UNIVERSITY OF CAPE COAST

MANAGEMENT OF LEARNING RESOURCES IN PUBLIC JUNIOR

HIGH SCHOOLS IN THE MFANTSEMAN MUNICIPALITY IN THE

CENTRAL REGION OF GHANA

SAMUEL ACQUAAH

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CENTRAL REGION OF GHANA

BY

SAMUEL ACQUAAH

Thesis submitted to the Institute for Educational Planning and Administration of the Faculty of Education, University of Cape Coast, in partial fulfilment of the requirements for award of Master of Philosophy Degree in Educational Administration.

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DECLARATION

Candidate's Declaration

I hereby declare that this thesis 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: Samuel Acquaah

Supervisors' Declaration

We hereby declare that the preparation and presentation of this thesis was supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

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

Name: Mr. S.K. Atakpa

Co-Supervisor's Signature:.......................................Date..............................

Name: Dr. (Mrs.) Janet Koomson

ABSTRACT

The main purpose was to find out the availability, adequacy and state of learning resources in the Junior High Schools (JHSs) in the Mfantseman Municipality in the Central Region of Ghana. It further wanted to find out how heads as well as teachers manage these available learning resources. In all 202 teachers and 70 headteachers were involved in the study. The headteachers were requested to answer 50 items whilst the teachers had 49 items. The entire respondents answered closed-ended questions on the availability, adequacy and state of school resources. They further answered questions on how the resources are managed in the JHSs in the Mfantseman Municipality. The main findings were:There were available learning resources in most of the schools and were adequate. Only science equipment were inadequate. The state of learning resources was good with the exception of science equipment. The resources were yearly replaced and inspected once a week.Old existing materials were used when resources are not supplied, resources are mainly kept in the headteachers office and receipt voucher and inventory books are used to take school records. It was concluded that:More learning resources should be supplied to schools to help eliminate the inadequacies in the schools.Both teachers and head teachers should constantly inspect and ensure effective use of learning resources in the schools. It is recommended that Ghana Education Service, head teachers and teachers should regularly maintain and replace outmoded learning resources in the schools.

ACKNOWLEDGEMENTS

DEDICATION

To my parents Mr. & Mrs Acquaah (Snr), my wife Mrs Vida Acquaah and my

children, Keslyn and Cyrus.

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CHAPTER ONE

INTRODUCTION

Background of the Study

School effectiveness and quality improvement have become important themes in current educational policy-making (Barber & White, 1997). This is because education is regarded as a foundation for socio-economic and political development in the larger society. The main aim of education at all levels is to help the individuals to acquire knowledge, skills and attitudes to help them develop their potential and function well in order to fit into their societies. Agyeman (1996) stated that the essence of basic education is to transmit to learners values, ideas, techniques of life, beliefs and knowledge accumulated and used by a particular group of people. Generally, the return from good quality education should enable individuals to contribute to national development and to ensure quality improvement in their lives through the use of the school learning resources. For the successful achievement of this, both the government and other stakeholders are employing various strategies and methods to achieve the objective of giving quality education to Ghanaian children.

Miller-Granvaux, Welmond and Wolf (2002) state that a number of non-governmental organisations (NGOs) are helping to channel a growing amount of developmental resources to schools to help implement school programmes. In

1996, 40 NGOs facilitated school renovation and construction, provision of educational materials and in-service training of teachers in the education sector (Akyeampong, Pryor, & Ampiah, 2006). Between the period 1986 and 2002, the Government of Ghana received credit totalling $260 million to support its reform of the basic education sector. The credits were allocated to improving school efficiency, budgetary procedures and restructuring of the school system (World Bank, 2004). At the 35th congregation of the University of Cape Coast the then sector minister indicated the government of Ghana had invested 6.3 trillion cedis in education. Despite these provisions, Yeboah (1990) reports of scarcity of textbooks, decline in the state of buildings, furniture and equipment. He further noted that data and statistics needed for planning and improving on these learning resources are difficult to be documented.

Learning resources are important components in quality education. They play a vital role in effective teaching and learning. The main rationale for the usage of these resources, according to Farrant (1980), is to help students to survive in the modern world so as to be marketable and beneficial to individuals, the community and entire country.

Osafo-Acquah and Asamoah-Gyimah (2009) indicated education is a right and not a privilege and therefore it is impossible for the government to finance formal education for all Ghanaians as stated in the 1986 Education Commission's Report on basic education. But lack of resources to invest in education serves to widen the gap to the attainment of quality education (Bush & Bell, 2005). In Nigeria for instance schools do not have adequate funds for

provision of relevant furniture, textbooks and adequate classroom let alone adequate funds to purchase modern equipment to aid instruction (Aduwa-Ogiegbaen & Iyamu, 2005; Adeniyi, 2001). Inadequacy of resources in basic schools in Ghana also led to the shift system where classrooms were shared between two classes with one group using the classroom in the morning for a stipulated period and the other in the afternoon. This was due to the lack of infrastructure, teachers, textbooks and learning materials (Korda, 2010).

Assessment of the performance of institutions delivering educational services has become a matter of particular interest to nations around the world seeking to increase educational provision and maximise value for money (Adeniyi, 2001). Worldwide, governments have increasingly tried several means to improve education through the provision of adequate resources. In recent years in Hong Kong, the total education expenditure on schools increased from HK 48,000 million dollars to HK 55,000 million dollars in 2002/2003 (Education and Manpower Bereau, 2004).The additional educational budget was used to upgrade school facilities such as buying computers, textbooks, renovation of school structures and training of sufficient teachers for the schools.

Today, the provision of learning resources to schools in Ghana is the responsibility of the central government. This position was supported by Mankoe (2001) that governments in the past years have allocated thirty five to forty per cent of its annual budgets to the education sector in a bid to improve upon education.

The history of education in Ghana could be traced from the 16th century with the involvement of Christian missionaries and the colonial government in establishing schools to train the indigenes in Africa. But this failed to address the country's problem of national development and equity (Mcwilliam & Kwamina-Poh, 1975).

After winning the general election in 1951, the Convention's People's Party was determined to improve upon educational facilities in primary, middle, secondary and the technical schools through the accelerated development plan. In 1952 the government developed new classroom structures to accommodate 132,000 children in basic schools. In 1957 the number increased to 450,000 when attaining independence from our colonial masters (Mcwilliam & Kwamina-Poh, 1975).

Auxiliary governmental involvement could be identified in successive years from The National Liberation Council (NLC)-1966-1969, The Progress Party (1969-1972), the National Redemption Council (NRC) and the Supreme Military Council 1 (1972-1978), Supreme Military Council 2 (1978-1979), the Armed Forces Revolution Council Era (1979) and the People National Party in 1979 to 1981 together established educational committees to review the educational system and propose solutions for the educational sector. The Kwapong and Dzobo committee recommended for an improvement in learning resources in basic schools but could not materialize as a result of inadequate funds (Amaning, 2006).

According to Mcwilliam and Kwamina-Poh (1975) the Provisional National Defence Council (PNDC), found it expedient to implement the new educational reform proposed by the Acheampong government, because the educational sector suffered difficulties regarding teachers, insufficient curriculum materials, equipment and furniture and deterioration of school structures. The New Structure and Content of Education for the JHSs which relied on the government's white paper was thus implemented in 1987 (Mcwilliam & Kwamina-Poh, 1975) to improve upon education in Ghana. The new reform which introduced the 6-3-3-4 system allowed 6years of primary education, 3years of junior secondary education, 3years senior secondary education and a minimum of 4 years of tertiary education. The reform also sought to improve on the child's use of modern scientific and technological resources to learn.

The reform of 1987 had some setbacks which called on the government to establish an Education Reform Review Committee of 1993-1994 to review basic education to the year 2000. Some of the problems identified by the committee included:

i) Poor quality of teaching and learning in schools due to poor management practices.

ii) Inadequate funding of the education sector leading to inadequate supply of inputs.

iii) Disappointing growth in enrolment in schools

iv) Lack of teaching and learning resources to train pupils toward technical and vocational education.

As indicated by Quaicoo (2006), the aforementioned problems in 1992 called for the formulation of a new basic education policy known as Free Compulsory and Universal Basic Education (FCUBE). The main objectives of FCUBE were to improve on the quality of teaching and learning, improve efficiency in management and increase access and participation.

Emphasis on improving teachers motivation through incentives, reviewing curriculum to promote quality students learning, improving teacher-student interaction, enhancing specific skills through in-service training and improving of teacher-community relationships were prominent in enhancing the quality of teaching and learning (Prempeh, 2005). Management and accountability for effective use of the school resources featured in the improvement of efficiency in management. In terms of improved access and participation, it aimed at improvement and increase in school infrastructure and other services.

Other donor support could also be identified in the bid to improve on school resources. The United States Agency for International Development (USAID), an international partner in its effort introduced Quality Improvement in Primary Schools (QUIPS) and Improving Learning through Partnership (ILP) aimed at helping the Ghana Education Service (GES) and the Ministry of Education (MOE) to improve on education in Ghana (Prempeh, 2005). All these were geared towards providing access and improved education to the Ghanaian child. The Community School Alliance Project (2000), a local NGO, under the USAID sponsored project at the Twifo Hemang reported that 53 million United States dollars was invested in QUIP to support education in Ghana. As usual the

FCUBE also had its own limitations. They include insufficient textbooks, teaching staff, infrastructure and learning resources and as a result failed to produce the desired effect (Mcwilliam & Kwamina-Poh, 1975).

The Kufour administration in 2006, as part of efforts to expand access to education, gave budgetary allocation for the construction of 224, six (6- unit) classroom blocks with ancillary facilities in all districts. A total of 30 billion cedis completing 33 blocks was spent on the project. In addition to this, classroom furniture was procured at the cost of 15.2 billion cedis (MoFEP-Budget Statement, 2006) to augment resources for teaching and learning in basic schools. A textbook policy to achieve a 1:1 pupil textbook ratio in all subjects at the primary and JHS level was also implemented. For the realization of this objective, contracts valued at 395.0 billion cedis were awarded for the printing of textbooks in which the first batch of textbooks were delivered and distributed in 2006 (MoFEP -Budget Statement, 2006).

In the recent past, the Anamuah-Mensah Committee 2007 also reaffirmed the need for an improvement in learning resources as a way of bringing about a better change in the provision of education. This led to the refurbishment and renovation of old school structures for both basic and second cycle institutions. The Ministry of Education in 2007 collaborated with the District Assemblies and Non-Governmental Organizations in providing the necessary infrastructure for basic schools. This culminated in the upgrading of facilities in 31 and 25 senior secondary schools in 2006 and 2007 respectively (MoFEP -Budget Statement, 2006).

Besides, the one computer for one child policy was also implemented under the Presidential Special Initiative (PSI). Other support from the Ghana Education Trust Fund (GETFund) was to compliment government efforts. The current government in the 2010 budget statement initiated the School Under Trees Project to remove schools under trees, eliminate school shift system and the provision of infrastructural facilities in schools. A TV3 bulletin news of 21st September, 2010 also mentioned the GETFund 2010 budgetary allocation to end the shift system in the Accra Metropolitan Assembly in a bid to improve on educational infrastructure (Money & Solomon, 2010).

Supplementary efforts from parents, philanthropist and non-governmental organizations such as Plan International and Action Aid have also lent extra support to the government in an attempt to provide good education to the citizenry. Danquah (2003) buttresses this stance that there were still visible signs and indeed various addresses from developmental partners to offer substantial support in the realms of educational infrastructure and instructional materials in the quest of providing quality education.

Yet regardless of all these efforts not much has been achieved in ensuring that quality education emanate from adequate and efficient use of learning resources. Yakubu (1996) asserted that though total enrollment at basic education level in Ghana had increased from 560,000 in 1960 to 2,300,000 in 1990, there had not been a corresponding growth in educational facilities and resources. Furthermore he asserts that the environment of the schools did not promote serious learning and the schools he taught and served as the school administrator

lacked the standard resources. For instance, throughout his three years teaching in the school, the students never had access to basic scientific instruments such as beakers, test tubes, and burners, apart from seeing this equipment in science textbooks. MOE (2002) has stated that the then Deputy Minister of Education Mr. Rashid Bawa, at the 26th Ghana Book Award Ceremony indicated the Ghana Education Service needs 70 million dollars to purchase new textbooks for basic schools. He further said the ministry could not meet its target funds and was to liaise with the Ghana Book Development Council to raise funds to support in the proper management of the schools (http://www.modernghana.com).

Korda (2010) also highlighted that a hindrance to the delivery of quality education in most schools in Accra is dilapidated and inadequate infrastructure and overcrowded classrooms. He further adds that most schools lacked proper amenities and therefore needed urgent renovations. He stressed again that the greatest deficiencies were inadequate classrooms, non- existence of libraries, ICT facilities, science laboratories, sports court, toilets, and playing fields in the schools.

The ensuing result is children learn under unfavourable learning conditions in overcrowded uncompleted classrooms and tents. This confirms that there is still a yawning gap in terms of infrastructure, personnel, and teaching resources in Ghanaian schools (The Ghana National Education Campaign Coalition, 2010). A further report also noted with concern the continuing inequalities in the distribution of educational facilities and infrastructure to schools. This situation leaves head teachers and teachers with no option than to

make judicious use of the limited resources at their disposal. For this reason, prudent management of these resources is essential for the achievement of the stated educational objectives of ensuring quality education.

Effective schools therefore require good leadership and good management. For efficiency of education management is a key target or a contributing element for successful education provision. This assertion is supported by Atakpa and Ankomah (1998) who emphasized that schools that utilize available learning resources are likely to have academic successes than those who do not. The question therefore on adequacy of these resources, availability and their present state and how they are managed by heads and teachers certainly warrants further studies. So it is for a better understanding of this that the study was undertaken.

