with other adults and may miss opportunities to share experiences with other teachers. There is also the challenge of the attitude of parents, community and other stakeholders. Some of them view multigrade as waste of time. They believe that teachers must be in front of the class pouring knowledge into the heads of their pupils. Where stakeholders are not sensitized, it worsens the case and parents are unco-operative and unwilling to give the needed support (Commonwealth Secretariat, 2005).

Operating Effective Multigrade Schools

Multigrade teaching is generally taken to be a set of techniques that allow a teacher to deliver effective instruction to groups of pupils of various ages and capabilities (Thomas & Shaw, 1992). For Schiefelbein (1990), multigrade teaching is an "unassembled educational kit" used to improve the quality of basic education. He identified some essential inputs that promote effective multigrade teaching. These include a teacher prepared to act as facilitator of learning rather that a source of knowledge, effective teacher training, teacher resource centers, self-directed instructional text books, teacher guides, learning corners, classroom libraries, appropriate furniture (flexible) group work, peer tutoring and activities designed to enhance the relationship between the school and the community.

According to Brunswic & Valérien (2004), separating pupils into small groups helps to develop the different aptitudes of each person. Also certain innovative methods that are particularly suited to teaching in multigrades are peer coaching, self-directed learning, flexible curricula and programmes presented in modular form. In addition, a participatory atmosphere has an undoubted impact

32

on academic performance and offers better prospects in terms of socialization, especially where they are co-educational.

Commonwealth Secretariat (2005) and Ghana Education Service (2007) maintain that teachers in multigrade setting need to develop special skills and techniques that relate specifically to their particular teaching and help them to:

1. Identify themes, and topics within the curriculum that can be developed to teach more than one group. The national curriculums in most countries have been developed with monograde teaching setting in mind.

2. Design and develop resource materials that can be used independently by different class groups. One of the most important tasks is to help pupils in multigrade setting to be self-directed learners. So the teacher will need to design worksheets and activity sheets that will suit the different learning needs and abilities of young pupils and help them become confident independent learners.

3. Effectively organize the pupils in groups (based on ability, grade, friendship), individually or in pairs.

4. Develop a system that will provide opportunities for monitoring and supporting the learning of all the groups in their class.

5. Make the best use of space in the classroom and manage time effectively. The schools must also be given administrative support services by the education system. Gutloff (Ed) (1995) discusses strong parental education programme and a programme to get students actively involved in and responsible for their group work. It also emphasizes staff development in research, strategies and models on multigrade teaching to be adopted.

Teachers are also encouraged to plan their classroom and curriculum and to use project – based activities. Brunswic and Valérien (2004), report on a determined effort on the part of the political authorities to implement the multigrade strategy which led to an increase school enrolment in Uruguay.

Alternatives to Multigrade School System

Multigrade schools are not the only means of addressing problems of expanding services to rural areas or maintaining schools in towns with declining populations or managing scarce resources. There are alternative policies which include biennial or triennial intakes, consolidating or merging small schools or setting up a network of satellite and nucleus schools (Bray, 1987; Lockheed, Verspoor & Associates, 1991; Thomas & Shaw, 1992). While the biennial school admits pupils to Primary Class 1 every two years, the triennial schools admit pupils to Primary Class 1 every three years. The biennial and triennial systems allow a teacher to a class but the children must wait an extra year or two before starting school (Lockheed, Verspoor & Associates, 1991). Lockheed, Verspoor and Associates (1991) remark "Since rural children often have high dropout rates, a policy that, delays their entry may, in fact also reduce their time in school. Therefore, biennial and triennial intakes may not increase educational participation" (p.159). This system is not popular in Ghana.

Another alternative to multigrade schools is to consolidate or amalgamate small schools into larger units. This would mean closing some of the small rural schools. This system has some drawbacks; school closing is often done at a considerable political cost. Closing also damages the social and cultural life of rural communities when not done with sufficient consensus (Thomas & Shaw,

34

1991). It also brings about strained relationship between communities and it is not a good alternative in the light of compulsory universal primary education.

The creation of a system of satellite and nucleus or cluster schools is also an alternative to multigrade classes. This represents somewhat of a compromise with full-scale multigrade schools. Individual rural communities may retain either an incomplete grade school or a limited multigrade school for lower levels Primary Class 1- 3 while older pupils could attend central Primary 4 - 6 which is a single grade designed to serve larger catchments areas. The draw backs associated with this system include:

1.   Difficulty for a community to have a complete school.

2.   Long distance covered by pupils to attend upper primary classes and the difficulty of parents to get the pupils assist them in household chores.

3.   Where the younger children go to school with older siblings there is the possibility of younger children not going to school.

4.   Also one cannot rule out the hazard entailed for the girl-child.

Perceptions of Multigrades in the World Today

An investigation concerning multigrade arouses intense interests among parents, teachers, researchers and educational managers. For parents the critical issue is whether the multigrade classroom will provide the kind of positive, satisfying and productive social and learning experience they want for their child in school. Parents perceptions are reported to be negative in general (Veenman, 1995). They are more negative in urban as opposed to rural communities. The chief parental concern is said to be about the level of student achievement. One of the reasons principals prefer to have single grades is the degree of parental

concern about multigrade and the time and energy taken in dealing with those concerns (Mason & Good, 1996).

In general, teachers are said to prefer single grades because multigrade mean more planning, preparation, organization and work, catering for a wider range of abilities and maturity, less time for meeting individual needs and for remediation, less time for reflection on teaching and lack of relevant professional training and less satisfaction with their work Mason & Burns, (1995); (Veenman, 1995). While principals' attitude has also been reported to be negative in general, Mason and Good (1996) found heads to be not as strongly opposed to multigrade as teachers. Given their role in supporting system policy and dealing with the reality of student numbers, heads' actual perceptions might have been more negative than those expressed. The chief disadvantages perceived by principals were the necessity for teachers to prepare two or more curricula, the strength of parental concerns and the negative attitude of teachers.

Researchers' major focus has been the question of whether student's achievement differs in multigrade and single grade classes. Some positive perceptions that have been identified by researchers concern student's social skill development, opportunities for the enhancement of learning by the lower grade level group through exposure to upper grade level work, reinforcement of earlier learning for the upper grade level students and opportunities for children to learn through peer tutoring (Mason & Burns, 1995; Veenman, 1995). Research on multigrade teaching by Brunswic and Valérien (2004) acknowledges that multigrades are common in developing countries as well as the wealthy northern countries and to date, researchers have primarily studied the impact of

36

multigrades on learning. A review by the World Bank indicates that studies conducted in North America, Europe, United Kingdom, United States, Germany, Netherlands and Switzerland, show that pupils from multigrades obtained comparable results in all their main subjects. Their results were even better in some cases (Thomas & Shaw, 1992). In Latin America education agencies launched the first large scale projects using multigrade teaching as a solution to the problem of expanding educational provision in the rural areas (Brunswic & Valérien, 2004). In Columbia, the Escuela Nueva (new school) system is based on multigrade teaching (Brunswic & Valérien, 2004). The new school programme started since 1975 and the new school teaching methods promoted continuity and completion of primary education. From 1988 to 1996 enrolment grew by 45.6 percent in rural schools. The performance of pupils in new schools proved to be significantly better, better results were also recorded in terms of self confidence and social and civic behavior. Absenteeism had dropped because children can help their parents without interrupting their education. Repetition of grades was also down as scholastic progress were adjusted to the pace of each pupil (Brunswic & Valérien, 2004). According to the research studies, multigrade teaching has made it possible to offer the entire elementary curriculum with one or two teachers taking responsibility for five consecutive grades in a single school. Furthermore, the recommended methods encouraged creative participatory and responsible learning, for instance the children learn how to behave in a public-spirited, democratic manner and they study at their own pace using materials designed especially for self directing learning. In addition "the role of teachers is changing: they are becoming facilitators who guide and direct

37

the learning process. Further training for teachers is provided locally. Administrative personnel and communities are involved in the teaching process" (Brunswic & Valérien, 2004).

In Asia multigrades are still usually the only means of providing schooling in remote regions inhabited by minority groups. They are the sole alternative to having no education at all (Brunswic & Valérien, 2004). Provision of education is difficult in such regions, not only because of their geographical conditions but because their populations are nomadic, highly dispersed and widely separated. Also the inhabitants at a low level of economic development function as autonomous family units and need their children as a source of additional labour (Brunswic & Valérien, 2004).

Multigrades exist in almost all countries in the Asia-Pacific, India Republic of Korea, China, Papua-New Guinea, Philippines and Vietnam (Brunswic & Valerien, 2004). Some of the countries have received support from co-operation agencies. United Nation Children Education Fund (UNICEF) provided support to 51 clusters of schools having multigrades in six provinces in Cambodia. There was a clear improvement in the average scores, rates of repetition fell, and enrolment rose. The findings also showed that the clusters had a positive impact on schooling for girls (Brunswic & Valerien, 2004). Comparisons between school clusters supported by UNICEF and clusters that receive no support from UNICEF showed that the academic performance of pupils in the former were clearly better (Brunswic & Valérien,, 2004). Other advantages of multigrade teaching in Asia are that most of the children in Laos attend classes in villages that have multigrade schools (Brunswic & Valérien,

2004). Rural areas in Laos manage to make up for the shortage of teachers and the pupil–teacher ratio is rising (Brunswic & Valérien, 2004).

In Magnolia and Papua-New Guinea, after explaining the multigrade method to children and their parents, the authorities located educational centers close to their places of residence, and encouraged children to continue their education. It was reported that parents have realized the importance of multigrade educational methods and improvements are expected in the near future (Brunswic & Valérien, 2004). Also in Philippines multigrade methods have improved teachers' conditions of service and enabled optimal utilization of classrooms. The use of teaching kits has helped to raise performance levels (Brunswic & Valérien, 2004).

In the regions that adopted the multigrade school system in Viet Nam the pupils' participation is 100%, performance is better than in traditional classes. Instruction is learner centred and pupils spend more time working in group. Children are more active, more sure of themselves and know how to re-act appropriately (Brunswic & Valérien 2004). It is significant to note that, when the required resources, training and regulatory framework are not forthcoming, the results can be disappointing. In Pakistan, for example, the performance of pupils in multigrade was 30% lower than that of pupils in monograde classes. This result was attributed to the fact that owing to lack of resources and training, teachers were not able to use the teaching methods successfully in the multigrade (Brunswic & Valérien, 2004).

While multigrade teaching is proving a success in Latin America and Asia only a slight expansion of multigrade is observed in Africa where enrolment rates

remain low in the context of population growth and incomplete demographic transition (Brunswic & Valérien, 2004). With a few exceptions (Zambia and Lesotho), data for the English – speaking and Portuguese-speaking regions are not yet available (Brunswic & Valérien, 2004). In French-speaking Africa, the International Institute for Educational Planning (ILEP) conducted a study in 2002 and Benin, Burkina Faso, Equitorial Guinea, Guinea, Mali, Senegal and Togo participated in the study. The purpose of the study was to examine in greater depth the implications of the expansion of the one-teacher schools and multigrade classes in terms of providing broader access to quality basic education for all (Brunswic & Valérien, 2004). In Zambia the most important impact of multigrade classes has been to provide a complete primary education in places where there were no schools at all and to improve the pass rate between the two levels. In Burkina Faso multigrade classes are primarily concentrated in rural areas and more specifically in certain regions where provision of school is difficult. Performance in 1993 showed an advantage for multigrades but subsequent years showed a large drop in performance. In addition serious inadequacies were identified, in connection with concerns over multigrade approach, teacher dissatisfaction and with insufficient proficiency in multigrade teaching methods (Brunswic & Valérien, 2004).

In Senegal the multigrade are formed when two grades combined have a total of not more than forty-five pupils. The classes are often temporary and held in makeshift shelters. They are granted permanent status if they survive for three to five years. But the departure of the teacher often means the disappearance of the class. In Equitorial Guinea, the instruction provided to the multigrade is

40

considered to be inefficient owing to repetitions and drop-outs. Teachers are not highly qualified and have to cope with large groups of pupils of different ages all grouped together in a single class (up to one hundred and twenty pupils). pupils). Schools in the rural areas have virtually no resources; some do not even have furniture (Brunswic & Valérien, 2004).

In many classes, each sub-group within the class faces a different wall of the classroom. In the face of a rapid population growth and given the high proportion of rural children who do not attend school, the solution most frequently adopted in Africa is to try to endow incomplete schools with new classrooms and new teachers in order to transform them into complete schools offering all the primary grades. Responsibility for founding new schools that are or will be, destined to become multigrade schools is left up to local communities (Brunswic & Valérien, 2004). Throughout Africa, descriptions of the conditions of one teacher schools and multigrades reveal serious problems; make shift facilities, lack of teaching materials, and no support for teachers. All of these factors complicate the lives and task of rural teachers who are often younger, less experienced and less qualified than their urban counterparts (Brunswic & Valérien, 2004). It is thus not surprising to find that multigrades show unsatisfactory results in evaluations and scholastic attainment (Brunswic & Valérien, 2004).

Multigrades have a mixed impact on scholastic performance in West Africa. From the 1999 report of Conference of Ministries of Education in French Speaking countries the multigrade approach seems to be suffering from a certain discouragement on the part of teachers who are overtaxed with work and must use

a special methodology with which they are not fully conversant (Brunswic &
Valérien, 2004). It is also possible that multigrades do not receive enough
methodological support. In 2002, awareness came to nine team of planners on the
true nature and potential of multigrades. That is, the establishment of multigrades
can make a decisive contribution to national EFA campaigns, particularly in rural
areas or hard to reach places but only when three vital conditions are met.

1. The central government's commitment and mobilization of local
    communities must be strong and clearly affirmed.

2. Teacher motivation, maintained through supervision of teaching methods,
    training and the establishment of a communication mechanism aimed at
    overcoming the isolation of teachers.

3. Allotment of educational aids – guides for teachers and textbooks for pupils
    and small expendable learning materials for group activities within the class.

    From the on going discussions, the perceptions of multigrade teaching are
generally positive in the developed countries but mixed in the developing
countries. In many developing countries apart from the countries mentioned
above, that have undertaken successful projects, the educational administrators
consider multigrades as at best a provisional system offering lower quality where
principal advantage is to offer some form of schooling at a time when a number of
obstacles make it impossible to create schools with monograde classes. (Brunswic
& Valérien, 2004). For educational planners, this type of structure is merely an
alternative made necessary by circumstances. Sometimes where this type of class
exists and is recognized, no provision is made to assist either teachers or pupils
(Brunswic & Valérien, 2004). Managers of education are sometimes reluctant to

invest in a structure consisting of multigrades and incomplete schools which are regarded as provisional and short - lived. Yet multigrade teaching is indispensable for providing schooling in disadvantaged rural areas particularly in the context of EFA (Brunswic & Valérien, 2004).

Summary

The review establishes the fact that, multigrades involve several grades which are taught simultaneously in the same classroom by a single teacher. There is also prevalence of multigrade teaching in the world even though it is underestimated because they do not appear in school census. Furthermore the review shows that, multigrade school system is established in most cases as a result of necessity and sometimes due to deliberate choice made for either political or educational reasons. When multigrades are established for reasons of necessity the reasons may relate to:

1. Geographical or demographic constraints (scattered settlements and low population density).

2. Administrative and pedagogical challenges (inadequate teachers, inadequate classrooms, low enrolment and absenteeism of pupils and teachers)

Generally, the perception about multigrade schools in the developed and some developing countries is positive. Nonetheless there is agreement in the literature that negative attitude and negative perception of multigrades prevail. But the poor image that multigrades have is not because of their pedagogical structure but because they are under- endowed with physical and human resources and because no consideration has been given to their specific nature.

The following vital inputs; government commitment, effective teacher training, a teacher who is a facilitator of learning, teacher resource centers, flexible curricular, allotment of educational aids, participatory learning atmosphere, peer tutoring and administrative support among others could go a long way to promote effective multigrade classes. Even though there are alternatives to multigrade teaching Brunswic and Valérien, (2004) advocate for multigrade classes because it is indispensable for providing schooling in disadvantaged rural areas particularly in the context of EFA. In the light of the findings in the literature, given the necessary support, multigrade classes in Ghana can be regarded as an effective means of delivering quality education for all especially in the rural and underserved communities in Ghana.

( )

CHAPTER THREE

METHODOLOGY

This chapter outlines the research design, the population, the sample and sampling procedures. It also describes the instruments that were used for data collection, the data collection procedure and data analysis plan.

Research Design

Research design is of extreme importance as improper design could lead to misleading results (Opoku, 2002). To this end, the descriptive survey has been chosen to obtain information concerning the current status of multigrades in the Asunafo District of the Brong Ahafo Region. Descriptive research studies are designed to obtain information concerning the current status of phenomena and they are directed towards the determination of the nature or a group of a situation as it exists at the time of the study (Ary, Jacobs & Razavieh, 1979). Denscombe (2003) states that the very notion of a survey suggests that the research involves an active attempt by the researcher to go out and look and to search. He maintains that surveys are associated with getting information straight from the "horse's own mouth" and is purposefully structured. He further postulates that surveys are easily associated with large scale research covering many people or events. The breadth of coverage means that, the findings from a good research scores well when it comes to generalization. If the coverage is suitably wide and inclusive it

gives credibility to generalized statements made on the basis of research. This strategy equally lends itself to methods such as the questionnaire which can generate large volumes of quantitative data that can be subjected to statistical analysis. In the view of Fraenkel and Wallen (1993), obtaining answers from a large group of people to a set of carefully designed and administered questions lies at the heart of survey researches. The following are advantages of descriptive survey:

1. It provides a meaningful situation and seeks to explain people's perceptions and behaviour on the basis of information obtained at a point in time.

2. It can be used with greater confidence with regards to particular questions, which are of special interests and value to the research.

3. In-depth follow up questions can be asked and items that are not clear can

. be explained.

4. Survey also saves costs and time.

On the other hand Fraenkel and Wallen (1993) outlines a number of disadvantages of descriptive survey. These include:

1. The difficulty of ensuring that the questions to be reacted especially during interviews have exact wording.

2. In addition, the data could produce untrustworthy results because they may delve into private and emotional matters in which respondents might not be completely truthful.

3. Denscombe (2003) also points out that though service cover a wide span, the data that are produced are likely to lack much by way of detail or depth on the topic investigated.

4. Also the emphasis on wide and inclusive coverage limits the degree to which the research can check on accuracy and honesty of responses.

Despite the disadvantages, the descriptive survey design was considered appropriate for carrying out the study on multigrade classes in the Asunafo North District because it would give accurate and precise data on the phenomenon as it existed at the time of the study.

Population

This study sought to examine the multigrades in Asunafo North District. as such, the population included all those who were involved in the multigrades so that the facts derived would give meaningful conclusions. At the time of the study the multigrade schools in the district have reduced to seventeen due to the inception of the National Youth Employment Programme (which recruited Community Teaching Assistants to teach in the schools). The seventeen schools had twenty-two teachers teaching nine-hundred and eighty-seven pupils in the multi classes. At the time of the study, six out of the eight circuits had seventeen multigrade schools with twenty-two multigrades. Akrodie circuit had five, Asumura and Ayomso Circuits had four multigrade schools each. Kasapin circuit had two schools while Bediako-Bitre and Ampenkro Circuits had one multigrade schools each. The target population of the study therefore comprised all the thirty-five District Education Officers, eight Circuit Supervisors, thirteen District Education Oversight Committee (DEOC) members, seven District Education

47

Planning Team (DEPT) members and the School Management Committee (SMC) members in each of the seventeen multigrade schools. The seventeen headteachers and twenty teachers of the multigrade schools as well as the parents of the pupils in the multi-classes and finally the opinion leaders from the seventeen multigrade school communities were also part of the target population. However, the researcher could have access to only one hundred and fifty-five respondents out of the target population.

Sample and Sampling Technique

In all, one hundred and fifty-three respondents were used. These respondents used by the researcher were major community stakeholders in education. They were made up of headteachers of seventeen multigrade schools in the district, all the twenty teachers in addition to eight Circuit Supervisors. The four frontline Assistant Directors and the Basic Schools Co-ordinator, three retired teachers, seventeen SMC Chairpersons, three DEOC members, (including the District Chief Executive (DCE) who is the Chairman), two DEPT members, forty-four parents of pupils in multigrade classes and thirty-four opinion leaders from the seventeen multigrade school communities in the district.

The choice of Asunafo North District was based on the researcher's familiarity with most of the multigrade schools in the district. As the District Director of Education the researcher had personal contact and interaction with most of the population for almost three years. It is significant to note that the seventeen multigrade schools with twenty multigrades were purposively selected, likewise all the headteachers, teachers and SMC chairmen of these schools. Even though the schools were scattered, the sampled size was just adequate for the

study. The circuit supervisors and the rest of the District Education office staff were also purposively selected because they were all frontline men who worked closely with the multigrade schools in planning, managing and supervising. Furthermore, the inclusion of DEPT, DEOC and SMC in the sample was purposively done because of their involvement in the management of basic schools. The members selected were the active members who were present at the time of the study However, the parents and opinion leaders were randomly selected using the fishbowl method. They were selected from parents who were very active at PTA meetings that is, two parents from each class, one male and one female. The opinion leaders were concerned community members who were involved in the running of the schools. Some were chiefs, unit committee members, assemblymen/women and church elders. Also some of the opinion leaders had their wards and relations in these multi classes.

Research Instrument

In order to ascertain the assessment of multigrades in the district, it became necessary to look for an appropriate research instrument. Much assistance was sought from the literature review by way of relevant issues raised in the literature and the research questions. Also the supervisor assigned to the researcher was very helpful in coming out with an appropriate device. In all two research instruments were designed for the study.

1. Questionnaires for teachers, headteachers on one hand and educational managers on the other hand (Appendices E and F).

2. Interview Guides for Parents and Opinion Leaders most of whom could not read and write (Appendix G)

Each of the questionnaire was in six sections based on the research questions. It included biographic data and also data on the school. The biographic data and the data on the school essentially elicited information on the background of respondents and the school that were considered useful. The purpose of including sections B, C and D in the questionnaire was to get first hand information on the state of multigrade classes as it existed in the district. Section E examined the perception of people on multiguide schools. Finally section F gives the recommendation for improving multigrade schools. Similarly the interview guide was also in sections. Section A was on background of the parents and the opinion leaders and the two other sections examined the perception and the suggestions of respondents on multigrade schools. Open ended and closed ended questions were used. Likert scales were also designed as the basis for eliciting the methods of teaching, the organization of the classes and the resources committed to the teaching of multigrade classes.