Statement of the Problem

The unavailability and inadequacy of learning resources continues to obstruct teaching and learning in Ghanaian basic schools. Mfum-Mensah (2003) indicated that many junior secondary schools in Ghana are faced with the problems of infrastructure, logistics, qualified teaching personnel and material inputs affecting the proper management of the schools.

The Ghanaian National Education Campaign Coalition (GNECC) of (2010, June), confirms that 29% of learning resources allocated to some public schools did not get to its recipients. Moreover, it is a regular sight for children to daily carry stools and desks to school due to the absence of desks or poor state of furniture in some public schools. In some other instances school children use

their laps as writing desks due to the same reason. The report again indicated that Ghana currently has about 3900 schools under trees and 4000 schools still under sheds and this is partly the reason why some 8000 children are not enrolled in schools. Furthermore in the 2010 education budget out of 750 million Ghana Cedis requested for building of 600 schools only 6 million Ghana Cedis was allocated leaving a huge financial gap in these schools. The Ghanaian Times (2010, April 23) stressed that about 20% of children of school going age are not in school making the achievement of the United Nations Millennium Challenge Goals of education for all by 2015 a mirage.

In spite of all the efforts in addressing problems in education delivery, the Anamuah-Mensah committee had stated standards of education continue to dwindle resulting in all sought of comments about the education system (Government of Ghana, 2002). The subject of poor performance of pupils at the Basic Education Certificate Examination (BECE) is also prevalent in some Municipalities in Ghana. According to the Ghanaian Times of November 11th 2009, the performance of pupils in the Asuogyaman District over the past three years indicated a decline in trends: 55.4% in 2007, 50.6% in 2008, and 50% in 2009 while in the Eastern Region of Ghana, the Akwamufie Presbyterian Junior High School scored zero percent with all the 38 pupils presented for the BECE scoring aggregate 31 and above (Hammond, 2010). These performances in some cases were attributed to inadequate learning resources and infrastructure. Money and Solomon (2010) reporting in the TV3 News bulletin of September 21 also highlighted inadequate infrastructure compelling a head of an institution at

Abakrampa in the Central Region to cramp 94 pupils in a small classroom. These scenarios may not be different from the Mfantseman Municipality after a visit to the Municipal Education Office. According to the education officers, reports of poor performance by students could be attributed to inadequate teaching and learning resources, and poor management on the part of head teachers and teachers. It is based on these grounds that this study was designed to investigate into how teaching and learning resources are managed to support classroom teaching and learning in basic schools in the Mfantseman Municipalities.

Purpose of the Study

The purpose of the study was to investigate the management of learning resources in the JHSs in the Mfantseman Municipality. Specifically the study seeks to:

Investigate the availability of learning resources in the JHSs in the Mfantseman Municipality, examine the adequacy of learning resources in the JHSs in the Mfantseman Municipality, assess of the state of the learning resources in the JHSs in the Mfantseman Municipality and find out the managing procedure of learning resources in JHSs in the Mfantseman Municipality.

Research Questions

Based on the above, the study was guided by the following research questions.

1. What learning resources are available in the JHSs to support teaching and learning in the Mfantseman Municipality?

2. Are the learning resources in the JHSs adequate in the Mfantseman Municipality?

3. What are the current states of the learning resources in the JHSs in the Mfantseman Municipality?

4. How are the available learning resources in JHSs in the Mfantseman Municipality managed?

Significance of the Study

Although the study might not be a panacea for the provision of learning resources it is presumed that its recommendations might help to stimulate policy decisions at the Ghana Education Service and the Municipal Assembly level on the provision, allocation and use of needed learning resources. Philanthropists, parents and NGOs who also have interest in provision of learning resources in schools might also find this work useful. It might help teachers and head teachers to take good care of learning resources entrusted into their care. It would also serve as a source of reference to other researchers who would like to study further on this topic.

Delimitation of the Study

A study of this nature could have been conducted in all JHSs in the Central Region of Ghana, but due to limited resources and time this was not possible. The study was therefore confined to only public JHSs in the Mfantseman Municipality in the Central Region. Secondly the study looked at how teachers and head teachers manage learning resources in the public JHSs in the Mfantseman Municipality in the Central Region. The study was further

limited to only 73 public basic schools relatively to the 90 basic schools in the Municipality.

Limitations of the Study

This study, like any other research has limitations. Some teachers and head teachers were not present on the day for the retrieval of questionnaire whilst some felt reluctant to answer the questionnaire making it difficult to get all the views which could have helped in bringing to light how resources are managed in the various schools within the area under study. But 272 out of 290 questionnaires were retrieved.

Secondly, distances from one school to the other were far apart. Long distances were covered in moving from one school to the other. To assist in this direction the Assistant Director in charge of Supervision to basic schools at the Municipal Education Office was approached for the location of schools.

Thirdly, the personality of the researcher as a professional teacher might have led to bias in the findings in the topic under study due to the element of subjectivity in reportage but care was taken to be objective in this regard.

Definition of Terms

Learning Resources: Refers to tangible and intangible materials used to facilitate teaching and learning in the schools. For the purpose of this study learning resources refers to the classrooms, textbooks, exercise books, cupboards, school compound, science equipment and tools, student furniture, toilet and urinals, libraries and teaching and learning materials (TLM's).

Management: Management in the context of this study means the process of procuring and use of learning resources in the attainment of educational goals. It is measured by the number of resources available to every pupil in a particular classroom.

Availability: Availability in the context of the study means existence and use of learning resources in the schools.

Adequacy: The quality of available learning resources being able to meet learners' educational goals satisfactorily.

State: State in the context of the study refers to whether the learning resources are in good or bad condition.

Head teacher: Is the administrator of the school who takes delivery of supplied resources to the school and is also responsible for supervising teachers and students to make effective use of the school learning resources.

Junior High School: This is the next stage of education after successful completion of six years primary education. The duration for junior high is three years. Children are prepared to write the Basic Education Certificate Examination for entry into senior secondary schools.

Organisation of the Rest of the Study

The study is organised in five chapters. Chapter One dealt with the background to the study, the statement of the problem, the objectives of the study, research questions, significance of the study and the organisation of the study. Chapter Two dealt with the review of related literature. Chapter Three highlighted the methodology used for the study. These included research design, sample and

sampling procedures, and instruments used for the study. It further highlights data collection procedures and analysis of data collected. Chapter four entails the result and discussion. Chapter Five provided a summary of findings, conclusions, and recommendations to the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter reviews literature that is relevant to this study. It includes learning, types of learning, models of learning, and how children learn. It further highlights theories of management, application of management principles on schools learning resources and the role of learning resources. The availability, adequacy and the state of learning in schools as well as management of learning resources, use, storage and maintenance of school learning resources are also reviewed. It also stresses on the empirical framework emphasizing studies conducted on management of learning resources by other researchers as a point of reference for the understanding and interpretation of the results. To assess relevant journal and articles on learning resources, e-journal from major educational search engines including JSTOR, Emeralds and Google scholar were assessed through the UCC library repository using learning resources as key words to search.

Learning

According to Oduro (2008), one of the objectives of providing basic education to students is to develop basic skills that would be beneficial for developing other skills. Children learn using the sense of seeing, hearing, and also from what they do. He argues that it is very significant for teachers to provide the

needed resources and opportunity for children to make use of their sense organs. This has been shown in figure 1.
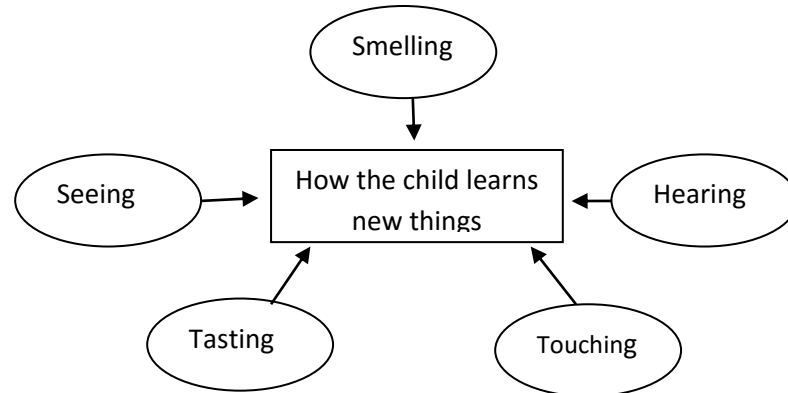
Figure 1: Senses through which the child learns new things

Source: Oduro (2008)

Figure one, illustrates the five cardinal principles about how the child learns new things. These includes seeing, smelling, tasting, touching and hearing.

Every child is born with certain talents and no one is born to be stupid. These talents can well be enhanced and developed to the fullest when the right resources are provided for children to make good use of. Aggraval (2006) explains that learning resources should be made available to children in order to enhance their learning. Further, the child learns faster when allowed to play with objects.

How Children Learn

Children need constant practice of what they have been taught with learning resources like their exercise books and the necessary text books. Learning is a process because it takes time (Berliner & Gage, 1991). It takes place in all living organisms including humans and animals. Learning takes place in or

outside the classroom, consciously and unconsciously, voluntary, and involuntary (Berliner & Gage 1991). In the school setting most learning is structured to follow a designated time table. In the JHSs, for instance, considerations are attached to subject which children are to calculate for morning and reading subject for afternoons. Teachers impact knowledge from one subject to the other following what has been stipulated on the planned school main time table. Unconsciously children learn to imitate their teachers, friends and what they see around them.

Berliner and Gage (1991) asserted that overt behaviour of talking, writing and moving allow for cognitive development. They further said that cognitive behaviours like thinking, remembering, problem solving and creativity are the processes through which children learn. In the process of creating and solving problems the child must relax on comfortable tables and chairs with the essential learning materials. Learning is incomplete without satisfying any of the domains as a result (Bhatia, 2005) has stated that learning must takes place in the cognitive, affective and the psychomotor domain.

Types of Learning

Bhatia (2005) identified the following ways in which children learn. He said that children learn through seeing, touching, tasting, smelling and feeling. The implication is that learning resources are important for children to acquire knowledge. In conceptual learning, the child builds on a learnt fact to generalize. The child infer knowledge gain and in one subject area to another, for example, concepts learn in the mathematics could be applied in science assignment. In associative learning, children develop new knowledge.

Models for Learning

Sudbury Models of Democratic Education

According to Greenberg (1987), the Sudbury Model of Democratic Education asserts that there are many ways through which children learn. The model argues that learning is a process you do, not a process that is done for you. It takes place through manipulation of resources by students with teachers serving as guides. In the case of reading, the children need the reading books with little or no guidance. In the case of problem solving, the child would need the steps to complete the exercises on their own.

The model suggests there should be abundant learning resources at the disposal of the learner. A good class must have enough books, furniture and materials for experiment. Learners through manipulation teach themselves individually and in groups. The model opposes forcing or bribing children to learn but rather sufficient learning materials should be present to stimulate children to learn.

Anthony Gregorc Model

Mills (2002) indicated that Gregorc and Butter work to organize a model describing how the mind works. This model is based on the existence of perceptions. These perceptions form the foundation of our specific learning strengths. The model indicates that there are two perception qualities (a) concrete and abstract (b) and two ordering abilities (i) random and (ii) sequential. The concrete involve registering information through the five senses while the abstract involve the understanding of ideas, qualities and concept which cannot be seen.

The sequential ability involves the organization of the class learning to following an order. The random involves learning in chucks with no specific order. Both the perceptual and ordering abilities are presents in every individual but some certain children have more dominance.

Flemming Model

In the view of Hawk and Shah (2007), Flemming model solely relies on the sense in helping children to learn. The model claims that the visual learner have the preference of seeing; think in pictures through the visual aids such as overhead slides, diagrams and handouts. The auditory learns best through listening to discussions, lectures and other audio tapes. Kinesthetic or tactile learners prefer to learn via experience through active exploration by touching, moving and doing in science projects.

<center>**Empirical Review**</center>

Tawiah – Mensah (2002) researched on the management of learning resources by heads of JHSs in the Cape Coast Municipality. The main purpose of the study was to find out how learning resources were managed in the JHSs. The design adopted was the descriptive survey. The main instrument for the study was questionnaires. Fifty-two heads and 156 teachers were sampled but 48 heads and 137 teachers completed the questionnaires representing a return rate of 92.3% and 87.8% respectively. The main finding of the study was that there were available learning resource in the schools but the PTA/SMC's in Cape Coast were not doing much to support the public schools with resources and therefore most schools encountered problems in the management of learning resources. The

major problems were stealing of school materials, mishandling of school textbooks and furniture and roof leakages on school structures. One advantage of this work was it followed the laid down procedure in writing. The language was clear and easily understood. The instrument designed was in line with the research questions.

In management, Cole (2004) reports that practicing managers such as Taylor and Fayol, and social scientist such as Mayo and Mcgregor are among the earliest theorists. Taylor and Fayol reflected on their own personal experiences in producing management principles in achieving organizational goals. They were more interested and concerned with structuring the work of organizations. They were known as classical or scientific managers (Cole, 2004).

The social scientist like Mayo and Mcgregor were academics who researched into human behaviour in the workplaces. They emphasized on efficiency and efforts of physical working conditions on employees. Further studies were carried on employee motivation, interpersonal communication and leadership styles. They were also referred to as the human theorist (Cole, 2004).

Classical / Scientific Theories of Management

Frederick Winslow Taylor (1856 - 1915), was born in Boston, Massachusetts, served in a shop floor. After getting experience, he became the manager. He began as an apprentice in engineering and worked with Middle Steel Company for eleven years. He rose from a labourer to become the shop superintendent. He became the father of scientific management. His ideas and experiences resulted in quality and quantity production and is widely used today

(Parthasarathy, 2007). Kinard (1988) reported to improve output the workers who perform extraordinary should be rewarded whilst slow workers must be penalized to make them perform better. He added that the only way of getting better results from workers is to examine their performance scientifically and objectively.