A course mate and the supervisor helped to review and evaluate whether the items were relevant to the research questions; their suggestions helped to streamline the number of items in the questionnaires. They also helped tremendously to enhance the quality of the questionnaire and the interview guides.

Pilot testing of Instruments

It also became necessary to embark on the testing of instruments to ascertain the adequacy and reliability of the instrument for collecting the data. In addition, the pilot testing of instruments also served as a preparatory training for the research assistants since the researcher conducted the pilot testing of the instruments with them. Getting accurate information is at the heart of descriptive

50

survey; and it also gives creditability to the findings. Three Circuit Supervisors were selected and trained during the pilot testing so that they could go to the field to support the researcher in the hard to reach areas and to help in translating the interview guide from English to Twi.

The fifteen participants for the pilot testing of the instrument were from the Asutifi District whose terrain was similar to that of Asunafo North District. Also Asutifi District was carved from Asunafo North District and it shared a common boundary with Asunafo North District. Importantly also, because of the proximity, Asutifi District was chosen. The participants included the District Director, two circuit supervisors two headteachers, four teachers two SMC members and two parents. During the pilot testing it became evident that former teachers of multigrade schools, opinion leaders and the community structures like the DEOC and the DEPT should be included because of their involvement in the schools and their responses would go a long way to give informed contributions on the multigrade schools in the district. From this exercise, it became necessary for some items to be eliminated while others were added and reframed to make them clearer and more precise before they were used for conducting the actual study.

Thus the pilot test data collected was not subjected to any rigorous analysis.

Data Collection Procedure

As stated earlier, the researcher selected and trained three circuit supervisors to facilitate in the collection of credible data. She also made preliminary contacts with the District Chief Executive (DCE) and the District

Education Office Staff, Headteachers, teachers and other respondents to explain the rationale for the exercise. Also time was fixed for the collection of all completed questionnaire and interview guide. She emphasized that the exercise was a purely academic one and confidentiality was assured and that no one would fall a victim because of any adverse findings in connection with their professional duties. At best weaknesses would be strengthened. The three circuit supervisors supported the researcher in administering the interview guide to parents, SMC Chairmen and Opinion leaders who could not speak English.

Money was provided for the transportation and other incidentals of the three circuit supervisors who went round with the researcher. The data collection in general was smooth with a few follow ups to farms and settlements sometimes crossing streams with studs. The first four weeks of the third term of 2006/2007 academic year were used to gather the data. All the circuit supervisors met the researcher on the date planned and all the 153 questionnaires and interview guides sent out were collected.

Data Analysis

The data analysis was done according to the five research questions. The completed questionnaires were serially numbered, coded and set into the computer for the analysis using version 13 of the Statistical Package of Social Science (SPSS) computer program. Since the study was purely a descriptive survey of the existing situation of schools operating multigrade school arrangement, all the five research questions were analyzed using frequencies and percentages to present the information collected. The results were finally presented in tables.

CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter presents the findings of the study and their discussion. The questionnaires and the interview guide were divided into sub-sections with regard to the five research questions for the study. Data gathered on respondents' gender, educational background and occupation form the Part 1 of the chapter. Part 2 follows with data on the multigrade schools, their date of establishment, management unit and the enrolment of pupils in the classes which were combined. Finally Part 3 looks at analysis of the research questions and the recommendation of stakeholders in respect of multigrade schools in Asunafo North District.

Biographical Data on Respondents

"Questionnaire items and the interview items on respondents' biographical data demanded their gender, educational background and occupation. Information on the various groups of respondents which constituted the major community stakeholders is summarized in Table 3.

Table 3

Gender of Respondents

Gender	Total		Headteachers and Teachers		Educational Managers		Opinion Leaders and Parents	
	No.	%	No.	%	No.	%	No.	%
Male	29	78.4	34	89.5	42	53.8	105	68.6
Female	8	21.6	4	10.5	36	46.2	48	31.4
Total	37	100.0	38	100	78	100.0	153	100.0

Table 3 shows the three groups of respondents that were used in the research namely: The headteachers and teachers, the educational managers, opinion leaders and parents. This enabled the researcher to identify the number of respondents from each category. About one third of the respondents were females and two thirds were males representing 31.4% and 68.6% respectively. Only eight (21.6%) of the headteachers and teachers and four (10.5%) of the Educational Managers were females. The imbalance in the representation might have come about because of female teachers' refusal to accept posting to the rural and hard to reach areas and the low level of participation of women in accepting responsible position in the community. However, the number of female parents and opinion leaders was almost equal to the number of their male counterparts. This might be because of the dominant role that women play in the education of their children. The educational backgrounds of the respondents were also collected. The information gathered on them is presented in Tables 4, 5 and 6.

Table 4

Educational Background of Educational Managers, Headteachers and Teachers of Multigrade Schools

Highest Educational Background	Educational Managers		Headteachers and Teachers	
	No.	%	No.	%
Graduate (Prof.)	11	28.9	0	0
Diploma	4	10.5	0	0
Specialist	0	0	0	0
Certificate "A"(Post Sec.)	3	7.9	5	13.5
Certificate "A" (4-Year)	4	10.5	6	16.2
HND	0	0	0	0
SSSCE	2	5.3	11	29.7
GCE ('A' Level)	0	0	0	0
GCE ('O' Level)	1	2.6	2	5.4
City & Guilds	1	2.6	0	0
MSLC	10	26.3	13	35.1
Not Completed	1	2.6	0	0
Non-Formal Education	1	2.6	0	0
Total	38	100	37	100

Table 4 reveals that 11 (28.9%) out of the 38 educational managers were graduates. Furthermore 22 (68.6%) of the educational managers had professional certificates. This is very encouraging because they could give professional guidance, which could go a long way to help in the development of the teachers

when the need arises. On the other hand 11 (29.8%) of the 37 headteachers and teachers had the basic qualification for professional teachers. Twenty-six (i.e. 70.2%) of the teachers were untrained. The pupil teachers dominating the multigrade schools give a wrong signal on their effectiveness. Mitzel (1960) cited in Flanders and Simon (1969) remarks that the qualification of the teacher which is presage factor affects the teacher's effectiveness. Could these untrained teachers possess those array of techniques as described by Schiefelbein (1990).

Table 5

Background of Headteachers and Teachers and Educational Managers in Multigrade Teaching

	Respondents			
Background	Headteachers and Teachers		Educational Managers	
	No	%	No.	%
Those with training in multigrade teaching	2	5.4	11	28.9
Those without training in multigrade teaching	35	94.6	27	71.1
Total	37	100	38	100.0

The study sought to look further at the background of teachers and headteachers and educational managers in multigrade teaching. This is displayed in Table 5. Two (5.4%) of the 37 teachers and headteachers have training in multigrade teaching and 11 (28.9%) of the educational managers have training in multigrade teaching. Ghana Education Service, (2007) states that teaching pupils

in multigrades requires special techniques and skills. Even though Multigrade teaching is not a new idea, it is seriously missing in teaching current pre-service and in-service teacher education programmes (Commonwealth Secretariat, 2005). The lack of training in multigrades teaching of the 94.6% headteachers and teachers is likely to adversely affect the teaching of the pupils in these multiclasses.

Table 6

Educational Background of Opinion Leaders and Parents

Educational Level	No.	%
Above Secondary School	6	7.9
Secondary School	10	12.8
Basic Education	10	12.8
Primary Education	20	25.6
No Formal Education	32	41.1
Total	78	100.0

An examination of Table 6 shows that parents with little or no formal education constituted 66.7% while parents with basic education and above constituted 33.3%. This shows the low level of formal education of parents in the area of study. This finding confirms the finding of Ankomah (1998) that there was a high illiteracy rate among parents in the rural areas of Brong Ahafo Region of Ghana. Also Châu (1990) found that parents in rural zones in Madhya Pradesh, Guinea and Zjejiang had low level of education. It is often considered with

respect to the schooling of children that the parents' level of formal education is of prime importance because of the support that they can give their children (Brunswic & Valérien, 2004). Under these circumstances one could say that the support that parents would give their children for basic schools necessities and for school work (especially home work) would be inevitably very limited without adequate sensitization.

Table 7

Distribution of Educational Managers, Parents and Opinion Leaders' Occupation

Occupation	Educational Managers		Parents and Opinion	
	No.	%	No.	%
Teaching	18	47	8	10.3
Farming	15	39	52	66.6
Trading	0	0	8	10.3
Brewing	0	0	3	3.8
Artisans	0	0	7	9.0
Retired Teachers	3	7.9	0	0
Civil Servants &Others	2	5.3	0	0
Total	38	100.0	78	1.00.0

The distribution of the occupations of Educational Managers, Parents and Opinion leaders as presented in Table 7 indicated that a significant proportion of the population in management were teachers (47.4%) followed by farmers (39 5). The others who were either retired teachers or civil servants represented 7.9% and

5.3% respectively. The teachers were mainly from the District Education Office.
It could be concluded that apart from teachers most of the people in management
and a significant percentage of parents (66.6%) engaged in farming as their main
occupation. It is therefore clear that the dominant occupation in the area of study
is farming. This situation finds validation in Ankomah (1998) research finding
that parents of the rural areas of Brong Ahafo Region, were mainly farmers. The
research also reveled that most of the farmers were either subsistence farmers or
migrant farmers. It can therefore be concluded that the majority of the parents
and opinion leaders are of low socio-economic status.

Data on Multigrade Schools in Asunafo North

The study looked for information on the classification, the date of
establishment, the management unit and the enrolment of the multigrade schools.
The responses of the headteachers are shown in Table 8, 9 and 10.

Table 8

Classification of Multigrade Schools

Classification	No.	%
Rural	15	88.2
Hard to reach	2	11.8
Total	17	100.0

Table 8 shows that almost 90% of the multigrade schools were found in
rural areas and the remaining 10% were in hard-to-reach areas. This confirms

what Brunswic and Valérien (2004) discovered that multigrade schools are often the only way to ensure quality education in rural and remote areas.

Table 9

Management Units of the Multigrade Schools

Unit	No.	%
Local Authority (L/A)	15	88.2
A.M.E Zion	1	5.9
Presbyterian	1	5.9
Anglican	0	0
Methodist	0	0
Roman Catholic (R/C)	0	0
Seventh Day Adventist (SDA)	0	0
Islamic	0	0
Total	17	100.0

Table 9 reveals that there were eight Educational units operating in the Asunafo North District. However, only two units; AME Zion and Presbyterian units operated the multigrade system. The table further shows that the L/A unit had more multigrade schools (88.2%) than all the other units put together (11.8%). It is significant to note that although Ghana is a secular state, religion is one of the factors that influences the location of schools in the area of study. This is shown in the number of units operating in the district.

Table 10

Distribution of Schools by Number of Years of Establishment

Year	No.	%
1 – 10	2	11.8
11 – 20	7	41.2
21 – 30	3	17.6
31 – 40	3	17.6
40 – 50	2	11.8
Total	17	100.0

Table 10 shows that almost 90% of the multigrade schools were established between eleven and fifty years ago. This means that multigrade schools were in existence for a long time as stated in the literature review.