It can be deduced from this theory that after the necessary learning resources are made available to staff, the head teacher is mandated to supervise so that greater output would be achieved. Also, the quickest way of getting the best out of the teachers is to use the principles to control them. It is the only means for high achievement of institutional goals.

Parathasarathy (2007) indicates Taylor's scientific management dealt with jobs of individual workers and Fayol focused on managing the entire organization which he termed as administrative management. Henri Fayol (1841 - 1925) began as a young mining engineer at the age of nineteen the rose to become the Managing Director at the age of forty-seven. Working as a leader, many companies grew and prospered. He was the first to identify the specific managerial functions of planning, organizing, leading and controlling. He believed these functions were the core to the management process (Parathasarathy, 2007). But Lydndall Urwick who was a consultant and management theorist integrated the work of Fayol with that of Taylor. Urwick and Gullick came out with the acronym POSDCORB meaning planning, organization, staffing, directing, controlling, reporting and budgeting (Griffin, 2000). He employed these managerial functions to develop guidelines in improving managerial effectiveness. The theory is emphasizing that there should be laid

down work objectives, division of labour and delegation of responsibilities. Institutions which practice this theory lead to unity among the subordinates (Spirit de Corp).

Humans Relations Theorist

Elton Mayo (1880-1949), an Australian psychologist and professor join the studies at the Hawthorne plant of Western Electric Company at Chicago (Griffin 2000). The research was taken jointly by the National Research Council and Western Electronic Company (1927-1932). The study found out those workers who were the subject of study improved productivity whether light was provided or not .The study is placing emphasis on the worker instead of the work. The conclusions were that people at work must be given the highest priority to perform their task (Griffin, 2000). Parthasarathy (2007) quoting Follet in agreement with this study stressed that interpersonal relationships should be important for every manager.

In effect, the head teacher should establish good cordial relationship with their teachers in order to provide positive result. Caution must however be exercised by head teachers not to over socialize otherwise some teachers would not take command serious (Griffin, 2000).

The school as an institution is a formal organization in the educational establishment. Schools are made up of people working in a structured way to achieve a specific goal. Every organization has a goal, programmes, plans, resources and leaders. Without the goal the school would have no reason to exist. Equally, every school has a program which spells out the methods for achieving

these goals. Plans are used to make the school effective while the needed resources are necessary to be acquired or allocated to facilitate the achievement of the set goals. Schools depend largely on the resources supplied by the district or local assembly, donations from past student, NGOs and philanthropist for the efficient running of schools. This requires good management by both head teachers and teachers to make effective use of the resources available. Management therefore becomes an essential component in efficient running of an organization like school.

Management is a fundamental aspect of leadership because it has important bearing on a range of activities that can lead to the attainment of organizational outcomes. This is because the successes of most organizations like the school rest on effective management. Like other complex human activity, management is difficult to pin down, precisely define or accurately describe. This is because there is no generally agreed definition of the concept as various scholars have diverse understanding of the term (Cole, 2004). The term management is very broad and has different meaning depending on the context in which it has been used. Basically, it deals with group of people working for the attainment of specific goals (Sivalingam, 2004). Henri Fayol whose definition is widely accepted and used explains as; to forecast and plan, to organize, to command, to co-ordinate and to control (Cole, 2004). This implies management put together all the co-ordinated events like planning, co-ordinating and organizing, controlling and commanding in order to utilize available resources to achieve goals in the quickest and most efficient manner. For schools to properly

executive their educational roles like the identification and distribution of resources, taking proper care of resources leading to the achievement of the desired objectives would definitely need some management principles.

Application of Management Principles on the School Learning Resources

Parthasarathy (2007) assert that management needs the process of planning, organizing, leading, co-ordinating, budgeting, reporting, communication and supervising of organizational resources to achieve state organizational goals. It is defined as a process because all schools engaged interacted activities in order to achieve the goal. These management activities are referred to as management functions which are executed as follows (Parthasarathy, 2007);

Planning

It is the crucial and one of the prime functions of management. It involves selecting strategies from among alternative possible courses of actions both for the institution as a whole and every department within it. It is an intelligent preparation for anticipation and action which involves the analysis of relevant information from the present, past and an assessment of probable future development so that a course of action to be taken on it that enables the educational sector to meet its stated objectives. Planning could be short or long term, but tries to remove limitation of the present to meet the future with relevant confidence.

The needs for planning in education are; time and other resources are limited therefore man should plan for the optimum utilization of the resources. The rapid change in terms of technology calls for careful planning of how to make

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judicious use of educational learning resources. The educational sector deals with human beings who cannot be manipulate like inanimate object, therefore to get their co-operation in the organizational efforts requires careful planning. Managing educational organization is a very complex function. It complexity in translating it goals into action make planning necessary.

Organizing

This is concerned with arranging and allocating work, authority and resources among organizations members so that they can achieve educational organizational goals efficiently. Atta, Agyenim-Boateng, and Baafi-Frimpong (2000) observed that it is the task of school head to select resources, motivate and supervise. In organizing, the head of an institution should know the nature of the job to be done used and how the job should be done. Different goals require different structures. For example, in planning to participate and become first in athletic competition calls for different resources from strategies for preparing student to score hundred percent in the Basic Education Certificate Examination.

Leading

It involves directing, influencing and motivating employees to perform essential task. It involves interacting with people. By establishing the proper atmosphere, school managers help their subordinates to do their best. The key part of leading are motivating employees, managing group process and dealing with conflict and changes in the school working environment. Atta et al (2000) define motivation as "the process of influencing or stimulating a person to take action that will accomplish desired goals" (p.47). Head teachers being leaders should be

able to encourage their teachers to put up their best to manage inadequate resources for the schools. In a school where text books are not adequate for the number of students, the head being the leader should encourage his staff to cope with the available resources. Ainscow (1991) noted that a school administrator who motivates their staff to use available resources creates an orderly and safe atmosphere conducive for teaching and learning. In school management, the head teacher is the chief executive. He instructs his subordinates what to do and tries to inspire, influence, establish rules and regulations.

Co-ordination

This is an all important activities which involves interrelating and interconnecting the various part of the work. It refers to harmonious integration of activities and process of the various sections within an organization towards attainment of its goals. To attain organizational goals, it is incumbent on management to coordinate all the necessary units in the organization. The school has many sections which must effectively co-ordinate. Resources must be used together. The administrator's role is therefore to resolve all conflict as amicably as possible. He must as a co-ordinator brings harmony, unity and understanding between the people, department or the various sectors concerned.

The GES Head teacher's handbook (1994) is of the view that harmonization of resources helps to overcome specific problems and weakness of the school and equip both teachers and students with knowledge and skills. In a school where these skills, knowledge and resources are well co-ordinated as a team it helps to achieve stated goals.

Budgeting

Budgeting refers to the fiscal planning, accounting and control. In the school setting it may be classified as finance and business management which involves drawing the school budget, preparing annual estimate to the ministry or district offices on the resources needed to run the school, administering and monitoring school purchases. In budgeting schools are able to draw a scale of preference to know the most needed resources for the school.

Reporting

Is keeping those to whom the executive is responsible informed as to what is going on, which includes keeping him and the subordinates informed through records, research and inspection. In schools, keeping records includes class and admission registers, the logbook and inventory of school's property. It involves preparing reports for the local or districts school boards on issues such as enrollment, the adequacy, availability and state of school learning resources, student performance and on the school's achievement and failure. Students and teachers must also be informed about all correspondence concerning them.

Communication

To ensure that educational establishment is moving on smoothly, there must be communication of the goals, policies and strategies to those who know them. Lack of communication could create what is referred to as planning gap. Teachers and students of the school need to be informed on the available resources at their disposal and where they have been kept. By this the head teacher must establish good rapport with the staff and students. In this situation

the staff understands the goals and the plans, know what they are to do to achieve them. Ideally, there should be a complete flow of information through all the levels of management and the people working in a particular educational set up for the adequate and optimum rendering of their duties towards the achievement of the stated goals.

Supervising

Commonwealth Secretariat of Education [CSE] (1993) says the school leaders have a supervisory and leadership role to play. Supervision according to CSE involves using the available resources to do job on your own, teaching others how to use resources and checking that the job is done. Supervision is the process which is concerned with the efforts to guide the day-to-day activities of the school. This occurs through stimulating, directing, controlling and co-ordinating the workers and their efforts and cultivating good working personal relations so that all work collectively toward a more efficient performance of all the functions that lead to the goal achievement.

Bame (1991) states that the teacher would not be able to use well school resources when the mixed feeling about supervision is not eliminated. But for good supervision both the head and other educational officials who always find fault and give unfair criticisms when resources are poorly managed should rather offer ideas which would aid teaching. In the school system where the aim is better school performance, supervision relates to guiding and co-ordinating the work of teachers and all connected with school work in such a way that student-learning is facilitated. Supervision aims at facilitating learning through planning and devising

ways of improving teachers professionally and releasing their creative abilities so that they willingly improve the learning situation. Adepoju (1998) testify that inspections assist in improving classroom instruction because teachers are made competent and efficient, motivating them to work hard to achieve the goals of education. Furthermore it allows for the necessary relevant advice to be given for the improvement of the schools.

The Role of Learning Resources

The school as an institution uses various laid down procedures to unearth the potentials of its students. One of the main ways of achieving this is to use resources to achieve this objective. Carney (2005) defines resources as something that can be used as a source of help. Learning resources can therefore be anything required by teachers to manage the needs of the child in attaining the goals set for education. The mission and goals of the school can at best be achieved with combination of other resources (Shedding and Holmes, 1994). These can be grouped into two: human and material resources in the school setting. But Osei-Anto (1999) is of the opinion that the extent to which public education succeeds in delivery services with an effective use of scarce resources will largely depend on the quality of personnel. He concludes by affirming the role of the teacher as most crucial. He stated the school building, equipment and other learning materials are important but teachers must know how to make good use of these learning resources with the task of effecting desirable changes in pupils. Darling-Hammond and Young (2002) is of the view that formal education preparation by going to school for certificate and knowledge on the subject matter leads to better

performance of students. But on the contrary, Whitehurst (2002) in his analysis proposed that the teacher knowledge is more important than their professional qualifications. Hanuseshek and Kain (2005) investigates on teachers experience declared teachers do perform well in the few years of their work but do perform poorly after a long service of teaching. Spinks (1992) is stressing that teachers are key persons to adopt approaches in the management of their schools and should have constant training programmes in their schools. A school can succeed when its resources are properly managed by experienced heads and teachers. An inexperienced principal with an ill-developed vision on resources is likely to encounter difficulty which will affect the prospect of the school to become what it is planned to be (Fullan, 2005). If the principal appointed is a novice, experienced persons should be appointed (Meier, 1995). Schools are established to serve the needs of societies. The principal would achieve these when teachers are told to abide by the norms and regulations governing the use of learning resources for the school's benefit (Pretorius, Nieman, & Van Vuuren, 2005).

Some of the material resources include textbooks, exercise books, equipment, libraries, classrooms, furniture, cup boards, toilet and urinals and the school compounds. Generally, resources are identified as anything that can be seen or touched which perhaps may be used in the educational system. It also includes other materials found in the natural environment, which may cost nothing and not supplied by the government.

For the purpose of this study particular focus is placed on textbook, teaching and learning resources (TLM's), exercise books, equipment and tools,

libraries, classrooms, furniture, cupboards, toilet and urinal and school compounds.

School Classrooms

School facilities play significant role in the education system. Adequate, resourceful and appropriate school facilities go a long way to enhance educational provision. This is because this can either improve or negatively affect educational attendance and performance. Ampiah, Davis and Munkoe (2006) re-echoed that school structure are very significant to teaching and learning in schools. In their study they emphasized that teaching and learning is seriously hampered when school structures are not in good shape and there are insignificant classrooms. Money and Solomon (2010) has confirmed that dilapidated school structures forced parents to withdraw about four hundred pupils from the Kanda cluster of schools in Accra. On the contrary a well constructed school facility built from a Japanese grant in the Tunayili within the Tamale Metropolis the Northern Region experienced increased enrolment. Large class size also affects the quality of educational provision. This ultimately affects the pupil-teacher ratio as well as the pupil-textbook ratio. Quaicoo (2006) attest that Ghana Education Service standard of pupil's to a class is 46. Hence, school with enrolment figures of 60-90 may pose problems for teacher as pupil-teacher interaction may be minimal and may equally affect the imparting knowledge to pupils. It may also have rippling effect on the ratio of pupil to textbook. It can be concluded that classes with fewer children have many more advantages than those with larges enrolment figures.

Becker (1990) has stated many institutions continue to view the provision, operation and maintenance of school facilities especially the school structure as a technical job. Furthermore some administers perceive management to be synonymous with building maintenance. Best, Langston and De-valence (2003) recount that some practitioners struggle to specify exactly what constitute management of school resources. Management of resources requires competence and technical expertise to do so. It is therefore imperative for heads to develop a higher level of critical thinking (Loosemore & Hsin, 2001) in selecting competent people for proper renovation or repairing structures. Prempeh (2005) opines that the involvement of community members in the management of resources make them confident to help in identifying the area for infrastructural development in their communities. By their involvement, they tend to develop a strong feeling or ownership for the school and would always want to maintain the existing structures. There have been a number of occasions that parents are willing or have willingly created school building and provided other learning resources for the schools (Musaazi, 1982). Besides the proper management of school structures helps improve relations in the school.

School infrastructure should be properly ventilated with adequate space to accommodate students. It is also significant to have light in the classroom because light can affect both the health and performance of students. Appropriate lighting enhances productivity, quality and staff morale (Lewy, Rosenthal, & Wehr, 1982) though too much sunlight can create a painful glare for both teachers and students.

Schools of today must be well planned to accommodate a large number of students. They must be designed to make full use of a numerous learning materials and equipments. The design and construction of the school dictates the type of teaching and learning which is possible within the walls. This stance is strengthened by Chotipanich (2004) that the range of resources may affect number of functions and roles in schools.

Furthermore he outlines the requirements for a good educational classroom as follows:

1. Appropriately 1200 square feet floor space to allow all types of learning activities and equipment.

2. The floor space should be detached from the classroom for use as teachers' study and lesson preparation room and pupil-teacher parent conference room.

3. Adequate storage space for instructional materials and for the keeping of students work.

4. Facilities and structures which will prevent outside noises into the classroom.

5. Functional equipment as well as books, maps, globes, chalkboards display surfaces and learning resources files.

Lockhead and Verspour (1991) on the other hand, maintain the location of schools is necessary to increase school attendants. Distance is a significant factor determining school attendance particularly for rural children and therefore care

must be taken before schools are mapped for construction. The issue of funding is also a determining factor in the provision of school infrastructure.

Lockhead and Verspour (1991) points out again that the building of schools is expensive and requires a lot of resources which many countries are not in the position to provide. A suggestion would be for countries to develop and use local materials in construction in order to reduce the cost of the construction of schools other than those typically used at present. But it is also highly possible that the use of local materials can be functionally useful and artistically attractive. In Niger, for example, a classroom made of concrete cost five times more than one made of "banco", which is most commonly used in the villages. It makes classroom cooler in the warm season and warmer in the cold season and cheap in cost and it also most appropriate and conducive for classrooms.

Aggraval (2006) asserts that school buildings should be planned to be spacious and function with pleasing architectural feature. It should stand out as something the local community can be proud of. Again, children should be confined in big rooms so that they would have contact with the earth, trees and animals within their environment.

Schools nonetheless continue to suffer from more basic problems such as a shortage of necessary materials and equipment due to lack of regular and proper maintenance and management of school facilities. These inadequacies are directly reflected in the students' academic performance (Paraguassu, 2008). It is for this reason that government ought to make special efforts to improve the quality of

school buildings resulting in more facilities with improved physical learning environments.

Furniture

A good classroom according to Postlewaite and Ross (1992) should have enough furniture, desks and cup boards for the storage of books. The GES Head teacher's handbook (1994) provides examples of furniture as chairs, desks, benches tables, stools, blackboards, cupboards and shelves. It further reports that students feel more happy, relax and comfortable on good desk than using poor ones. In support of this (Mensah, 2010) reported Agricultural Development Bank in Ghana presented 100 desks to six schools, while Ebenezer Hill SHS and Kpone Presbyterian JHS at Sebrepor also received the same gesture from their Member of Parliament (The Ghanaian Times, 2010 June 4). Both emphasized the provision of these learning resources will ease the pressure in the schools.

Research has shown that proper arrangement of furniture in the classroom facilitate teaching and learning. Edwards (2000) points out that "sitting in circles" encourages students to work in groups, facilitates social interaction and makes it easy to communicate, while "sitting in rows" encourages students to work individually and ensures the teacher's authority. Also classrooms with student's desks arranged in rows, in the front and centre positions enable greater student-teacher interactions. Furthermore, students sitting in these positions generally have better attitude, tend to participate more, demonstrate better task behavior, attain higher achievement levels and receive more constructive feed backs.

Toilet and Urinals

An investigation conducted in a secondary school in Cape Coast revealed that the non-existence of toilet facilities in a school has greatly impeded teaching and learning in the school (Afful, 2010). As a result of this schools must have adequate toilet and washing facilities. Doors to the toilet and urinal centres should be arranged such that the interior of the rooms will not be exposed to view when the doors are opened.

The GES Head teacher's handbook (1994) continues to indicate that toilets, urinals, and washing materials should be enough for pupils and staff to ensure proper hygiene and cleanliness in the schools. He further advocates separate facilities for the boys and girls. Besides the non-existence of toilet and urinal affect the health, comfort and habits of pupils and schools cannot do efficient educational work without considering these factors.

According to the (World Bank, 2005) there are three different kinds toilet types available in our schools. Dry toilets, water flush toilets and the urinals. But the environmental conditions existing in and around a school determines the appropriate toilet for those schools. Therefore it would be inappropriate for a school without enough water to request for the construction of water flush toilets which may pose danger to the life and health of the students.

Likewise urinals and toilets can be designed as separate building at the back of the school building preventing bad odour into the classrooms which would affect the health of students. But World Bank (2005) cautioned that is it importantly not advisable to let both boys and girls to be sharing the same toilets

and urinals. A research conducted in Mutairu Primary School in Kenya support this point that majority of the girls stopped schooling because there was no privacy for them to deal with soiled clothes when menstruation and had to fall out of their schools. In addition parents continued spending so much to cater for illness of their wards as a result of students' limited access to hygiene facilities like toilets, urinal and water in their schools (World Toilet Day, 2011).

School Compound/Playground

The GES Head teacher's handbook (1994) reveals that schools with a properly decorated compound promote teaching and learning. Well decorated school attracts students to be punctual and gives better impression of the school to visitors. Well ventilated schools provide quality indoor air to improve the learning conditions of students. Many studies have shown that naturally ventilated classroom and compound ensures the good health of students and staff and a lot of students and teachers prefer best to teach and learn in a good natural environment (Duffy, Laing & Crisp 1992).

According to Asiedu-Akrofi (1981), the school compound is vital to the development of children. In a good environment, children not only work but also enjoy the work and also benefit from what they are doing. He further said good classroom should never be woefully bare and on the other hand it must not be too extravagantly decorated with pictures. The decoration must be of good taste, modest and relevant. For the chief learning tools in the schools are: chalkboards, books, pens, scrapebooks and charts.

Musaazi (1982) asserts that "the social value of the child is significantly formed depending on the total environment in which the child develops in the school" (p.251). In accordance with Asiedu-Akrofi pupils' interest in the school and their sense of environmental control show the strongest relation to their achievement and teachers are expected to encourage children in getting used to the classroom environment.

Tools and Equipment

Equipment according to the GES Head teacher's handbook (1994) includes education materials such as ropes, beanbags, whistlers, spades, trowels, pick axes, hand forks, watering cans and so on.

According to Prempeh (2005) the world is becoming a global village and the high rate of technological advancement demands that educational institutions are provided with the right type of facilities and materials in adequate numbers and at the right time so that pupils and students who go through the system will be well equip with the necessary skills and knowledge to ensure the rapid development of their communities. Educational resources according to Mills (2009) include workshops, tools and equipment, learning materials, and library materials. Supporting Mills, Dawson (1972) has stressed that workshops, laboratory tools and equipment are important and positively related to the academic achievement of schools in Canada. Similarly, Hayman and Loxley (1982) in a study in Uganda confirmed that the average number of books per pupil reflects on students' academic performance thus school facilities and other

learning resources have strong influence on students learning in developing countries.

Teaching and learning is both affected by human and materials factors (Musaazi, 1982) and as a result the material factors include supplies and facilities. Besides schools without learning materials like textbooks, tools and equipment, exercise books, classroom and playing field will have a negative impact on teaching (Musaazi, 1982).

The Ghana Education Reform of 1987/1988 was designed to expose learners to the use of tools and equipment, to enable learners to discover the potential for self-improvement, an understanding of their environment and an eagerness to contribute to its survival and development. Students are therefore to use the hand and mind to create and produce (MOE, 1987).

Government of Ghana (2002) indicated that since 1990 out of an average of 240,000 junior high schools pupils who passed out every year, only 72,000 representing 30% gain admission into senior secondary schools whilst about 10,000 representing about 4% were admitted into technical and vocational institutes. Due to inadequate or absence of some learning resource in the schools, a total of 158,000 unskilled children find themselves on the streets each year after basic education.

Kor (2005) indicates the literacy rate in Ghana reported by the vision 2020 document for 1999 was 42%. According to Kor, only about 10% of those who completed school achieved literacy skills. Only 11% of children aged nine to 14 years were able to write a letter. Furthermore 40% of children who completed

school sufficiently literate relaxed back to illiteracy. Owing to this the illiteracy level was still 38%.

The Ghanaian Times (2009, November 17) reports that 14 Basic schools in the Birim North District in the Eastern Region who wrote the year's Basic Education Certificate Examination scored hundred percent. This success according to District Director of Education was attributed to the proper management and use of resources.

Additionally, Nichols (1990) points out children cannot know the essence of tools and equipment unless they are taught what to do with the equipment. The tools which are not in use should be properly positioned in order to prevent injuries and not to cause harm.

Teaching and Learning Materials

Teaching can only be effective when adequate and relevant instructional materials are used. It is therefore important for stakeholders and education authorities to provide adequately for the needs of the schools (Afolabi, Adeyanju, Adedapo & Falade, 2006).

Many educators and researchers have reported the importance of instructional materials in teaching. Teaching and learning could not be effective without adequate and relevant use of instructional materials (Grant, 1978). Schramn (1977) referred to instructional materials as basic channel of communication of ideas and concepts in the classroom for the purpose of bringing about effective teaching and learning.

For Adebanjo (2007) instructional resources in teaching and learning make students to learn more and retain better what they have been taught and also promotes and sustains students' interest. It also allows the learners to discover for themselves their abilities. Reporting the view of Schramn (1977) instructional materials enrich learners' knowledge and reinforce verbal instruction.

Nacino-Brown, Oke and Brown (1990) indicate that the value of instructional materials are misplaced and have no relation to the objectives to be accomplished consequently because of the lack of adequate knowledge on instructional materials, teachers prepare poor aids for class.

Tamakloe, Amedahe, and Atta (1996) report an instructional material makes it possible for subject matter to be presented in a logical manner because it is carefully planned and prepared. They further assert that instructional materials make teaching simple because the teacher does less verbal communication.

In developing instructional materials however, care must be taken as well as being well taught to make them accurate, appropriate, artistic, brief, bold, clear and suitable in order to function properly (Vhorhen, 1978).

Instructional materials to be used in class should be prepared earlier and must be kept at its proper place in class. Balogun (1984) says if equipment such as projectors or tape recorders is to be used, these must be tested and confirmed to be working before class. Nacino, Oke, and Brown (1990) stress instructional materials for class should be used in the most professional way to achieve the desire results. Presentations should be accompanied with necessary explanations, comments or demonstrations especially when using projectors (p.197).

The cost of the procuring some of the instructional materials at times has become a hindrance instead of a benefit in its use in schools. In support of this, Farrant (1980) confirms that the trend in the high cost of electrically operated teaching resources is forcing many countries more closely to local resources for education and encourages heads and teachers to make greater use of them. Beyond the cost, the attraction of sophisticated instructional materials has influence on the teachers concerning the use of resources. Research reports have shown that availability of instructional materials and ability of teachers to use them are vital determinant for teaching and consequently for achievements. (Afolabi, 2008). Oyeniran (2003) posited that pupils learn best if they are given the opportunity to see and to make observation of what they are taught. He declared that a good instructional material might be a substitute for real life objects in the classroom.

Many research reports abound on the inevitability of instructional materials and resources on learning outcomes (Hassan, 2000). In spite of this, many of these resources and instructional materials are lacking in our schools. Hassan (2000) on his study of evaluation of availability and adequacy of learning resources in Nigeria reported that 100% of his sample from Zamfra State responded there are inadequate learning resources and instructional materials for teaching and learning in schools.

Nsiah (2005) is of the view that no qualified and efficient teacher can carry out successful teaching without instructional materials. Besides no matter

how competently and carefully designed a resource material is, it takes the teacher to manage the material to bring about effective teaching and learning.

A "chalk and talk" teaching requires students to sit down and make notes (Mayer, 2001) about multimedia facilities allow students to actively participate in learning process. In line with this Shelly (2002) draws attention to the fact that student who hears, sees and interacts with learning resources in the environment can retain 80 percent of the information.

Textbooks

Research on textbook ratio indicates an enormous gap between the numbers of pupils who graduate from basic school and those who master a minimum set of skills (Education for All, 2005).

Ampiah, Davis and Munkoe (2006) reports the various studies carried on effectiveness of school learning resources in Ghana by United States Agency for International Development (USAID) in 2005 and the World Bank in 2004. The USAID study proved that schools provided with resources like textbooks with well trained teachers contributed significantly to higher levels of pupils' achievement. The World Bank study on the other hand indicated that school quality improved due to materials inputs. The study concluded that learning outcomes depends significantly on learning resources particularly textbooks.

In the Ghanaian Times (2010, April 26) Yarboi-Tetheh who represented a Non-Governmental organization to support Abakrampa Junior High School said "without a solid and sound education one cannot develop his or her potential in

life. In addition "educational materials like textbooks are part of foundation laying for the development of the child" (p. 14).

On the contrary, a five year research into school resource management by Yorke (2000) reveal that most schools comparatively pay little attention to proper management, despite evidence of their impart on student learning.

Dzamboe (2002) accounts that the Ministry of Education presented to parliament a new policy on production of textbooks for basic schools to local publishers. The objective was to make production less expensive. It was also to build themes around Ghanaian setting to nurture in children the interest of reading and to develop their knowledge.

Akrofi-Asiedu (1981) states that a good textbook has three uses for the teacher;

1. It contains pictures and diagrams which throws light on or explain the written page which leads the child to study the written words and desire meaning.

2. It gives the child a common experience of reading and sharing their experiences with the rest of the class.

3. It gives the opportunity for teachers to teach children how to collect and arrange written materials.

In view of this, the essence of textbooks in learning cannot be under estimated. Hence insufficiency or lack of textbooks can be very detrimental to academic work. Ampiah, Davis, and Mankoe (2006) are of the view that lack of textbooks in our schools places pupils learning behind those who have textbooks

and have access to them in school and at home. Also pupils with textbook have a better English language facility which tends to make communication more meaningful than those who do not.