Table 11

Distribution of Class by Enrolment

Enrolment	No.	%
Above 35	5	10.9
20 – 35	16	34.8
Below 20	25	54.3
Total	46	100.0

Table 11 displays the enrolment of pupils in the forty-six classes that form the twenty-two multiclasses. The enrolment in most classes were below twenty

(54.3%). Five (10.9%) out of the forty-six classes had enrolment above thirty-five and sixteen (34.8%) out of the forty-six classes had enrolment between twenty and thrity-five. In Ghana, the minimum class size for primary should not be less than twenty pupils (Ghana Education Service, 1997). The guidelines also state that where there is low enrolment with less than twenty pupils per class primary two and primary three, primary four and primary five should be combined to have a teacher (Ghana Education Service, 1997). The guidelines, further stipulate that schools with very low enrolments should arrange to transfer pupils to nearby schools within three kilometers. Where no school exists in the vicinity a special concession should be sought for the school to operate (Ghana Education Service, 1997). Following the guidelines, it means twenty-five of the forty-six classes qualified to be combined while the remaining twenty-one classes should not be combined because their enrolments were more than twenty pupils. In the case of Edwinase KG1 the pupils were up to sixty-eight and they were combined with KG2 pupils who were twenty-seven (Appendix A). These twenty-one classes should therefore be monogrades. A second look at appendix A reveals that some schools like Alhajikrom might have special concession to operate because their enrolment was very low. In Alhajikrom Primary 4, 5 and 6 were combined and they had six, one and five pupils respectively. This community is a rural and hard-to-reach and the children come from various farming settlements. In the case of Ahantamo Primary which is less than 1kilometre one wonders why that school should be opened. Asunafo North Education Office (2005) reports that because of conflict between these two communities parents of Ahantamo would not allow their wards to attend school in Mpamase.

Analysis of the Research Questions

Research Question 1

What is the rationale for combining classes in Asunafo North District?

Table 12

Reasons for Combining Classes

Reasons	Parents and Opinion Leaders		Head teachers and teachers		Educational Managers	
	No.	%	No.	%	No.	%
Low Enrolment	25	32.9	.12	32.4	12	31.6
Inadequate Teachers	42	55.3	23	62.2	18	47.4
Inadequate Classrooms	6	7.9	0	0	0	0
Inadequate Furniture	0	0	2	5.4	8	21
Not Aware	3	3.9	0	0	0	0
Total	76	100.0	37	100.0	38	100.0

Table 12 shows that out of 76 parents and opinion leaders who were interviewed, 73 (96.1%) knew the reasons for initiating the multigrade classes while three (3.9%) were not aware of reasons why the classes were combined. Furthermore, Table 12 shows that the three groups of respondents in the study gave "inadequacy of teachers' as the major reason for combining the classes (Head teachers and teachers 62.2%, Educational management 47.5%). The second reason was low enrolment followed by inadequate furniture. This finding is in line with Thomas and Shaw (1992) who outline scarce educational inputs as factors that necessitate the opening of multigrade schools. They see multigrade

schools as economical because more classes will be combined under the direction of one teacher in one classroom. According to Brunswic and Valerien, (2004), many schools in the districts of US combine classes as cost cutting measures, and also in areas where shortages of teachers and classroom space exist. Anwiwia, Mpamase and Edwinase for example are rural communities with large classes which have to be combined because the schools do not have their full complement of teachers (Appendix A). This finding contracticts Thomas & Shaw (1992) who outline declining intake of pupils as one factor which necessitate the running of multigrade schools. Most of the multigrade schools are in communities with inadequate basic amenities and teachers refuse postings to such areas (Asunafo North District Education Office, 2005). For these communities they have to accept the multigrade arrangement so as to maintain educational services for their children (Bray, 1987; Thomas, 1992).

In addition, the Asunafo North District is noted for migrant farmers who move from community to community to work on cocoa farms. As these farmers move they take away their children contributing to low enrolment in some of the schools (Asunafo District Education Office, 2005). Also, some of the hard-to-reach communities like Brodedwo, Diasibe and Atom, (Appendix A) multigrades should be run or the children have to travel long distances beyond the GES norm of three kilometers radius to have access to school (Ghana Education Service, 1997). In Diasibe, it is not only the long distance but the children have to contend with crossing a river with studs which posses a great danger to the pupils. These areas have low enrolments between one and nine pupils in a class. One interesting thing noted was that in some cases schools had to combine three

classes and some of the classes combined did not fall within the GES guidelines (Primary 4, 5 and 6 combined in Alhajikrom Primary School and KG1, KG2 and Primary1 combined in Kofimire AME Zion Primary School (Appendix A). Brunswic and Valérien, (2004) further indicates that multigrade classes are used as a provisional situation when a primary school first opens. This reason did not hold for Asunafo North District where most of the multigrade schools were established long ago. Table 10 shows that about 90% of the multigrade schools were established over 10 years.

Research Questions 2

Who initiates multigrade classes in the district?

Table 13

Initiators of Multiclass Arrangements

Initiators	Head teachers and Teachers		Educational Manager	
	No.	%	No.	%
District Education Office	14	82.3	31	81.6
The School	1	5.9	13	7.9
SMC/PTA	2	11.8	4	10.5
Total	17	100.0	38	100.0

The study also sought to investigate the initiators of multigrade schools. Brunswic and Valérien (2004) states that government as well as educational authority or innovative teachers can initiate the multigrade arrangement. The study revealed that the District Education Office initiated most of the multigrade schools in line with GES policy that where classes 2, 3, 4, and 5 are less than

twenty in enrolment, classes two and three, four and five should be combined. Ghana Education Service, (1997). Subsequently, the District Education Office determines the number of teachers to a school based on the number of pupils in a class. While the National Pupil Teacher Ratio (PTR) at present is 1:35 for primary and 1:30 for KG the District PTR is 1:29 for primary and 1:30 for KG. The study further revealed that the opening of multigrade schools were not politically motivated as stated in the literature review but rather came up with another group of initiators: SMCs and PTAs. In Table 13, although these groups form a small percentage, (10.5%) it shows their involvement of SMCs and PTAs in initiating multigrade schools. The opening was therefore not left to the District Education Office alone. To the parents, it was the necessary choice; either multi-grade school or no school at all. It shows the involvement of parents in the education of their children and coming out to initiate multigrade arrangements. Also the fact that SMCs, PTAs and the schools also influence the opening of the multi class systems revealed their acceptance of the multigrade schools. As stated earlier it is either the multi-class or no school because of the refusal of teachers to serve in these rural and hard-to-reach communities.

Research Question 3

What learning resources are committed to the teaching of multigrades in Asunafo North District?

Learning resources include classrooms, furniture, stationery, textbooks equipment and tools and teaching learning materials. These resources are very important and the Ghana Education Service (1994) and Schiefelbein (1990) stress that heads should ensure they are available so that teaching and learning can go on

smoothly (Ghana Education Service, 1994). The documentary data guide from the District Education Office and the responses from the headteachers showed that the following resources were available: Classrooms, Furniture for Teachers and Pupils, Cupboard, Classroom Libraries, Textbooks, Writing Materials, Reading Materials Teaching and Learning Aids. However, the quantities vary from school to school (Appendix B and Table 14).

Table 14

Learning Resources for Multigrade School

Resources	Available in good condition		Available in poor condition		None available		Total	
	No.	%	No.	%	No.	%	No.	%
Classroom Pupils	9	41.0	7	31.8	6	27.2	22	100
Furniture Teachers	9	41.0	13	59.0	0	0	22	100
Furniture	6	27.2	9	41.0	7	31.8	22	100
Cupboards	2	9.1	5	22.7	15	68.2	22	100
Textbooks Teaching	14	63.6	1	4.6	7	31.8	22	100
Learning Aids Writing	0	0	22	100	0	0	22	100
Materials Reading	0	0	22	100	0	0	22	100
Materials Classroom	14	63.6	8	36.4	0	0	22	100
Libraries	0	0	15	68.2	7	31.8	22	100

Table 14 shows that nine (41.0%) out of the 22 multigrades had classrooms which were in good condition and six (27.2%) of the multigrades did not have classrooms. Commonwealth Secretariat (2005) explains that the physical environment has effect on pupil learning behavior, hence the need to have classroom which are in good condition. However, from Table 14 it was observed that seven (31.8%) classrooms were in poor condition in addition to the six multi-classes which do not have classrooms. The June 30th 2007 edition of the "Ghanaian Times" p. 19 confirmed this finding. The Asunafo North District was among the districts provided with classrooms for three schools under "Schools under Trees Project". Commonwealth Secretariat (2005) encourages spacious, well organized classrooms where pupils' work or articles of interest are displayed. Additionally, the classroom should accommodate the following learning areas: Language arts corner, a class shop, a science corner, "time-out" and a home corner/area. This means classes without classrooms will be disadvantaged and if they are not spacious they will not be able to provide the learning areas, let alone perform the required activities in such areas. The writer's observation revealed that where the pupils did not have a classroom the classes are conducted either under a tree or in a chapel or in a make-shift shed. One cannot rule out the distractions from outsiders and the disruptions in classes when it rains which will not augur well for quality learning outcomes.

There is also the need for pupils' furniture and this should be extended to the learning centres (Commonwealth Secretariat, 2005). Table 14 shows that 59% of pupils' furniture were in poor state. However, the good news is that every

child had something to sit on, either a kitchen stools or forms provided by the church, PTAs and SMCs. These pupils had serious problem when it came to writing. In multi-classes pupils furniture facilitates movement from one activity to another and pupils working on their own. The pupils need to observe procedures carefully and there is no reason why the pupils cannot move from one group of desks to another. Commonwealth Secretariat (2005) suggests that "the desks should be arranged in six groups which can be re-grouped in 3 sets of two-in one in front of the chalk board and two further back on each side of the room. Mats can be suitable alternatives of desks in the learning centres but these were also not available (Commonwealth Secretariat, 2005). Furniture promotes learning if it is flexible (easily moved about) and in good shape to ensure good posture. (Ghana Education Service, 1994). Except for the benches and the kitchen stools, (41.0%) of pupils furniture were in good condition but they were not flexible.

Teacher's furniture consists of a table and a chair. In monograde classrooms, teachers often work from the front of a class which is seen as a symbol of power but in a multi class this is not so. The teacher's table serves as storage space rather than as symbol of power (Commonwealth Secretariat, 2005). It further suggests that the teacher should sit on a spare chair as he works with different groups and keep moving around the classroom in order to monitor or correct their work. From Table 14, seven (31.8%) of the teachers in the twenty-two multi classes did not have furniture. This indicated a messy classroom. Where does the teacher keep curriculum materials as well as the pupils' work? Where does the teacher sit to work with the different groups? He will be tired by the close of the day.

Cupboards are for storage of the teaching learning materials but Asunafo North District lacks cupboards. Table 14 shows 68.2% of the classes without cupboards. How do the pupils access materials? How safe will the materials be? From the study, Textbooks were kept in the headmasters' houses and were conveyed to and from school daily hence the short life span of these books. Table 14 also shows that most primary schools have textbooks (63.6%). This is because in 2006/2007 academic year primary 1 to 6 were supplied with textbooks but the Kindergartens are yet to be supplied. The 31.8% represented in Table 14 without textbooks are from the Kindergarten.