Although the usage of textbooks by children is important, it is equally essential that books used for children should have varying difficulty and be appealing to children in order to capture the attention and interest of pupils.

Besides, the teacher who is at the centre of teaching should help the students to locate and use the right kind of learning resources for their work.

In relation to the GES textbook policy each pupil should have access to an individual copy of textbooks in the core subjects' namely English language, mathematics, social studies and Integrated Science. Up till now, this policy has not been achieved due to continual decline in the pupil-textbooks ratio (Ampiah, Davies & Mankoe, 2006).

School Library and Books

A school library is a resource that significantly affects pupils' achievement. School libraries with quality collections, relaxing, reading environment and qualified school librarians helps to improve student achievement. School library programmes that are effective help to equip students with skills and knowledge needed for work and life (Krashen, 1993). The school library should function as a learning centre providing to students in search of knowledge. The aim is to provide our students the opportunity to read works of frictions to broadens their outlook and develop their personality as wells develop the habit of reading. Also libraries with learning resources serve as instruments

for learning and repository of knowledge that has come to occupy a very important position in education. Asiedu-Akrofi (1981) in support with Krashen (1993) asserts that good library program of instruction encourages children to search for information, analyze the collected data to draw their own conclusions.

School libraries also help to promote the development of reading skills and encourage life-long interest in reading among pupils for their mental and intellectual development (Adeyem, 1979). In addition it helps the teaching staff to locate, utilize and design teaching methods from a wide range of teaching and learning resources available to match individual learning levels of their pupils. More over libraries with reading materials like books helps teachers to evaluate and modify learning based on feedback gain through interaction with pupils. As a result the school library should therefore be accorded the greater recognition due to its great significance to pupils.

Farrant (1980) is of the view that ideas on library are not anything new in Africa. The history of the library coincides with that of literacy and spans nearly four thousand years. Currently, libraries serve more purposes than only storing of books. It also stores films, tapes, pictures, charts and other teaching materials.

Though one of the main purposes of libraries is to help students to have additional information from books and other related materials, it should also be a centre for active learning not simply a repository of books and resource materials (The Commonwealth Secretariat of Education, 1993).

Asiedu-Akrofi (1981) admonishes that impression must not be given that the library is only a place for the collection of books. He advises that teachers and

students can create their own simple libraries in their own classroom with picture cutting from new magazines, news papers, re-written materials, wall charts and pamphlets, crafts, sports, periodicals and from gardening. Additionally, materials collected from the environment can be organized along four main purposeful activities;

1. The first group covers the subject of study in the school, social studies, languages, science, geography, topical events or current affairs, food and clothing and so on.

2. The second group of material cover things that fire's children's imagination and creative activity. This includes story-telling materials on local myth, legend, talks, adventure stories, frieze work to illustrate stories, mural, paintings, modeling, dramatization travel and maps.

3. The third group is mainly reference books for adding to what teachers have taught. It is full of illustration, diagrams and charts for definite information. It is not allowed to go out of the room.

4. The fourth group includes manipulative materials like flannel boards in explaining process or building up parts of lessons and also involves children in the thing displayed.

Cupboards

Cupboards are needed resources essential for storing and keeping materials like pencil, attendance register, duster, exercise books and textbooks. The head teacher being the administrator should procure cupboards of superior

quality. It must be durable with lively colours to attract children to learn (How Contributor, 2010).

Exercise Books

Exercise books are essential school records books for the evaluation of learners. It is used for the record of all academic activities that takes place during teaching and learning. This includes class test, exercises, notes and home work. Graph, mathematics, writing, technical drawing and language books are among the exercise books in the schools. But the buying of exercise books for children to learn in schools is solely the responsibility of parents. School heads are to ensure that exercise books received from parents are properly stored and maintained for teaching and learning in the school. However some schools find it difficult to keep books because of non-existence of storage facilities. As a result textbooks get stolen or misplaced by students because of the carrying of books to school daily. Nevertheless the Atta-Mills government introduced free supply of exercise books to some schools in all the ten regions in Ghana. In the Cape Coast Metropolis, a total of 263, 816 exercise books were supplied to basic schools for 2009-2010 academic year (Metropolitan Education Office, 2011). In the same vein the Northern Regional Minister supplied on behalf of the government 73,378 exercise books free of charge to basic schools in the Northern Region (GES, 2010). In the Asikuma-Odoben-Brakwa District the Ghana Education Service distributed 174,568 exercise books as a package to support learning (GES, 2010). In the Ashanti Region, 7.1 million exercise books were supplied to basic schools (GES, 2010).

Ensuring Availability, Adequacy and Proper State of Learning

Resource in Basic Schools

According to the GES Head teacher's handbook (1994), it is the responsibility of the head teacher to ensure there are good and enough learning resources for effective running of the school. This can be achieved by soliciting for assistance from various institutions and other stakeholders. With the introduction of the school performance Improvement Plan (SPIP), heads are expected to write for allocation of learning resources from the Ghana Education Service to be supplied to the schools.

Mills (2009) citing the GES Head teacher's handbook mentioned parents, philanthropist, teachers and head teachers are among the agents who are to provide and ensure the availability, adequacy and good state of school learning resources.

Classrooms and Toilet/Urinals

It is the duty of the government through the district assemblies to provide sufficient classrooms and toilet facilities for schools. There should be separate toilets and urinal for boys, girls, and for teachers. The GES Head teacher's handbook (1994) maintains heads have an additional role to ensure proper usage and maintenance of these facilities. Where minor damages are found on the walls, roofs, floors or on the foundation the school head must use school fund in renovating or making repairs. When classrooms and toilets are not adequate, the head can liaise with school committees in creating decent shed as classrooms and toilet. Toilets and urinal should be at least 20 metres away from the school (p. 88).

But the materials use in the construction should be of higher quality to ensure durability. Bray (1987) further stated that not all school building materials should be imported, where it is impossible to acquire roofing sheets, metal windows and cements, it is at best to use local available materials for the building of schools. It is easier to maintain building built of local materials than from imported materials. Heads should secure book donations and other equipment, by writing to commercial companies and organizations for assistance.

Equipment and Teaching Materials

It is the duty of government to make available equipment and teaching and learning materials (TLM's) for learning in the schools. But where there is none or inadequate, Mills (2009) suggests that heads should find the appropriate means of securing quality TLM's at the lowest cost for the school. The school performance improvement Plan (SPIP) also advocates that heads can use part of the capitation grants in securing resources like TLM's and equipment for the school. Tawiah-Mensah (2002) however advices that the acquisition of equipment must be in relation to the needs of the department of the school and this should be a collective duty of parents, community and the government.

Furniture, Textbooks and Library Books

The District Assemblies are mandated to provide available and adequate desks, chairs and tables for schools while Ghana Education Service has the role of supplying schools with all the relevant textbooks for learning (Mills, 2009). Parent Teacher Association (PTA) and the School Management Committee (SMC) with approval from the District Assemblies may impose levies on their

members for raising funds in purchasing resources like textbooks, furniture and library materials for schools GES directives authorize the repair of chairs with loose nails, weak joints and wobbly legs during pre-technical skills lessons alongside the education of school children on how to use chairs (GES, Head teacher's handbook, 1994).

Textbooks and library materials are supplied by the Ghana Education Service. To augment government supplies parents and other organizations can be approached to donate library and textbooks for the schools. Part of the school fund can also be used in procuring books for the school. The old books hiding in the offices can be used as part of library collection but library books and textbooks must be stamped and numbered for easy identification. Proper records on receiving and borrowing of school books should be kept to ensure their safety. On the whole head teachers are encouraged to educate students on how to handle and repair damaged books.

School Compound, Cupboards and Exercise Books

GES Head teacher's handbook (1994) reports that library books and textbooks can be kept in the cupboard, bookshelf, boxes or in cartoons. Also part of the capitation grants can be used in providing cupboards for all classrooms. Furthermore resources can be kept in the head teachers' office, staffroom or at the school library. It is the responsibility of government to provide textbooks and parents' responsibility to provide enough exercise books for their children. School heads should ensure that the school compounds are well demarcated fenced and hedge (p. 89). To check erosion and properly maintain the school compound,

there should be planting of trees and flowers around the school compound (p. 90). Heads should further ensure that school cupboards for storage of teaching and learning materials are in good state.

Management of Learning Resources

Studies by Tanner and Lackney (2006) have confirmed that the establishment process of a school in every country is always defined but its management can be a complex process which can end up in disappointment and even failure (Weedall 2004). The purpose of management in schools as indicated by Kochhar (2008) is to enable the pupils to receive the right education through the use of the right learning resources at a cost within the means of the state.

Robbins (1991) observes that the presence or absence of resources have a large bearing on the attitude and behaviour of members in the school. Accordingly the leader has a major responsibility for obtaining and maintaining resources (p. 280). It is for this reason that Robinson (2001) stress the adequacy and utilization of learning resources in schools is a critical factor in bringing productive change in students and influence the quality of learning that take place within the schools. This is an indication that the availability, adequacy and management of learning resources are fundamental aspects in the educational enterprise.

Good management of school resources like building, equipment and furniture enhance the school's organization to compete successfully in a rapidly changing world (Becker, 1990). On the contrary, improper management will not only lessen the life span of these resources but also be an impediment on the

attainment of effective teaching and learning in the classroom. Since learning resources are subject to wear and tear the quality of materials used in making is very essential in management. Besides, heads should be acquainted with the state or condition of resources and also make out outmoded resources so as to determine when they need eventual replacements. Opoku-Asare (2006) cites Hall and Stephen that teaching and learning resources in schools are significantly attracted by a powerful inspectorate that is mandated to ensure and maintain quality in resource allocation, curriculum delivery and educational standards. Also, inspections are essential for sustaining teaching and learning effectiveness and maintenance of quality standards in the schools. Furlang (2002) suggest that an inspection plays a key role in the development and improvement of schools. He indicated that inspections are connected with accountability and its main purpose is to ensure that the standards in education are satisfied. Goodard and Emerson (1997) support this view when they stated that inspections should promote high educational outcomes, in particular, high attainment, good progress, and a positive response from pupils.

Obondoh, Nandago and Otiende (2005) have rather complained about the idea where parents see schools as places of "official business" and as such have no interest in the affairs of schools. They recommended a strong link between the school and parents with the purpose of helping to support schools. There is no gain saying the fact that the success of the educational enterprise to a large extent will be determined by the interaction or collaboration of school authorities and parents. Parents should therefore be active members in the educational provision

as school property or structure need to be seen more as assets than liabilities (Douglas, 1996).

But according to the Ministry of Education [MOE] (1996) Basic Education Sector Improvement Programme (BESIP) document outlines that a school can be classified as being quality based on the usage the following criteria.

- Textbooks by pupil ratio by subject area

- Library book/pupil ratio

- Work bench space available

- Tools and equipment for teaching

- Condition of school physical facilities eg. roof, walls

- Furniture per pupil, furniture per teacher

- Store for books and technical tools, office, staff room

- Library, laboratory etc

- Water source

- Playing field

- Toilet, urinal (by gender), drainage, refuse

- Disposal and security (p. 42)

An editorial in the Daily Graphic (1995, March 23) identified that not only school administrators and teachers should be blamed on poor management of the school resources but also some school pupils' who refuse to manage well textbooks and other resources given to them especially when they take them home to do assignments.

Clark (1996) stated that the term adequacy of learning resources has a major impact on the output of the school. Schools with insufficient resources in terms of buildings, teaching aids and staff undermine the pursuit of the focal task. On the other hand an over-abundance of resources leads to wastage in schools. A study of 228 teachers in schools in South Texas revealed lack of sufficient supplies to accomplish teaching task resulted in high degree of frustration leading to overtiredness in the teachers (Kaufold, 2007).

Antwi (1992) asserted that one aspect of disparities in our educational system is the existence of regional differences in the provision of educational facilities. The Commonwealth Secretariat of Education (1993) indicated that school with good resources leads to joy between teachers and students. Administrators succeed when they well plan, consult and supervise to ensure that resources are fully used to achieve the schools purpose. In the selection and management of textbooks the document is of the view that;

1. The availability, quality and effective use of text book constitutes one of the most important factors affecting the quality of a school.

2. Text books support the curriculum and can lead to better teaching.

The benefits of school textbooks are numerous to students. Children who are likely to have textbooks would be in the position to learn to make their own notes, recall the main ideas from what has been read, understand meaning of words, sentences, paragraphs, graphs and tables and benefit by understanding and knowing how to use table of contents, index, glossaries, reference list and illustrations.

GES Head teacher's handbook (1994) reports that resources are suppose to be supplied to schools at the beginning of the academic year. For torn out books it is the responsibility of the head teachers to request for new ones. With required books which the Ghana Education Service is unable to supply the head teacher is advice to discuss with parents to purchase for children. Mills (2009) has indicated in a research at the University of Illinois that text books take a dominant place in schools. Besides, the school library helps in taking away pressures from teachers due to the essence of supplementary books, dictionaries, workbooks, magazine and pamphlets. Therefore it is very important for administrators to always encourage their teachers to visit the school libraries. Lander and Myers (1977) believe that schools should recognize the need for an instructional material and equipment before purchasing it. Again the material used for the production of equipment must be of quality to make it durable.

Bishop (1989) says most of our teachers colleges in Africa have resource centres' which are furnished with teaching materials useful for teaching. Materials available include reference materials books, newspaper items, maps, journals, audio-visual and paintings. He goes on to say that heads can encourage the school learners to make their own reading and learning materials for school.

Hall and Stephens (1998) conducted a study in eight schools in five districts in the state of Florida in the United States to find out how supervisor manage the resources in the schools. It came out that schools where supervisors monitored the resources performances were comparatively higher than school less monitored. In the improved schools, most teachers did adequate preparation to

teach and had various committees which helped in the management of the school resources.

Hall and Stephen further claimed that managing class with seats bolted to the floor is difficult because there is hardly space to accommodate chairs, affecting cooperation activities. But it is delighting when classrooms has movable furniture and with enough spaces for several groups to work at the same time. He further indicated that administrators should encourage teachers of today not only to depend on single textbooks but also depend on other materials like Films strips, slides, model, maps, laptops which are ready for use (p. 184).

A report from Addison and Maison (2000) on the "Baseline study on the state of supervision in Uganda schools" gives sufficient empirical evidence to the theoretical assumption an effective management of schools. This was conducted in 80 schools from ten provinces of the country. The study revealed that effective management produces good performances. It further came to light that infrastructural facilities were properly maintained whilst the teaching and learning resources were managed effectively.

Use, Storage and Maintenance of Learning Resources

The view of the GES head teacher's handbook (1994) maintains that is schools should make economical use of the resources ordered, received, stored and distributed. Heads have the duty to guide teachers and other workers in setting up procedures so that student will affectively use the materials at hand. For collection of learning materials for class, the head teacher must maintain a simple

accounting system to enable him to locate the various items taken to the classroom.

Kor (2005) reports of the Minister of State in Charge of Basic, Secondary and girl Child Education asserts that books can make little impact on reading learning abilities of pupils if they are hardly allowed access to them. The Minister further said for the objectives of providing quality education to be achieved, she told head teachers to make textbooks available to pupils to enable them make optimum use of them (pp.16, 17).

Textbook provision to the schools must be part of any educational plan. The provision of textbooks and related educational materials must be included in any specific educational planning that takes place (Murray & Kobayashi, 1987). But at times getting textbooks supplied to schools becomes difficult due to the difficulty in transporting especially in the rural areas. Furthermore administrators can best eliminate wasteful use and maintenance of textbooks through a gradual educational campaign with the pupils and teachers to show the respect for school property. UNESCO (2007) reports that shortages of learning resources in our school premises continue to pose challenges in the provision of quality education. Furthermore uneven access and inadequate provision of learning resources and differences in pupil-textbook ratio continue to exist in many African schools including Ghana.

Murray and Kobagashi (1987) in another development stress that textbook, in many respects, define a curriculum. They define what is to be learned, and teachers must be well informed to go beyond the text. Textbooks

provide essential facts and techniques in learning. Textbooks along with lesson plan are among the main ways of ensuring that the curriculum that has been designed is actually used in the classroom. It also provide key supplementary material, including information, tests, bibliographies and study guides which permit students to go beyond the minimal curriculum.

Hammond (2010) points out that the Ghana Education Service should constantly make follow-up to ensure textbooks and other learning materials supplied to schools are delivered and are in use. This came out from a research in 160 schools that 29 percent of textbooks meant for distribution to schools nationwide, are unable to reach to beneficiary schools in Ghana. He further encouraged head teachers to acknowledge receipt after taking delivery of consignment and seek assistance through the District Assemblies for the proper provision of furniture for the schools to stop pupils from using their laps as tables.

In the report of (Chan & Richardson, 2005) school facilities serve more than just shelter for educational activities. Classes and activities should be programmed such that every room is used efficiently. They further confirm in their research in America that every school classroom should have a 100% usage than the other facilities. They encouraged heads and teachers to properly make good use of the other facilities like the toilets, drinking water and lavatories. Likewise pupils who visit especially these places to use these facilities within the school building must be carefully supervised.

For appropriate use and care of equipment (Nichols, 1990) reports children should be taught how to handle and maintain them. They should

understand for instance that volleyballs are not made to be kicked or they should not sit on inflated balls to damage the values. Teaching the care of equipment goes a long way in helping children take responsibility for the school's property so that it may be in use for a long time.

Ediger and Rao (2006) stress that learning resources support the growth and development of students. Administrators must encourage teachers in using resources. Not all children can read and write. Some can express themselves through song, dance and athletics whilst others operate using the hands to build or create. Administrators must seriously learn these skills when providing resources to children.

Bray (1987) indicated that members of the community can be of help in repairing and maintaining our school buildings such work must be properly organized following this process;

a. There must be work to be done

b. Organizers must make sure that the necessary tools and materials are available

c. Each person should know exactly what he or she is supposed to do.

d. The organizers should make sure that they use the specific talents of capable individuals

e. Goods records must be kept on those who worked properly.

Aggrawal (2006) asserts that the idea to build schools for children is good but the provision of equipment and other materials is also significant. These materials should be properly maintained and kept in reserved rooms. The

Department of Basic Education and Early Childhood (2011) indicated that records on learning resources should be stored in an environment free from dangers such as water, excessive heat and insects. They continue that records on learning resources should be properly boxed and labelled so that they can be easily located when needed.

Chifwepa (n.d) is supporting that records books including inventory, waybills and receipt vouchers helps to account for materials like equipments, furniture, textbooks and exercise books stored in head's offices, classrooms and workshops in schools. Furthermore records keeping constitute a vital task for every school and all school leaders are obliged to regularly and constantly keep proper records for evaluation purposes.

The GES Head teacher's handbook (1994) indicates that for the best usage of the school library books, a teacher and library prefect should be appointed to educate students on how to make the best use of library books and to make ensure that borrowed books are always returned and properly handled. School books must further be stamped and numbered for easy identification.

However a study conducted by Gule and Makina (1993) revealed that headteachers are unable to keep records in schools due to the absence of school facilities like furniture and equipment, lack of organizational management skills and lack of self- confidence. Shehu (2007) is of the view that keeping records in school is not an end in itself; rather it is a means to an end. Durosaro (2000) revealed that record keeping is an important tool for effective planning and administration of schools.

Asiedu-Akrofi (1981) postulates that when we make mention of storing or recording keeping on children, teachers only think of cumulative records which gives data on students. But in the same way, exercise books, textbooks and other relevant materials must also be kept in cupboards. Where there are none, shelves can be made out of sticks or split bamboo and stones/mud blocks. Mannix (1996) indicates that for the developing countries, school budget are seldom adequate to satisfy all desires and therefore School boards and Administrators must set priorities. It is the careful planning of the goals that will help to obtain best results from the resources that are available.

Summary of Literature Review

The literature review made known a lot of studies carried out by different authors on how to make learning resources available and adequate to schools and how to manage learning resources in the schools. This summary of the findings serves as a benchmark to examine what exist in the JHSs in the Mfantseman Municipality. The literature reviewed the theories of learning. However, the literature failed to cover the measurement of learning materials but this gap will be filled by this study.

CHAPTER THREE

METHODOLOGY

This chapter focuses on the research design, population, sample and sampling techniques used in the study. Additionally, it discusses the research instruments, pre-testing, data collection and the data analysis.

Research Design

Given the purpose of this study, the most appropriate research design selected was a mixed method; that is, partly qualitative (observation) and partly quantitative (questionnaire). The mixed method approach is characterized by the collection and analysis of quantitative data followed by the collection and analysis of qualitative data. The purpose of this design is to use qualitative results to assist in explaining and interpreting the findings of a primary quantitative study (Creswell, 2002).

Creswell (2002) observes that mixed method is straight forward in nature, easy to implement, and easy to describe and report on the findings. The main weakness of this method however, as explained by Creswell (2002), is the length of time involved in the data collection.

Population

Population as indicated by Sarantakos (2005) is the total of all items in the group of items in which the researcher meant to study. In the words of Agyedu, Donkor and Obeng (1999), population refers to the complete set of individuals, objects or events with common characteristics which the researcher intends to study. On this account, the population for the entire study are head teachers and teachers of JHSs in the Central Region of Ghana. The target population therefore was all JHSs head teachers and teachers within the Mfantseman Municipality of the Central Region. In all, a total of 90 head teachers and 524 teachers constituted the population of the study.

Sample and Sampling Procedure

The sample size for the study comprised 217 teachers and 73 head teachers. To get the sample size for the head teachers and teachers, the multi-stage sampling technique was employed. Through this method, the list of all the JHSs in the Municipality was obtained from the Mfantseman Municipal Directorate of Education. This was followed by a list of all teachers and head teachers in the Municipality. The next step involved proportional allocation of the sample size among the 90 schools such that schools with larger population got large sample size whilst schools with smaller population got small sample size. Finally, simple random technique using random numbers generated from Microsoft Excel was employed to select the sample size of 217 teachers and 73 head teachers.

According to Krejcie and Morgan (1970), for a population of 524, the suggested minimum number that should be use as sample size could be 217. This constituted the sample size of teachers used for the study. This same justification informed the selection of 73 head teachers out of 90 head teachers. The choice of the sample size was also informed by factors such as cost, representativeness and sampling error which can be tolerated. Table 1 provides sample sizes (S) required from given population sizes (N). Bartels (1997) summarized the advantages of sampling as follows: There is shorter time lag in the use of sampling in a research study; and there is greater scope. The disadvantages of sampling according to him are: errors due to sampling tend to be higher for small sample where the number of sample observations in certain cells may be very small.

Table 1: Distributions of Samples among the Various Circuits

Name of Circuit	Heads (Population)	Heads Sample	Teachers Population	Teachers. Sample	School Population	School Sample
Saltpond	14	11	82	34	14	11
Eyisam	11	9	64	27	11	9
Mankessim	14	11	82	37	14	11
Yamoransa	6	5	34	14	6	5
Dominase	7	6	40	16	7	6
Narkwa	12	10	70	29	12	10
Anomabo	14	11	82	34	14	11
Essarkyir	12	10	70	29	12	10
Total	**90**	**73**	**524**	**217**	**90**	**73**

Research Instruments

Two instruments were used for the study which were a questionnaire for (head teachers and teachers), and an observation checklist (See Appendix A, B, & C). Two separate questionnaires (questionnaires for head teachers and questionnaires for teachers) were designed. The questionnaire for head teachers had 50 items and comprised three sections (Appendix A). Section A which had three closed-ended items sought information on personal data. This included highest qualification, rank and number of years served as head. Section B, looked at the availability, Section C covered adequacy and the pupil-textbook ratio in the nine subject areas, Section D dealt with the state of learning resources while in Section E, eight closed-ended items looked at how learning resources are managed.

The questionnaire for teachers on the other hand had 49 items in three sections (Appendix B). Section A, contained four closed-ended questions that seek personal data. This included their status, highest qualification, rank and number of years served as teacher. The Section B had looked at the availability, Section C dealt with the adequacy of the learning resources and the pupil-textbook ratio, Section D covered the state of the learning resources and Section E was made up of six items on the management of learning resources in the schools.

The use of questionnaires was preferred because questionnaires provides a wider coverage of respondents, are less expensive and provides quick results (Sarantakos, 2005). Sarantakos further indicated the observation checklist which uses vision as its main means of data collection compliment the questionnaires.

The observation checklist allows for a firsthand data without relying on reports, as well as access to a wide range of information even when respondent felt reluctant to offer information. Although it is time consuming and cannot give information about the future or unpredictable events. It also helped to ascertain whether the information provided by head teachers and teachers relate to what existed in the schools. Questionnaires used were adopted from Mills (2009) who worked on a management of learning resources in JHSs in the KEEA Municipality. Few modifications concerning sentence construction and adherence to the research questions for the study were made in the instruments in order to suit the study. For example, modifications were made on items 44 to 49 of the teachers' questionnaire.

Pre-Testing

The instrument was pre-tested in ten schools in the Komenda Edina Eguafo Abrem (KEEA) Municipality. Methodist A JHS, Methodist B JHS, Sharif Islamic JHS, Anglican JHS, Elmina M/A JHS, Catholic Boys JHS, Catholic Girls' JHS, Model JHS, Atonkwa JHS and Broyibima JHS were selected for the pre-testing because they shared common characteristics culturally (the location, occupation and type of schools in that Municipality) with the Municipality under study. The purpose of the pre-testing was to test the research instruments and make the necessary additions or modifications which might be of importance and also to ascertain whether the instructions on the questionnaires were clearly understood and reliable. On the analysis of the results, items which were ambiguous were re-written. Reliability coefficients of .71 and .78 (teachers and

headteachers respectively) were achieved for both questionnaires using Cronbach Alpha. The instruments were therefore deemed reliable based on the rule of thumb that reliability should be at least .70 and preferably higher (Fraenkel & Wallen, 2000).

Data Collection Procedure

To facilitate data collection an introductory letter was obtained from the Institute for Educational Planning and Administration, University of Cape Coast to facilitate access to the schools under study. A briefing section was organised in the selected schools to brief head teachers and teachers on the purpose and need for the research into the management of school learning resources and on how to fill the questionnaires. Respondents were assured of confidentiality and anonymity. Questionnaires were distributed and retrieved three days later. Fifteen uncompleted questionnaires were also retrieved from the respondents. The observation checklist was sent to the selected schools (See Appendix C) to check whether the various learning resources were available, adequate and was in good state and their responses were stated on the observation checklist. The observation checklist covered 70 out of 73 JHSs. This was because the remaining three did not avail themselves to be observed. In all 70 out of 73 head teachers and 202 out of 217 teachers completed the questionnaires. The return rates of the questionnaire for head teachers were 95.9% and that of the teachers were 93.1%.

With regard to the observation, the researcher used participant observation method. The researcher visited the various schools and classrooms. In the various schools, the researcher inspected the availability and adequacy of the various

learning materials. In the classrooms however, observation concentrated on how the learning materials were utilized. That is, how the available learning materials were distributed and used in the various classrooms. In all these procedures, the adequacy, availability, and utility of the items were ticked on the observational guide.