Teaching and Learning Aids were also woefully inadequate in the schools. The importance of Teaching and Learning Aids cannot be under emphasized. They do not only foster curiosity and interest, but also, they explain concepts, and when they are displayed in the classroom, they establish a positive learning environment. Most materials can be displayed in the classrooms and they can be examples of pupils' work and articles supporting current topics being studied and occasionally, topics teachers intend to cover (Commonwealth Secretariat, 2005). Useful resources for displaying materials were absent in the classrooms. Writing materials were woefully inadequate. Parents looked forward to the state to support them even with writing materials. In the Kindergarten, writing was almost out, because furniture was not available for use and the class sizes de-motivated the teachers to do any meaningful writing exercises. The textbooks remained the only reading materials which were available to Primary schools and not KGs. The classroom libraries were also inadequate. GES provided a metal box with supplementary readers for all primary schools about ten years ago but from Table

14, the metal boxes were available but with few or no books. Some of the books were even torn. Indeed the condition of multigrades in Asunafo North District is not so different from the one teacher schools in other parts of Africa which reveal serious problems-lack of learning resources which result in unsatisfactory attainment (Brunswic & Valérien, 2004). Thus learning resources though available were in poor condition. This is likely to affect the learning outcomes of pupils in monograde schools how much more in a multigrade system.

Some countries with multigrade arrangements have received support from Donor, agencies and the state; for instance UNICEF provides support to 51 clusters of schools having multigrade classes in six provinces in Cambodia. But this was not the case in the Asunafo North District. Brunswic and Valérien (2004) explain that the support improves the academic performance of pupils. The study did not look out for the difference in academic performance of multigrade schools which were supported and those which were not supported but it identified the bodies and institutions that supported multigrade arrangements and the kind of support they gave. This is in Appendix C and D. The study showed that PTAs, SMCs NGOs, philanthropists, District Assembly, GES and Donor Agencies supported all the schools. However, it is significant to note that the support was not exclusively for multigrades. From the documentary guide from the District Education Office and the schools, the support included, classrooms, furniture, textbooks, teaching learning materials, incentive packages, volunteer teachers, and teachers' accommodation.

Research Question 4

How are Multigrades Organized?

The study looked at how lesson notes were written, methods of teaching used and how the pupils were organized in the classrooms. Table 15 displays the responses on preparation of lesson notes for the multigrade classes.

Table 15

Approaches to Lesson Notes Writing for Multi Grades

Approaches	No.	%
Written separately for each class	0	0
Same notes for combined classes	20	90.9
Combined only some areas	2	9.1
Total	22	100.00

Table 15 shows that most teachers (90.9%) combined the lesson notes for the multi-classes and 9.1% combined only some areas. Ghana Education Service (2007) remarks that lessons that require little or no previous knowledge/specific background knowledge like physical education and environmental studies should be combined and as much as possible the scheme of work for science, mathematics and language should be followed separately for each class. If 90.9% of teachers combined subjects which should not be combined this is likely to negatively affect teaching and learning outcomes. It is important to note that only the two teachers who were trained in multigrade teaching (Table 5) combined only some areas while the others who were not trained had the same note for all classes. This showed that when the capacity of teachers are built it goes a long

72

way to affect their teaching. In fact none of the teachers was willing to write lesson notes separately for each class because to them that was double work and they were not ready to go the extra mile which will not attract any remuneration.

Table 16

Methods for Teaching Multiclasses

Teaching Methods	Regularly		Rarely		Never		Total	
	No.	%	No.	%	No.	%	No.	%
Discussion	22	100	0	0	0	0	22	100
Explanation	22	90.9	2	9.1	0	0	22	100
Demonstration	2	9.1	4	18.2	16	72.7	22	100
Investigation	0	0	0	0	22	100.0	22	100
Experiments	3	13.6	4	18.2	15	68.2	22	100
Field works/outside visit	0	0	4	18.2	18	81.8	22	100
Project	0	0	0	0	22	100.0	22	100
Debates	1	4.5	2	9.1	19	86.4	22	100
Drama and role play	3	13.6	3	13.6	16	72.7	22	100
Educational games	0	0	1	4.5	21	95.5	22	100
Questioning	10	45.4	8	36.4	4	18.2	22	100

Table 16, displays responses on the teaching methods used for teaching multigrades in the study area. From the table, most teachers use the discussion

73

and explanation methods regularly (100% and 90.9% respectively). Investigation, Fieldworks, Projects and Educational games were almost never used (100%, 81.8%, 100% and 95.5% respectively). Demonstration, Experiments, Debates as well as educational games were rarely used (18.2%, 18.2% and 9.1% respectively). Almost 50% of the teachers used questioning methods which was commendable because questions and answers sessions determine the levels of understanding of the various groups in multi-classes (Ghana Education Service, 2007). Generally because teaching situations and learning styles of pupils vary so much, a mixture of strategies which vary the teaching methods to suit the pupils, goals and subject matter is advised. Also the teacher must have in-depth knowledge in various teaching approaches. Thomas and Shaw (1992) asserts that multigrade teaching is generally taken to be a set of techniques that allow a teacher to deliver effective instructions to groups of pupils of various ages and capabilities. Schiefelbein (1990) describes multiclass teaching as an unassembled educational kit and he identifies the teacher as a facilitator of learning using group work, and peer tutoring activities. Commonwealth Secretariat (2005) also points out that teachers should have different teaching and organizational strategies which include expository, and investigative methods, participatory strategies like drama, role play and educational games. Group work is also strongly recommended for all teaching (Commonwealth Secretariat, 2005). However, there were shortcomings in the methods for teaching the multigrade in the Asunafo North District. One wonders teachers in theses multigrade schools can improve the effectiveness of education delivery as cited in Thomas & Shaw (1992) if 70% teachers are not trained (Table 4) and the 30% trained teachers

74

(Table 4) are only trained to handle monogrades. (Commonwealth Secretariat, 2005).

Furthermore, at the heart of teaching is learning (Commonwealth Secretariat, 2005). Everything that a teacher does in the classroom is geared towards this objective and teachers are thrilled when pupils understand the concepts, skills and attitudes that are set out for them to learn. In multigrade arrangements, the teacher is faced with a wide range of abilities, interests and class levels. It is therefore imperative to understand how learning is organized in addition to choosing the most appropriate teaching methods. Table 17 shows how pupils are organized in multigrade classrooms in the district.

Table 17

Organization of Pupils in Multiclasses

Separately	Regularly		Rarely		Never		Total	
	No.	%	No.	%	No.	%	No.	%
Whole class teaching	22	100	0	0	0	0	22	100
Separate class grouping	0	0	2	9.0	20	91.0	22	100
Ability grouping	1	4.5	1	4.5	20	91.0	22	100
Friendship grouping	0	0	0	0	22	100.0	22	100
Peer tutoring within the grade	2	9.1	1	4.5	19	86.4	22	100
Cross age/grade tutoring	2	9.1	2	9.1	18	81.8	22	100

Table 17 reveals that 100% multigrade teachers in the district used the whole class teaching strategy to teach. Group work which is recommended

75

strongly for multigrades was almost never used (91%). In multigrade classes where different age groups and different levels of ability exist it will not be possible to teach effectively if the group work is not used (Commonwealth Secretariat, 2005). Furthermore, cross-age tutoring and peer tutoring are methods which the teacher can employ to benefit the pupils and himself. Commonwealth Secretariat again states that students learn to teach through these methods and these methods can also promote social skill development. (For instance the student who is directed at one time also directs at another time). In addition the class supervision is effective and the teacher does not overwork himself/herself when he/she uses these methods. Furthermore, the teaching should be learner-centred but from the study organization of lessons and pupils in multigrade schools in the Asunafo North left much to be desired. The reason for the poor running of the multigrade schools might be because of lack of training of the majority of teachers in multigrade teaching (Table 5). This is likely to affect the performance of the pupils.

Research Question 5

What are the people's perceptions of multigrades?

In many developed countries, the perceptions of multigrade teaching is generally positive but mixed in the developing countries. Educational administrators consider multigrade as at best a provisional system and should be discontinued when the obstacles are removed. Since it is regarded as merely an alternative made necessary by circumstances, no provision is made to assist either teachers and pupils (Brunswic & Valérien, 2004).

Table 18

Perceptions of Respondents on Suitability of Multigrades

Responses	Parents and Opinion Leaders				Headteachers and teachers				Educational Managers				Total			
	Agree		Disagree		Agree		Disagree		Agree		Disagree		Agree		Disagree	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Multigrades are ideal in implementing EFA	62	79.5	16	20.5	30	81.0	7	19.0	20	52.7	18	47.3	112	73.2	41	26.8
Multigrades ensure quality education	15	19.2	63	80.8	12	32.4	25	67.5	13	34.2	25	65.8	40	26.1	113	73.9
Multigrades are not suitable	44	56.4	34	43.6	26	70.2	11	29.8	28	73.7	10	26.3	98	64.0	55	36.0
Multigrades are Recommended	37	47.4	41	52.6	9	24.3	28	75.7	13	34.2	25	65.8	59	38.6	94	61.4

77

Table 18 displays the perceptions of the respondents on the suitability of multigrades. All the respondents in the study agreed to a large extent that multigrade was ideal in the implementation of EFA. One hundred and twelve (73.2%) out of the One hundred and fifty-three and respondents were in agreement that multigrade should be opened to ensure the provision of primary education. It was either multigrade or no school since administratively resources would not be available to operate monogrades. The distance and barriers (rivers and vast forest reserves) were enough to deter the pupils from going to schools in another community. On the other hand one hundred and three (73.9%) out of One hundred and fifty-three respondents disagreed that multigrades ensure quality education. It was noted from the study that multigrades were poorly organized. Perhaps this was due to the lack of training in multigrade teaching as well as the high percentage of pupil teachers (70.2% in Table 4) teaching the multigrades.

· The pupils in multiclasses do not only have different intellectual backgrounds but they come from different socio-economic backgrounds with different previous experiences. They also have different interest and needs and may prefer different learning approaches (Ghana Education Service, 2007). That is why Commonwealth Secretariat (2005) maintains that teachers in multigrade setting should be trained to develop skills that relate specifically to the teaching of pupils in multiclasses; For example, skills which relate to identification of topics to be taught separately or combined, skills which relate to effective organization of pupils in groups and skills relating to effective management of time. It was also observed from Table 14 that the multigrades were poorly resourced. There were no

exclusive support for the multigrade schools hence the stakeholders' conclusion that multigrades are not suitable.

The findings of the perceptions of stakeholders in multigrade teaching are similar to the issues touched in the literature review - The perceptions of multigrade teaching is generally mixed in the developing countries (Brunswic and Valérien 2004). The respondents, like the educational administrators in Brunswic and Valérien (2004) considered multigrades as ideal in providing EFA but disagreed that it should be continued when resources were available for a monograde because they perceived them as ineffective and inefficient. Multigrades were therefore regarded only as a provisional system and it was very likely that was why no provision was made to assist either the schools or the teachers as done in the developed countries. The literature review points to the fact that parents in the urban areas are more pessimistic about multigrade than parents in the rural areas. This was confirmed by the study. The reason being that though most parents in the rural areas disagree on the quality of multigrades (80.8%) on one hand they have also accepted them on the other hand because to them it is multigrade or no school – the lesser of two evils. Most of the teachers, twenty-five out of thirty-seven (687.6%) were honest to state that multigrade arrangements were not providing quality education (Table 18). They were aware that they did not have the requisite training. Above all there was much work to do in the multiclasses (preparation for and organizing the multiclasses) and there was little or no motivation (Brunswic and Valérien, 2004).

Out of One hundred and fifty-three respondents fifty-nine (38.6%) recommended multigrade classes and ninety-four (61.4%) disrecommended

multigrades. One reason which was deduced in favour of multigrade schools was its contribution to the attainment of EFA " How can my children go to school? All school is school" . "This school is education at out door steps." "There is no way the enrolment can improve". "We are migrant farmers. We come with our children for a while and we go" To these stakeholders multigrade schools were preferred to no education at all. On the hand, almost two thirds of the respondents disrecommended multigrade because of the following reasons: "The work load is very heavy or burdensome" and "Teaching and learning are ineffective". One parent remarked "I do not think these teachers are serious". Also, they felt one of the classes combined was disadvantaged.

According to the educational administrators, teachers ended up teaching the same thing to all the classes. Furthermore, they considered the class control as poor and the system doing dis-service to the brilliant pupils because the others slowed down their learning. From the study it was observed that in the Asunafo North District, multigrade schools were the only choice for schools to be opened in the rural, hard-to-reach and poorly populated areas. Multigrades were also the only way to achieve EFA goals. However, their quality left much to be desired. The respondents therefore advanced the following suggestions to improving the system. "Maybe these combined classes can be good if only the teachers know how to do it". This remark from an opinion leader emphasizes training in multigrade organization. Teachers as well as the district education officers should be trained to teach and supervise these classes. It was also suggested that the teachers should be given incentive packages. Apart from being in the deprived areas, multigrade teachers had to go the extra mile to consciously prepare, plan and organize these

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter summarizes the research problem, methodology adopted, sample and review of findings. The conclusions drawn from the study and recommendations for further research are also presented in this chapter.

Overview of the Study

Multigrade schools refer to schools which combine different classes in the same classroom setting normally because of inadequate teachers and budgetary constraints. It is noted that some percentage of primary school teachers in many countries including Ghana are teaching multigrades. The Asunafo North District in the Brong Ahafo Region of Ghana has seventeen such schools with twenty-two multi-classes. Some of these schools were opened over twenty years ago to make primary school accessible to children in remote, hard-to-reach and poorly populated areas.

Multigrade schools system requires special attention in terms of learning resources; well trained and qualified staff with a variety of techniques, strategies and teaching and learning materials In addition, the support from donor agencies, national, district and local sources are very essential in promoting learning outcomes in these schools. The study sought to have an in-depth assessment of multigrade schools in the Asunafo North District. Thus the rationale in operating multigrade schools, resources committed to such schools, running and organization

of such classes, and the perceptions of the core community stakeholders of the multigrade were assessed.

In line with the above, the study was guided by the following research questions:

1.   What is the rationale for combining classes in Asunafo North District?

2.   Who initiated the operation of multigrades in the district?

3.   What learning resources are committed to the teaching of multigrade?

4.   How are multigrades organized in the district?

5.   What are the major community stakeholder's perceptions of multi-grade schools?

The descriptive survey design was adopted for the study and data was collected through questionnaire and interview guide. The questionnaires and interview guides had open ended and close ended questions as well as likert scale. Additionally, the questionnaires and interview guides provided biographical characteristics of the respondents, data on the schools, other items which were based on the five research questions outlined above as well as information on the perception of the stakeholders on multigrade teaching arrangement. Purposive sampling was dominantly used with a few random sampling to select the one hundred and fifty-three respondents who were major stakeholders. The respondents included seven headteachers and twenty teachers who answered the same questionnaire (Appendix E) while the educational managers comprising four frontline Assistant Directors, one basic School Co-ordinator, eight circuit Supervisors, three DEOC members, two DEPT members, seventeen SMC chairmen and three retired headteachers answered another questionnaire (Appendix F).

Finally, the forty-four parents of pupils in multigrade as well as thirty-four Opinion Leaders were interviewed using the interview guides.

Descriptive statistical analysis which was both qualitative and quantitative was used to analyze the data gathered on the study. Percentages were greatly used with a few mean scores to present information collected on the biographical data, data on school and the first five research questions. The recommendations were based on themes that emerged from the interviews and questionnaires and they were summarized and presented in anecdotal form.

Summary of Major Findings

The studies revealed that the majority of the respondents were males. The ratio of male to female respondents was 2:1. Although most of the parents were illiterates with farming as their main occupation, they were aware that their wards were in multigrade classes and they preferred them to be in multiclasses than taking the risk of walking long distances to schools that are far away from their locations. In all three units, namely the Local Authority, Presbyterian and AME Zion Units had multigrade schools. It was noted that district education office, to a large extent initiated the opening of the schools due to the national policy on deployment of teachers according to the low pupil enrolment in the schools. In addition, the refusal of some teachers to serve in the remote and hard to reach communities necessitated the multigrades sometimes with high enrolment. Multigrade schools therefore, ensured a better distribution of schools in Asunafo North District so that the children were not denied basic education. This is in line with the EFA campaigns that the establishment of multigrade classes can make a decisive contribution to EFA in rural areas (Brunswic & Valérien, 2004).

Even though some stakeholders were involved in supporting the multigrade schools, the learning resources were woefully inadequate. The District Assembly and the education Directorate did not give any exclusive support to the multigrade schools. Findings showed that support given by these two bodies were given to all the schools in the districts and in such cases the multigrade schools suffered. Some multigrades for instance, were found to be under trees and some pupils used kitchen stools and some teachers had no furniture, especially in the kindergartens. Some pupils in the kindergartens did not have exercise books and some pupils shared exercise books with their siblings. Parents of such children expected the central government to extend the Capitation Grants to cover stationery for pupils as well.

In Asunafo North District the study showed that multiclasses are poorly organized. The majority of untrained teachers and even the professional teachers in multigrade arrangements adopted few innovative methods in the running of multigrade classes. Teaching and learning was therefore adversely affected and parents were not enthused to have their children attend these schools. Parents expressed doubts about the quality of teaching in the multigrade system. They made such statements as "The teachers are not serious". "Our children only sing, eat and sleep". "The teachers are good care takers". "We can only leave our children there safely and go to farm". For the majority of stakeholders, multigrade arrangements are only administrative and economic necessities, and should be done away with when resources for a monograde system are affordable and available irrespective of the poor enrolment and hence their disrecommendation of multigrade arrangements.

85

Conclusions

Multigrade schools to a large extent promote EFA goals in the rural, hard-to-reach and poorly populated areas. It also helps in the light of budgetary and human resource constraints. However, the study revealed that multigrade schools in the Asunafo North District have inadequate learning resources and also the multigrade teachers used few innovative methods in the running of multiclasses. This may affect the effectiveness of teaching and learning outcomes. To this end, stakeholders in the Asunafo North District should support multigrade schools so that standards should not be compromised in such schools.

Recommendations

Since multigrade school arrangement is useful, rural districts should resort to multigrade teaching instead of employing untrained teachers who lack pedagogical skills. The following suggestions are recommended:

1. . There should be a national policy decision with regard to the development of curriculum materials and political will for exclusive support in the provision of infrastructure and learning resources to multigrade schools.

2. District Directors should collaborate with District Assemblies, NGOs and other Donors like the UNICEF to exclusively support multigrade schools with the basic learning resources. In addition, adequate curriculum materials should be designed and supplied to children in multiclasses.

3. Communities should be sensitized by the directorate to own the multigrade schools and adequately provide their children with stationery, supervise their homework and ensure that they are regular and punctual to school.

4. Teacher training institutions should incorporate multigrade teaching into their programmes.

5. In addition, the directorate should collaborate with Teacher Education Division of the G.E.S and Teach Training Institution to give in-service training (INSET) to teachers in multiclass arrangements so that they will acquire the needed pedagogical techniques in multigrade teaching.

Suggestions for Further Studies

It is suggested that the present study could be replicated in other districts so as to make the generalizations of the research findings and their recommendation more reliable. It is also worthwhile to investigate the impact of the multigrade school system on the achievement of pupils. Appropriately conducting a study to find the effect of teaching methods and strategies for organizing multigrade classes on pupils learning outcomes could also be researched into.

REFERENCES

Akangbou, S. D. (1987). *The economics of education.* Ibadan: Shaneson C. I. Ltd.

Ankomah, P. O. (2006). *Capacity workshop in policy research, monitoring and evaluation for regional and district education personnel,* Accra: Ministry of Education, Science and Sports.

Ankomah, Y. A. (1998) Participation in secondary education in Ghana: The case of females in rural Brong Ahafo. *Journal of Education Management, 1* (1), 83-93.

Antwi, M. K. (1992). *Education society and development in Ghana.* Accra: Unimax Publishers Ltd.

Ary, D., Jacobs, L. C. & Razavieh, A. (1979). *Introduction to research in education* (2nd ed). New York: Holt Rinehart & Winston.

Asunafo North District Education Office (2004). *School mapping report.* An Unpublished Document, of the Asunafo North District Education Office, Goaso.

Asunafo North District Education Office (2005). *EMIS data.* An Unpublished Document, of the Asunafo District Education Office, Goaso.

Asunafo North District Education Office (2005). *Monitoring reports.* An Unpublished Document, of the Asunafo North District Education Office, Goaso.

Asunafo North District Education Office (2006). *District annual performance report.* An Unpublished Document, of the Asunafo North District Education Office, Goaso.

Awuku, V. M. (2001). *Increasing access to primary education through multigrade school system: A case study of Wenchi District of Brong Ahafo Region of Ghana.* An Unpublished Master's Thesis submitted to the Institute of Educational Planning and Administration of the Faculty of Education, University of Cape Coast.

Barnard, H. C. (1971). *A history of English education from 1960.* London: University of London Press.

Bray, M. (1987). *Are small schools the answer? Cost effectiveness, strategies for rural school provision.* Commonwealth Secretariat.

Brunswic, E. & Valérien, J. (2004). *Multigrade schools: Improving access in rural Africa.* Paris: UNESCO.

Châu E. (1969) *Demographic aspects of educational planning.* Paris: UNESCO/IIEP.

Cohn, E. (1979). *The economics of education.* USA: Ballinger Publishing Co.

Commonwealth Secretariat (2005). *Resource material for multigrade teaching.* London: Commonwealth Secretariat.

Denscombe, M. (2003). *The good research guide for small scale social research* (2nd ed). Maidenhead: Open University Press.

Fraenkel, J. R. & Wallen, N. E. (1993). *How to design and evaluate research in education* (2nd ed). New York: McGrraw Hill Inc.

Flanders, N. A. & Simon, A. (1969). *Teacher effectiveness. Encyclopedia of educational research* (4th ed). New York : Macmillan.

Ghana Education Service (1994). *Headteachers handbook.* Accra: Ghana Education Service.

Ghana Education Service (1997, June16). *Seminar on staff rationalization.* Circular Letter No. GES/STAT/INFO/Vol. 6/206. Accra: Ghana Education Service.