Data Analysis

Analyzing the data is an important step in any research, and must be done according to the aims of the study. Walliman (2005) stated that data is analyzed in order to measure, make comparisons, examine relationships, forecast, test hypotheses, construct concepts and theories, explore, control and explain. Borg, Gall and Gall (1993) argued that the results of quantitative studies should be presented in numerical form, whereas the results of qualitative studies should be presented either as verbal data (e.g., transcripts of interviews) or visual data (e.g., video recording of the events).

The data were organized into various themes and categories (five sections) based on the research questions and the purpose of the study such that each section provided answers for each of the research questions. Prior to coding and tabulating the questionnaires for analysis, all the items were edited. This helped to verify if instructions had been followed uniformly and whether all items had been responded to. The responses to the questionnaire were then coded by assigning numbers to the various categories of responses for the purposes of analyses. Similarly, items in the affirmative were given the following codes:

Available - 1, Not Available – 2,

Adequate -1, Not Adequate- 2

Good-1, Poor-2

After checking incomplete and inaccurate questionnaires, the questionnaires were transferred to a broad sheet (Statistical Product for Service Solution version 16.0). The data were then cleaned by examining them for any errors and were finally analyzed using the SPSS. Percentages and tables were then employed. Finally, the results were interpreted to answer the research questions.

In analyzing the outcome of the observation, the data was organized according to number of research question (four) across all the respondents and their answers in order to identify consistencies and differences. After this connections and relationships between the items were explored. Themes or patterns were then identified and organized into coherent categories. This was done by assigning abbreviated codes of few letters next to the themes and ideas found. The items were then transferred to Microsoft excel spreadsheet and analyzed.

CHAPTER FOUR

RESULTS AND DISCUSSION

The purpose for embarking on this research was to find out the availability, adequacy and current state of learning resources and how they are managed by head teachers and teachers in public JHSs in Mfantseman Municipality in the Central Region of Ghana. SPSS was used to analyse the responses of head teachers and teachers into frequencies and percentages.

This chapter has two parts. The first deals with the demographic characteristics of the respondents while the second part deals with the analysis of the main results of the study using frequencies and percentages. These were presented in tables. There was however a general discussion on the qualitative data.

Biographical Data

Highest Professional Qualification of Respondents

Data collected from the respondents were analysed to find out the highest professional qualification of the respondents. The responses are presented in Table 2.

Table 2: Distribution of Respondents by their Highest Professional Qualification

	Teachers		Head teachers	
Qualification	No	%	No	%
Special Certificate	14	6.9	6	8.6
Diploma / Certificate A	7	3.5	4	5.7
Graduate	137	67.8	32	45.7
Post Graduate	23	11.4	18	25.7
Others	21	10.4	10	14.3
Total	**202**	**100.0**	**70**	**100.0**

Table 2 shows that (67.8%) of teachers were Graduates while (11.4%) were Post Graduate degree holders. Also, (6.9%) were Special Certificate holders. On the part of the head teachers, while (45.7%) were Post Graduate degree holders, (25.7%) were Post Graduate degree holders. Also, (8.6%) were Special Certificate holders.

Darling-Hammond and Young (2002) are of the view that formal education preparation by going to school for certificate and knowledge on the subject matter leads to better understanding and usage of resources. But on the contrary, Whitehurst (2002) proposed that the teacher knowledge on resources is more important than their professional qualifications. Spinks (1992) supported that teachers are key persons to adopt approaches in the management of their school and should have constant training programmes in their schools. Also Osei-Anto (1999) is of the opinion that the extent to which public education succeeds in delivery services with an effective use of scarce resources will depend largely

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on the quality of personnel. It can therefore be concluded that since majority of the respondents have higher professional qualification, they would be better position to manage and use effectively learning resources at their disposal.

Experience of Respondents

Teaching experience was requested from the respondents to be able to know the working experience of the respondents. The responses are presented in Table 3.

Table 3: Experience of Respondents

	Teachers		Head teachers	
Years of experience	No	%	No	%
1 – 5yrs	107	53.0	16	22.9
6 – 10 yrs	36	17.8	25	35.7
11 – 15 yrs	20	9.9	22	31.4
16 yrs and above	39	19.3	7	10
Total	**202**	**100.0**	**70**	**100**

From Table 3, (53.0%) of teachers had less than six years of teaching experience while (47%) had six and more years of teaching experience. On the part of head teachers while (22.9%) had 1-5 yrs experience, (35.7%) had 6-7 years experience. Also (31.4%) had 11-15years while (10%) had 16 years and above. It can be deduced from the results that about half of the teachers (53.0%) of teachers who have shared their fresh knowledge from their schools, on the part of head teachers only (10%) had long service of experience to manage the learning

resources in their schools. Hanuseshek and Kain (2005) investigate on teachers experience declared teachers do perform well in the few years of their work but poorly after a long service of teaching. The outcome of Table 3 reveals that majority of the respondents (teachers and head teachers) have considerable number of years in teaching and as such might have gained the necessary skills and experience in managing learning resources in their respective schools.

Teaching and Learning Resources Available in the JHSs

The central government is expected to provide the essential learning resources in schools to support teaching and learning. There was, therefore the need to find out from the respondents the availability of learning resources in the JHS. It was based on this reason that research question one was formulated. Accordingly, items 5-14 on both teachers' and head teachers' questionnaires were designed to collect the relevant data. The responses are presented in Table 4.

Table 4: Availability of Learning Resources in JHSs

	TEACHERS						HEAD TEACHERS					
	Available		Not Available		Total		Available		Not Available		Total	
	No	%	No	%	No	%	No	%	No	%	No	%
Equipment	59	30.6	139	69.4	193	100	11	15.7	59	84.3	70	100
Libraries	155	77.1	46	22.9	201	100	32	45.7	38	54.3	70	100
Textbooks	191	94.6	11	5.4	202	100	44	62.9	26	37.2	70	100
Classroom	185	91.6	17	8.4	202	100	53	75.7	17	24.3	70	100
Teaching and Learning Materials	139	69.8	60	30.2	199	100	25	35.7	45	64.3	70	100
Toilet/Urinal	168	84.4	31	15.6	199	100	46	65.7	24	34.3	70	100
Play grounds	199	98.5	3	1.5	202	100	46	65.7	24	34.3	70	100
Cupboards	153	76.1	48	23.9	201	100	34	48.6	36	51.4	70	100
Students' furniture	194	96.0	8	8.0	202	100	58	82.9	12	17.2	70	100
Exercise Books	187	92.6	15	7.4	202	100	45	64.3	25	35.7	70	100

From Table 4, (30.6%) of teachers indicated that science equipment was available in their schools while (69.4%) of them disagreed. On the part of the head teachers, (15.7%) of them agreed that their schools are stocked with equipment to enhance effective academic exercise.

The outcome of Table 4 also indicate that (77.1%) and (45.7%) teachers and head teachers respectively held the view that libraries were available in their schools while (22.9%) and (54.3%) teachers and head teachers disagreed. Moreover, (94.6%) teachers agreed that textbooks were available in their schools. In the same vein, (62.9%) head teachers supported the stand of the teachers. In spite of this, (5.4%) and (37.2%) teachers and head teachers respectively disagreed.

With regard to the availability of classrooms that facilitate effective teaching and learning, (91.6%) and (75.7%) teachers and head teachers respectively were in support while (8.4%) and (24.3%) teachers and head teachers disagreed.

Again, the results show that (69.8%) teachers and (35.7%) head teachers maintain that TLMs were available in their schools. Notwithstanding, (30.2%) teachers and (64.3%) head teachers disagreed.

Also, (84.4%) teachers agreed that their schools have toilet and urinal facilities while (15.6%) of them indicated that those facilities are not available in their schools. However, while (65.7%) head teachers supported the view that toilet and urinal facilities are not available in their schools, (34.3%) indicated that those facilities are not available.

Additionally, Table 4 shows that while (76.1%) and (48.6%) teachers and head teachers supported the view that playgrounds were available for recreational activities, (1.5%) and (34.3%) disagreed.

On the availability of cupboards in the various schools, the results show that while (76.1%) and (48.6%) teachers and head teachers admitted they are available. This was contrary to the views of (23.9%) teachers and (51.4%) head teachers who disagreed.

In line with the availability of students' furniture, Table 4 reveals that while (96.0%) teachers and (82.9%) head teachers were in agreement, (8.0%) teachers and (17.2%) head teachers disagreed.

Finally, (92.6%) teachers supported the view that their schools have exercise books for students while (7.4%) of them were not in support. Also, while (64.3%) head teachers maintained that exercise books were available, (35.7%) of them disagreed.

The observation checklist on the availability of learning resources which took place in 70 schools indicated that there were student furniture (88.5%), textbooks (98.5%), toilet and urinal (85.7%) classroom (95.7%), exercise book (91.4%) and cupboards (90.0%) but insufficient science materials.

Available school facilities play significant role in the education system. Adequate, resourceful and appropriate resources go a long way to enhance educational provision. This is because it can either improve or negatively affect educational attendance and performance (MOE, 2001). In support, Ampiah, Davis and Mankoe (2006) report that the various studies carried on effectiveness of school learning resources in Ghana by United

States Agency for International Development (USAID) in 2005 and the World Bank in 2004 proved that schools provided with resources contribute significantly to higher level of pupils achievement. Money and Solomon (2010) reported from the Kanda Cluster of Schools in Accra-Ghana, that the non- availability of learning resources forced majority of parents to withdraw about 400 of their wards from the school from 2000/2001 academic year. Adebango (2007) reports that learning resources makes students to learn and retain better what they have been taught and also promotes and sustains student's interest. Research report have shown that availability of learning resources are vital determinant for teaching and consequently for achievement (Afolabi, 2008). Students attain 80% information when they hear, see and interact with learning resources (Shelly, 2002).

Adequacy of Teaching and Learning Resources in the JHSs

It is worthy of notice that adequate learning resources enhance effective teaching and learning thereby promoting the understanding of the given concept. In view of this, an attempt was made to find out how adequate the learning resources in the JHSs. The responses are presented in Table 5.

Table 5: Adequacy of Learning Resources in JHSs

	TEACHERS						HEAD TEACHERS					
	Adequate		Not Adequate		Total		Adequate		Not Adequate		Total	
	No	%	No	%	No	%	No	%	No	%	No	%
Equipment	14	7.6	170	92.4	184	100	6	9.1	60	90.9	66	100
Libraries	85	42.5	115	57.5	200	100	33	47.1	37	52.9	70	100
Textbooks	129	64.2	72	35.8	201	100	43	61.4	27	38.6	70	100
Classroom	146	72.6	55	27.4	201	100	53	75.7	17	24.3	70	100
Teaching and Learning Materials	77	38.5	123	61.5	200	100	23	33.3	46	66.7	69	100
Toilet/Urinal	123	62.8	73	37.2	196	100	44	62.9	26	37.1	70	100
Play grounds	152	75.6	49	24.4	201	100	45	64.3	25	35.7	70	100
Cupboards	109	55.1	89	44.9	198	100	36	51.4	34	48.6	70	100
Students' furniture	153	75.7	49	24.3	202	100	59	84.3	11	15.7	70	100
Exercise Blocks	141	75.7	61	30.2	202	100	55	78.6	15	21.4	70	100

According to Table 5, (7.6%) teachers and head teachers agreed that equipment in their schools are adequate while (92.4%) and (90.9%) teachers and head teachers indicated that the equipment in their schools are not adequate.

Also, Table 5 shows that (42.5%) and (47.1%) of teachers and head teachers respectively agreed to the view that libraries are adequate to enhance teaching and learning in their schools. On the contrary, (57.5%) teachers and (52.9%) head teachers disagreed to that view.

Moreover, while (64.2%) teachers and (61.4%) head teachers held that they have adequate textbooks in their school, (35.8%) teachers and (38.6%) head teachers disagreed.

Table 5 also indicates that while (72.6%) and (75.7%) teachers and head teachers respectively supported the view that they had adequate classrooms in their schools, (27.4%) and (24.3%) teachers and head teachers disagreed.

Furthermore, while (38.5%) teachers agreed that there were adequate TLMs in their school, (61.5%) disagreed. On the part of the head teachers, the results show that (33.3%) stated that TLMs are adequate in their schools which were contrary to the views of (66.7%) who disagreed.

Additionally, Table 5 reveals that majority of the respondents agreed to the adequacy of toilet and urinal facilities in their schools. Thus, (62.8%) and 44 (62.9%) teachers and head teachers were in agreement. However, (37.2%) teachers and (37.1%) head teachers disagreed.

It is again revealed that while (75.6%) teachers agreed that playgrounds were adequate in their schools, (24.4%) disagreed. This was not

different from the views of (64.3%) head teachers who agreed although (35.7%) head teachers disagreed.

With regard to the adequacy of cupboards in the schools, the results show that while (55.1%) and (51.4%) teachers and head teachers were in support, (44.9%) and (48.6%) teachers and head teachers disagreed.

More so, (75.7%) teachers supported the view that students' furniture was adequate. This was contrary to the views of (24.3%) teachers who disagreed. On the other hand (84.3%) head teachers agreed that students' furniture was adequate. This contradicted the views of (15.7%) head teachers who were not in support.

Finally, the results show that while (69.8%) and (78.6%) teachers and head teachers were in support of the view that exercise books were adequate in their schools, (30.2%) and (21.4%) teachers and head teachers respectively held that students' exercise books were not adequate.

In the observation conducted in 70 schools confirmed that classroom (75.7%), toilet and urinal (63.0%), playground (61.4%), student furniture (84.3%), exercise books (84.0%) adequate. On the other hand science equipment was (88.4%) inadequate.

To confirm the adequacy of textbooks both items 35-43 of teachers' and head teachers' questionnaire sought to find out the pupil-textbook ratio in the schools. The responses are presented in Table 6.