Ghana Education Service (2007). *INSET sourcebook. General pedagogy* module 4 (2nd ed). Accra: JICA

Gutloff, K. (Ed) (1995). *Multigrade classrooms.* West Haven, USA: National Education Association of the United States.

International Institute of Capacity Building in Africa (2006). *Multigrade school: A rural solution.* UNESCO Education. Online: www.unesco-iicba.org. Retrieved: 7/5/2006.

Juster, F. T. (1975). *Education, income and human behavior.* New York: Macgraw Hill Book co.

Kuffuor, J. A. (2005, January 7). *Address to parliament.* Accra: Unpublished.

Little, A. W. (2001). Multigrade teaching towards an international research and policy agenda. *International Journal of Educational Development, 21* (6), 481-498.

Lockheed, M. E. Verspoor, A. M. & Associates (1991). *Improving primary education in developing countries.* New York.: Oxford University Press.

Mason, D. A. & Burns, R. B. (1995). Teachers views of combination of classes. *Journal of Education Research, 89* (1), 36-45.

Mason, D. A. & Burns, R. B. (1996). Simply no worse and simply no better may be wrong: A critique of Veenman's conclusion about multigrade classes. *Review of Educational Research, 66* (3), 307-322.

Mason, D. A. & Good T. L. (1996). *Mathematics instruction in combination and single grade classes: An exploratory investigation. Teacher college record, 98* (2), 236-265.

McWilliam, H. O. A. & Kwamena-Poh, M. A. (1975). The *development of education in Ghana*. London: Longman Group Ltd.

Ministry of Education (2001). *Policies and strategic plans for the education sector.* Accra: Ministry of Education and Sports.

Ministry of Education and Sports (2005). *District education office financial operational capacity strengthening training handbook.* Accra: Ministry of Education and Sports.

Ministry of Education, Science and Sports (2007, June 30). Invitation for tenders. (National competitive tendering) Schools Under Trees *project* (SUTP). *Ghanaian Times*, p.19.

Opoku, J. Y. (2002). *A short guide to research writing in the social sciences and education.* Accra: Ghana University Press.

Owolabi, S. O. (1987). *Political and cultural context of education planning.* Ibadan, Nigeria: Aderibigbe Publishers.

Psacharopoulos, G. Rojas, C., & Velvez, D (1993). *Achievement evaluation of Columbia Escuela Nueva: Is multigrade the answer? Comparative education review, 37* (3), 269-276.

Schiefelbein, E. (1990). *Basic elements to reflect on the quality of education in Latin America context.* Paris: IIEP.

Schultz, T. W. (Ed.) (1974). *Economics of the family, marriage and human capital.* London: University of Chicago Press.

Shafritz, J. M., Kroeppe, R. P. & Soper, E. W. (1988). *The facts of file dictionary of education.* U.S: Facts of File.

The Republic of Ghana (2002). *Report of the president's committee on review of education reforms* (2002). Accra: Adwinsa Publications (Gh) Ltd.

Thomas, C. & Shaw, C. (1992). *Issues in the development of multigrade schools.* Paris: World Bank.

Thomas, H. (1990). *Education costs and performance: a cost effectiveness analysis.* London: Cassell Education Ltd.

UNESCO (2003). *Multigrade schools: A rural solution.* Online: www.unesco-iicba.org. Retrieved 1/8/2006.

Veenman, S. (1995). Cognitive and non-cognitive effects of multigrade and multiage classes: a best-evidence synthesis. *Review of Educational Research, 65* (4), 319-381.

APPENDIX A

ENROLMENT IN MULTIGRADE SCHOOLS IN ASUNAFO NORTH DISTRICT

NAME OF CIRCUIT	SERIAL NO.	NAME OF SCHOOL	NO. OF MULTIGRADES IN SCHOOL	CLASSES COMBINED	ENROLMENT		
					BOYS	GIRLS	TOTAL
Akrodie	1	Ahantamo L/A Primary	1	Primary 2	6	5	11
				Primary 3	5	6	11
	2	Aniape L/A Primary	1	Primary 4	8	9	17
				Primary 5	10	9	19
	3	Brodedwo L/A Primary	1	Primary 5	9	5	14
				Primary 6	9	19	28
	4	Mpamase L/A Kindergarten	1	KG1	18	21	39
				KG2	10	10	20
	5	Mensakrom L/A Primary	1	Primary 2	8	9	17
				Primary 3	10	9	19
Ampenkro	6	Diasibe L/A Primary	2	Primary 3	10	14	24
				Primary 4	6	5	11
				Primary 5	9	4	13
				Primary 6	3	4	7
Asumura	7	AtomL/A Primary	1	Primary 4	11	7	18
				Primary 5	6	14	20
	8	AworakeseL/A Primary	2	Primary 2	9	11	20
				Primary 3	13	11	24

NAME OF CIRCUIT	SERIAL NO.	NAME OF SCHOOL	NO. OF MULTIGRADES IN SCHOOL	CLASSES COMBINED	ENROLMENT		
					BOYS	GIRLS	TOTAL
				Primary 4	1	7	8
				Primary 5	5	4	9
	9	Gyesewobre L/A Kindergarten	1	KG1	20	11	31
				KG2	8	7	15
	10	Pomaakrom Presby Primary	1	Primary 2	14	15	29
				Primary 3	12	10	22
Ayomso	11	Anwiawia Kindergarten	1	KG1	29	28	57
				KG2	18	21	39
	12	Edwinase Kindergarten	1	KG1	25	43	68
				KG2	12	15	27
	13	Kyenkyenhenekrom Kindergarten	1	KG1	15	18	33
				KG2	17	10	27
	14	Minkakrom Kindergarten	1	KG1	30	27	57
				KG2	19	15	34
Bediako/Bitre	15	Alhajikrom L/A Primary	2	Primary 2	8	1	9
				Primary 3	3	2	5
				Primary 4	3	3	6
				Primary 5	0	1	1
				Primary 6	4	1	5
Kasapın	16	Kofimire AME Zion Primary	2	KG1	8	7	15
				KG2	10	8	18
				Primary 1	11	8	19
				Primary 5	12	5	17
				Primary 6	9	7	16
	17	Suntreso L/A Primary	2	Primary 1	20	8	28
				Primary 2	11	10	21
				Primary 5	5	10	15
				Primary 6	9	15	24

APPENDIX B

DOCUMENTARY DATA / GUIDE ON AVAILABILITY OF RESOURCES BY SCHOOL

SCHOOL	Classroom			Furniture (P)			Furniture(T)			Textbooks			T/L Aids			Writin Mat.	Reading Materials			Class Lib.			Cupboard		Total
	Ad	Inad	N	Ad	inad	N	Ad	Inad	N	Ad	Inad	N	A	Inad	N	Ad	Inad	N	Ad	Inad	N	Ad	Inad	N	Inad
Mensakrom																									
Mpamase																									
Ahantamo																									
Brodedwo																									
Aniape																									
Pomaakrom																									
Gyesewobre					٧																				
Atom																									
Aworakese							.									.							..		
Alhajikrom	.						.		.							.							.		.
Anwiawia														`											
Edwinase																									
Kyenkyenbenek rom																٧									
Minkakrom																									
Suntreso																									
Kofimire					`																				
Diasibe																									
No.	9	7	6	7	13		6	9	7	14	1	7					14	8		15	7	2		5	15
%	14	31.8	27.2	41	50		27.2	41	31.8	63.6	46	31.8	100				100	63.6	36.4		68.2	31.8	9.1	22.7	68

Ad =Adequate N=none P=pupilsInad=Inadequate T=Teachers TLM=Teaching and Learning materials

APPENDIX C

DOCUMENTARY GUIDE FOR THE TYPE OF SUPPORT THAT THE INSTITUTIOONS OR BODIES GIVE TO THE MULTIGUIDE SCHOOLS

Institution Body	Classrooms	Furniture	Text Books	Incentive to Teachers	Volunteer Teachers	Teachers' Accommodation	T/LMs	No.	Percentage (%)
District Assembly	√			√	√			3	42.9
GES			√	√			√	3	42.9
NGO (Action Aid)					√			1	14.3
Donor Agency DFID		√					√	2	28.6
Philanthropists		√					√	1	14.3
PTA	√	√		√		√		4	57.1
S.M.C		√		√		√		3	42.9

N.B. T/LMs= Teaching and Learning Materials

APPENDIX D

DOCUMENTARY DATA/GUIDE FOR THE INSTITUTIOONS/BODIES WHICH SUPPORT THE MULTIGUIDE SCHOOLS

	Dismict	GES	NGO Action Aid	Donor agency DFID	Philanthropists	PTA	SMC
Akrodie Circuit	√	√		√			
Ahantamo	√	√		√			
Aniape	√	√		√			
Brodedwo	√	√		√			
Mensakrom	√	√		√			
Mpamase	√	√		√		√	√
Ampenkro							
Diasibe	√	√		√			√
Asumura Circuit							
Atom	√	√		√			
Aworakese	√	√		√			
Gyesewobre	√	√		√	∵		√
Pomaakrom	√	√		√			
Ayomso Circuit							
Anwiawia	√	√		√		√	√
Edwinase	√	√		√		√	√
Kenkyenhenekrom	√	√	√	√		√	√
Minkakrom	√	√		√		√	
Bediako/Bitre Circuit							
Alhajikrom	√	√		√	√	√	√
Kasapin Circuit							
Kofimire	√	√		√		√	
Suntreso	√	√	√	√			
	22	22	2	22		8	5
	100%	100%	9.1	100%		36.4	22.7

UNIVERSITY OF CAPE COAST

INSTITUTE OF EDUCATIONAL PLANNING AND ADMINISTRATION

RESEARCH INTO MULTIGRADE SCHOOLS IN ASUNAFO NORTH
DISTRICT

QUESTIONNAIRE FOR EDUCATIONAL MANAGERS AND CIRCUIT
SUPERVISORS

Dear Sir/Madam,

This questionnaire/Interview is on Assessment of Multigrades in Asunafo
North District. I would be very grateful if you could respond to the items as
candidly as possible. Your responses would be kept strictly confidential.

Thank you for your support.

SECTION A

1. Status:

    D.E.O. Staff (Specify category)   [   ]

    S.M.C. Member   [   ]

    D.E.P.T. Member   [   ]

    D.E.O.C. Member   [   ]

    Retired Teacher   [   ]

2. Sex: Male   [   ]   Female[   ]

3.   Educational Background:

Second Degree   [   ]

First Degree   [   ]

Diploma   [   ]

Specialists   [   ]   Cert 'A' (Post Sec.)   [   ]

Cert 'A' (4yr)   [   ]   HND   [   ]

SSSCE   [   ]   GCE A/L   [   ]

GCE O/L   [   ]   MSLC   [   ]

Others (specify)...

4.   Occupation: ....

5.   If teaching, state years of teaching experience....................years.

6.   Have you ever taught a Multigrade Class?   Yes   [   ]   No   [   ]

7.   Do you have any training in teaching Multigrade Class?   Yes   [   ]

No   [   ]

SECTION B

1.   State reasons why teachers in the school(s) you supervise combine classes.

Low enrolment   [   ]   Inadequate classroom [   ]

Refusal of Teachers to serve in Rural/hard to reach areas   [   ]

Maternity leave   [   ]

Others (specify) ....

2.   Who initiated the Multigrade Classes arrangement?

PTA/SMC   [   ]   School   [   ]

District Education Office/Regional Manager of Educational Unit   [   ]

Others (specify) ....

SECTION C

(For A/D Statistics and AD/F&A)

1.   Which of the following resources are available in the schools with
     Multigrade Classes? (Indicate with a tick √)

Resources	Available in good condition	Available in good condition	None Available
Pupils' Furniture			
Teachers' Furniture			
Text Books			
Teaching/Learning Aids			
Writing Materials			
Reading Materials			
Classroom Libraries (Metal Boxes)			
Others specify			

2. Which of the following institutions or bodies support the Multigrade Classes?

Please indicate the type of support.

Body	Classrooms	Furniture	Text Books	Incentives to Teachers	Others specify
District Assembly					
Ghana Education Service					
Non-Government Organization (specify)					
Donor Agencies (specify)					
Philanthropists					
PTA					
SMC					
Others					
Others specify					

SECTION D

1. How do teachers of Multigrade Classes write their lessons notes?

Separately for each of the classes   [   ]

Combined   [   ]

Others (specify):... ....

2.   How often do teachers use each of these teaching approaches?

Method	Regularly	Rarely	Never
Explanation			
Demonstration			
Investigation			
Experiments			
Field work/outside visits			
Projects			
Discussion			
Debates			
Drama and role play			
Educational games			
Questioning			
Others specify			

3.   How do teachers organize their pupils? How often do they use each of these techniques?

Method	Regularly	Rarely	Never
Whole class teaching			
Separate class grouping			
Combining class			
Ability grouping			
Friendship grouping			
Peer tutoring within a class			
Cross age/class tutoring			
Others specify			

SECTION E

1. Multigrade Classes are ideal in implementing education for all in rural and remote areas.

    Strongly Agree   [ ]

    Agree   [ ]

    Disagree   [ ]

    Strongly Disagree   [ ]

2. Multigrade Classes ensure quality education in the rural and underserved areas with low and scattered population.

    Strongly Agree   [ ]

    Agree   [ ]

    Disagree   [ ]

    Strongly Disagree   [ ]

3. Multigrade Classes are only an administrative and economic necessity and should be done away with when resources for a monograde school structure is affordable and available irrespective of the poor enrolment.

    Strongly Agree   [ ]

    Agree   [ ]

    Disagree   [ ]

    Strongly Disagree   [ ]

4. Do you recommend Multigrade Classes?

    Yes   [ ]   No   [ ]

5.   State reasons for your answer.

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

SECTION F

For many reasons multigrade system cannot be done away with. What suggestion would you have for improving the system?

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

UNIVERSITY OF CAPE COAST

INSTITUTE OF EDUCATIONAL PLANNING AND ADMINISTRATION

RESEARCH INTO MULTIGRADE SCHOOLS IN ASUNAFO NORTH DISTRICT QUESTIONNAIRE FOR HEADTEACHERS AND TEACHERS

Dear Sir/Madam,

This questionnaire is on Assessment of Multigrade Classes in Asunafo North District. I would be very grateful if you could respond to the items as candidly as possible   Your responses would be kept strictly confidential.

Thank you for your support.

SECTION A

(Indicate with a tick \ )

1. Sex·   Male [   ]   Female [   ]
2. Qualification.

    Type   [   ]

    First Degree   [   ]

    Diploma   [   ]

    Specialist   [   ]

    Cert A (Post Sec)   [   ]

    Cert A (4 year)   [   ]

    HND   [   ]

    G.C.E. A/L   [   ]

    C.C.E. O/L   [   ]

    S.S.S.C.E.   [   ]

    M.S.L.C.   [   ]

    Others (Please specify) ....

3. Name of School: ....

4. Name of Circuit: ....

5. Date of Establishment: ....

6. Management Unit:

   Local Authority   [   ]

   Presbyterian Unit   [   ]

   A.M.E. Zion Unit   [   ]

   Anglican Unit   [   ]

   S.D.A. Unit   [   ]

   Roman Catholic Unit   [   ]

   Others (Please specify)...

7. Classification of School

   Urban   [   ]

   Sub-Urban   [   ]

   Rural   [   ]

   Hard to Reach   [   ]

SECTION B

(Indicate 1 -6 with a tick √)

1. How long have you taught/   Years [   ]   Months [   ]

2. How long have you been in this schools?   Years [   ]   Months [   ]

3. How long have you taught Multigrade class in the school?

   Years [   ]   Months [   ]

4. Have you taught Multigrade classes elsewhere? Yes [   ]   No [   ]

5. If yes, how long did you teach the multigrade class? Years [   ]

   Months [   ]

6.   Which classes do you teach? ....

7.   State the enrolment of pupils in each of the classes by sex

Class	Male	Female	Total

8.   How many communities does your school serve? .... (for heads
      only)

9.   Is your school able to attract majority of the children in the catchments
      areas? Yes [   ]   No [   ] (for heads only)

10.   State reasons for your answer

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

(Indicate with a tick √)

11.   Who initiated the Multigrade classes? (For heads only)

      The School   [   ]
      P.T.A. / SMC   [   ]
      S.M.C.   [   ]
      District Education Office   [   ]
      Regional Manager   [   ]
      Others (Please specify)..................................... ....

12.   Why did you combine the Classes?

      Low enrolment   [   ]
      Inadequate Teacher   [   ]
      Absenteeism / irregularly of Teachers [   ]

Absenteeism / Irregularly of Pupils   [   ]

Teacher of Maternity   [   ]

Others (Please specify)..

SECTION C (For heads only)

(If yes indicate the type with a tick √)

1.   Do you have a classroom?   Yes [   ]   No [   ]

2.   If yes, state the type.

Permanent Structure	[ ]
Temporary Structure	[ ]
Make shift shelter	[ ]
Pavilion	[ ]
Under a tree	[ ]

3.   Which of the following resources do you have in your multigrade arrangement/class? (Indicate by a tick √)

Resources	Available in good condition	Available in good condition	None Available
Pupils' Furniture			
Teachers' Furniture			
Text Books			
Teaching / Learning Aids			
Writing Materials			
Reading Materials			
Classroom Libraries (Metal boxes)			
Others (Specify)			

4. Which type of furniture do you have for the pupils in the multigrade classes? (Indicate by a tick √)

Type	Adequate	Inadequate	None
Standard Dual Desks			
Standard Mono Desks			
Chairs and Tables			
Benches			
Stools			
Others (Specify)			

5. Which of the following institutions or bodies support the multigrade Classes/system?

Please state the type of support

Body	Classrooms	Furniture	Text Books	Incentives to Teachers	Others (Specify)
District Assembly					
Ghana Education Service					
Non-Government Organization (Specify)					
Donor Agencies (Specify)					
Philanthropists					
P.T.A.					
S.M.C.					
Others (Specify)					

SECTION D

1. How do you write your lesson notes for the classes you teach?

    Separately for each of the classes   [   ]

    Combined   [   ]

    Others (Specify):..

2. How often do teachers use each of these teaching approaches?

Method	Regularly	Rarely	Never
Explanation			
Demonstration			
Investigation			
Experiments			
Field work/outside visits			
Projects			
Discussion			
Debates			
Drama and role play			
Educational games			
Questioning			
Others specify			

3. How do teachers organize their pupils? How often do they use each of these techniques?

Method	Regularly	Rarely	Never
Whole class teaching			
Separate class grouping			
Combining class			
Ability grouping			
Friendship grouping			
Peer tutoring within a class			
Cross age/class tutoring			
Others specify			

SECTION E

(Indicate with a tick √)

1. Multigrade Classes are ideal in implementing education for all in rural and remote areas

    Strongly Agree   _ [   ]

    Agree   [   ]

    Disagree   [   ]

    Strongly Disagree   [   ]

2. Multigrade Classes ensure quality education in the rural and underserved areas with low and scattered population

    Strongly Agree   [   ]

    Agree   [   ]

    Disagree   [   ]

    Strongly Disagree   [   ]

3. Multigrade Classes are only an administrative and economic necessity and should be done away with when resources for a monograde school structure is affordable and available irrespective of the poor enrolment

    Strongly Agree   [   ]

111

Agree   [   ]

Disagree   [   ]

Strongly Disagree   [   ]

4.   Do you recommend Multigrade Classes?

Yes [   ]   No [   ]

5.   State reasons for your answer

....

....

....

....

....

....

....

SECTION F

1.   For many reasons multigrade system cannot be done away with. What suggestions would you have for improving the system?

....

....

APPENDIX G

UNIVERSITY OF CAPE COAST

INSTITUTE OF EDUCATIONAL PLANNING AND ADMINISTRATION

RESEARCH INTO MULTIGRADE SCHOOLS IN ASUNAFO NORTH DISTRICT

INTERVIEW GUIDE FOR PARENTS WITH CHILDREN IN MULTIGRADE CLASSES AND OPINION LEADERS

Dear Sir/Madam,

This Interview is on Assessment of Multigrade Classes in Asunafo North District. I would be very grateful if you could respond to the items as candidly as possible. Your responses would be kept strictly confidential.

Thank you for your support.

SECTION A

1. Status: Parents _ [ ]   Opinion Leader   [ ]
2. Sex: Male   [ ]   Female   [ ]
3. Educational Background:

   Nil   [ ]
   Primary/Basic School   [ ]
   Secondary   [ ]
   Others
   (Specify):..

4. Occupation:.... ....

5. How many children do you have in multigrade classes? Please
   specify...

6. Which class is he/she in? please
   specify..

7. What is the name of your child's school?..

8. Do you have other children attending school
   elsewhere?...

9. If yes, why are they not attending this school?

   Because the dsistance from the house to the school is far   [   ]

   Because of inadequate teachers resulting in multigrade classes   [   ]

   Because of inadequate furniture in the class/school   [   ]

   Because of the poor performance of pupils   [   ]

   Combination of above   [   ]

   Other reasons, please
   specify:..
   ....

10. Are you aware that your child is in multigrade class? Yes [   ] No [   ]

11. If yes, who informed you?

    Child   [   ]

    Teacher   [   ]

    Headteacher   [   ]

    Chief   [   ]

    PTA/SMC Chairman [   ]

    Circuit Supervisor   [   ]

    Others, please specify..   ....

12. Were you informed about the reasons why he/she should be in a
    multigrade class?

    Yes   [   ]   No   [   ]

13. If yes. State reasons:...
    ....
    ....
    ....

SECTION B

(Indicate with a tick √)

1. Multigrade Classes are good in ensuring all children in rural areas go to school.

    Strongly Agree   [ ]

    Agree   [ ]

    Disagree   [ ]

    Strongly Disagree   [ ]

2. Multigrade Classes ensure quality education in the rural and underserved areas..

    Strongly Agree   [ ]

    Agree   [ ]

    Disagree   [ ]

    Strongly Disagree   [ ]

3. Multigrade Classes are only an administrative and economic necessity and should be done away with when resources for a monograde school structure is affordable and available irrespective of the poor enrolment.

    Strongly Agree   [ ]

    Agree   [ ]

    Disagree   [ ]

    Strongly Disagree   [ ]

4.   Do you recommend Multigrade Classes?

        Yes   [ ]   No   [ ]

5.   State reasons for your answer.

SECTION C

For many reasons multigrade system cannot be done away with. What suggestion would you have for improving the system?