Table 6:   Respondents views on Pupil-Textbook Ratio in the Schools

| | TEACHERS | | | | | | | | | | HEAD TEACHERS | | | | | | | | | |
| | 1:1 | | 2:1 | | 1:2 | | No textbooks | | Total | | 1:1 | | 2:1 | | 1:2 | | No textbooks | | Total | |
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
English Language	23	41.8	30	54.5	1	1.8	1	1.8	55	100	20	28.6	48	68.6	2	2.9	0	0	70	100
Mathematics	22	34.4	39	60.9	1	1.6	2	3.1	64	100	22	31.9	41	59.4	1	1.4	5	7.2	69	100
Science	17	27.4	43	69.4	1	1.6	1	1.6	62	100	21	30.0	47	67.1	0	0	2	2.9	70	100
Religious and Moral Education	4	10.8	14	37.8	1	2.7	18	48.6	37	100	12	17.1	35	50.7	0	0	22	3.9	69	100
Social Studies	17	36.2	27	57.4	2	4.3	1	2.1	47	100	19	27.1	49	70.0	0	0	2	2.9	70	100
Information Communication and Technology	24	49.0	21	42.9	2	4.1	2	4.1	49	100	33	47.1	36	51.4	0	0	1	1.4	70	100
Ghanaian Language	18	60.0	12	40.0	0	0	0	0	30	100	37	53.6	30	43.5	1	1.4	1	1.4	70	100
French	4	36.4	2	18.2	0	0	5	45.5	11	100	13	19.7	35	53.0	0	0	18	27.3	66	100
BDT	6	27.3	12	54.5	0	0	4	18.2	22	100	13	19.7	39	55.7	0	0	5	7.1	70	100

Key: 1:1- One child: one textbook, 2:1- Two children: one textbook, 2:1-Two textbooks: one child, No Textbooks for the schools

Table 6 shows that (41.8%) of the teachers agreed that each student has access to one English Language textbook while (54.5%) teachers agreed that in their schools, two students have access to one English Language textbook. In the opinion of the head teachers, (28.6%) agreed that each student is entitled to one textbooks while (68.6%) of them were of the view that two students are entitled to one textbooks in their schools.

With regard to access to mathematics textbooks, the results indicate that while (34.4%) teachers admitted that each student has access to one mathematics textbook while (60.9%) teachers admitted that two students have access to one mathematics textbook. One the contrary, (31.9%) head teachers indicated that one student have access to one mathematics textbook while (59.4%) held that two students have access to one textbook. However, (7.2%) head teachers were of the view that there were no textbooks in their schools.

Regarding science textbooks, the results show that (27.4%) teachers agreed that one student use one science textbook while (69.4%) of them admitted that two students use one textbook. On the part of the head teachers, the results show reveals that while (30.0%) held that each students has access to one textbook (67.1%) rather maintained that two students have access to one textbook. This was contrary to the views (2.9%) head teachers indicated that there were no science textbooks in their schools.

Again, the outcome of Table 6 shows that while (10.8%) of the teachers disclosed that each student use one Religious and Moral Education (RME) textbook, (37.8%) maintained that two students have access to one RME textbook in their schools. On the part of the head teachers, while (17.1%) head teachers accepted the fact that in their schools, every student has

access to one RME textbook, (50.7%) head teachers held that two students use one RME textbook.

Another revelation from Table 6 is the distribution of social studies textbooks among the students. The results reveal that while (36.2%) teachers supported the view that in their schools every student has access to one social studies textbook, (57.4%) of them agreed that two students have access to one social studies textbook. Also, (70%) head teachers on the other hand responded that two students have access to one social studies textbook although (27.1%) maintained that every student has access to one social studies textbook.

Furthermore, (49.0%) teachers supported the view that every student has access to one ICT textbook while (42.9%) teacher stated that two students have access to one ICT textbook. This was not different from the views of the head teachers. While (47.1%) held that every student is entitled to one textbook, (51.4%) stated that two students have access to one ICT textbook.

Additionally, (60%) teachers supported the view that every student has access to one Ghanaian Language textbook. This was different from the view of (40%) teachers who agreed that two students have access to one Ghanaian Language textbook. Furthermore, (53.6%) head teachers showed that every student has access to one Ghanaian Language textbook in their schools while (43.5%) held that two students have access to one Ghanaian Language textbook. Again, (36.4%) teacher agreed that one students is entitled to one French textbook while (18.2%) of them held that two students have access to one French textbook. On the part of the head teachers, (19.7%) of them

disclosed that every student has access to one French textbook while (53.0%) maintained that two students have access to two textbooks.

Finally, Table 6 reveals that (27.3%) held that each student is entitled to one BDT textbooks while (54.5%) maintained that two students are entitled to one textbook. This was similar to the views of the head teachers. While (37.1%) showed that in their schools every student is entitled to one BDT textbook, (55.7%) of them agreed that two students are entitled to one textbook.

In Table 5 and 6 on adequacies and the Pupil-Textbook Ratio, Robinson (2001) has stressed that adequacy and utilization of learning resources in schools is a critical factor in bringing productive change to students and influences the quality of learning that takes place within the schools and therefore an indication that the availability, adequacy and management of learning resources are fundamental aspect in educational enterprise. Therefore it is important that stakeholders and educational authorities provide adequately the needs of the schools (Afolabi, Adeyanju, Adedapo & Falade, 2006). Prempeh (2005) is in support with Afolabi et al that educational institutions should be provided with the right type of facilities and materials in adequate numbers to equip students with skills and knowledge. Kaufold (2007) in a study in South Texas revealed that lack of sufficient learning resources results in frustration leading to overtiredness in the teachers. In relation to the GES textbook policy each pupil should have access to an individual copy of textbooks in the core subjects, but up till now, this policy has not been achieved due to continued decline in the Pupil- Textbook Ratio (Ampiah, Davies & Munkoe, 2006). On the contrary, Hassan (2000) in a

study of evaluation of availability and adequacy of learning resources reported a 100% in favour of inadequate learning resources and instructional materials for teaching and learning. Clark (1996) says adequacy of learning resources has a major impact on the output of the school. School with insufficient resources undermines the pursuit of the focal task but on the other hand an over-abundance of resources leads to wastage.

Current States of Learning Resources in the JHSs

Provision of learning resources to boast teaching and learning is important but it is equally important to make sure that constantly the resources are in better condition for learning. It is for this reason that answers were sought from the JHSs on the current state of these learning resources on both items 25-34 of teachers' and head teachers' questionnaires. The responses are presented in Table 7.

Table 7: Current State of Learning Resources in the JHSs

	TEACHERS						HEAD TEACHERS					
	Good		Poor		Total		Good		Poor		Total	
	No	%	No	%	No	%	No	%	No	%	No	%
Equipment (Sci.)	28	15.0	159	85.0	187	100	7	11.7	53	88.3	60	100
Libraries	129	64.8	70	35.2	199	100	45	67.2	22	32.8	67	100
Textbooks	170	84.2	32	15.8	202	100	48	69.6	21	30.4	69	100
Classroom	158	78.2	44	21.8	202	100	54	78.3	15	21.7	69	100
Teaching and Learning Materials	109	54.2	92	45.8	201	100	35	50	35	50	70	100
Toilet/Urinal	130	66.3	66	33.7	196	100	40	58.0	29	42.0	69	100
Play grounds	144	71.3	58	28.7	202	100	45	64.3	25	35.7	70	100
Cupboards	132	66.3	67	33.7	199	100	42	61.8	26	38.2	68	100
School furniture	169	83.7	33	16.3	202	100	59	84.3	11	15.7	70	100
Exercise Books	166	82.2	36	17.8	202	100	65	92.9	5	7.1	70	100

From Table 7, (15%) teachers revealed that science equipment in their schools are in good shape while (85%) indicated that they are in poor condition. Eleven point Seven percent of head teachers supported the view that the equipment in their schools are in good state, although 53 (88.3%) of them held that the equipment were in poor state. With regard to libraries, (64.8%) and (67.2%) teachers and head teachers respectively agreed that their libraries were in good state while (35.2%) and (32.8%) agreed that their libraries were in poor state. Also, (84.2%) and (69.6%) teachers and head teachers respectively agreed that the libraries are in good shape. This was contrary to the views of (15.8%) and (30.4%) of teachers and head teachers revealed that the textbooks were in poor state.

The outcome of Table 7 also reveals that (78.2%) teacher supported the view that classroom conditions were in good shape, although (21.8%) maintained that were in poor condition. Again, (78.3%) head teachers held that the classroom condition in their schools were in good shape while (21.7%) of them showed that the classrooms are in poor state. Additionally, with respect to the current state of Teaching and Learning Materials, (54.2%) and (50%) teachers and head teachers agreed that the TLMs in their schools are in good state. Furthermore, (66.3%) and (58%) teachers and head teachers respectively agreed that toilet and urinal facilities in their school were in good condition. However, (33.7%) and (42.0%) of the teachers and head teachers disagreed that the toilet and urinal facilities were not in good state.

The results also show that while (71.3%) and (64.3%) teachers and head teachers supported the view that playgrounds in their schools are in good condition, (28.7%) and (35.7%) disclosed that the playgrounds are in poor condition.

Also, (66.3%) and (61.8%) teachers and head teachers were of the view that the cupboards in their schools were in proper state. This contradicted the views of (33.7%) and (32.2%) teachers and head teachers respectively who indicated that the cupboards conditions were in poor state. It can also be observed from Table 7 that while (83.7%) and (84.3%) of teachers and head teachers agreed that students' furniture were in good condition, (16.3%) and (15.7%) declined by noting that the student furniture in their schools are in poor state. Finally, (82.2%) and (92.9%) of teachers and head teacher held that the exercise books in their schools were in good shape. However, (17.8%) and (7.1%) teachers and head teachers showed that the exercise books in their schools were in poor shape.

During the observation in the 70 schools, it revealed that (61.4%), playground (60.0%) toilet and urinal (58.6%), student furniture (84.1%) exercise books (88.6%) classroom (81.4%) and textbooks (70.0%) were in good condition. On the other hand (81.4%) schools had their science equipment in poor state.

In support of the outcome of Table 7 on the state of learning resources the GES head teachers handbook (1994) indicates it is the responsibility of head teachers to ensure that there is good and enough learning resources for the effective running of the school. Besides, with the introduction of SPIP, head

teachers are expected to write to the Ghana Education Service for allocation of funds to buy roofing nails, sheets and cement to do minor repairs (Mills, 2009) but for major repairs schools are to seek assistance from the District Assemblies. Bray (1987) stress that where it is impossible to acquire roofing sheets, metal windows and cements, it is best to use local available materials which is easier to maintain than imported materials and heads must also purchase learning resources of higher durability. For torn textbooks heads must write for GES for replacements. For toilets and urinals, there should be separate ones for boys, girls and teachers. The old books hiding in the offices can be used as part of library collection, but library books must be stamped and numbered for easy identification (GES head teachers handbook, 1994).

Management of available Learning Resources in the JHSs

Management of learning resources in the context of this study means the avenues from which schools seek resources to replace broken ones; the duration of replacement; monitoring or inspection of the resources; plans put in place when broken resources are not replaced; record keeping on the nature of the resources; and places where the resources are kept. The views of the respondents on the above management issues are presented in Table 8.

Table 8:   Respondents Sourcing Learning Resources for their JHSs

Sources of resources	Teachers		Head teachers	
	No	%	No	%
Past Student	8	4.0	9	12.9
PTA/SMC	105	52.0	27	38.9
NGO'S	15	7.4	15	21.4
None of the above	74	36.6	19	27.1
Total	**202**	**100.0**	**70**	**100**

The responses in Table 8 indicate that while (4.0%) teachers held that they source their learning resources from past students, majority (52.0%) indicated that PTA/SMC provide most of the learning resources. Also, (7.4%) indicated that NGOs provide them with some learning resources. On the part of the head teachers, while (12.9%) maintained that past students, (38.6%) held that learning resources are obtained from PTA/SMC. This was contrary to the views (21.4%) head teachers who maintained that NGOs supply them with learning resources.

The outcome of Table 8 is supported by GES head teacher's handbook (1994) that schools can be effectively run through soliciting for assistance from various organisations and other stakeholders. Furthermore, with the introduction of the School Performance Improvement Plan (SPIP), head teacher's are expected to write to the Ghana Education Service for the allocation of funds to the schools to buy roofing nails, sheets and cements to do minor repairs. But for tables and chairs with loose joints must be repaired during Pre-technical skills periods. In another development (Mills, 2009) is of the view that Parent Teacher Association (PTA) and the School Management Committee (SMC) with approval from the

District Assemblies may impose levies on their members for raising funds in purchasing resources to replace damage ones. On the contrary Obondoh, Nandago and Otiende (2005) indicated some parents see schools as places for official business and have no interest in the affairs of schools and recommend that there must be strong link between the school and parents thus helping them to support their schools.

Furthermore, the researcher sought to find out from the respondents how often are the outmoded learning resources replaced in the school. It is in view of that both items 45 of teachers and head teachers' questionnaires were designed. The responses are presented in Table 9.

Table 9: Replacement of Outmoded Learning Resource in JHSs

Replacement of L. Resources	Teachers		Head teachers	
	No	%	No	%
Yearly	89	44.1	27	38.6
Termly	19	9.4	13	18.6
Hardly	94	96.5	30	42.9
Total	**266**	**100.0**	**70**	**100**

From Table 9, (44.1%) teachers held that learning resources are replaced yearly while (96.5%) maintained that the resources are replaced termly. This was different from the views of (96.5%) who indicated that the resources are hardly replaced. This result was not different from those of the head teachers. While (38.6%) indicated that the resources are replaced yearly, (18.6%) mentioned that learning resources are replaced termly.

In connection with the replacement of outmoded learning resources Becker (1990) reports good management of school resources enhance the school organisation to compete successfully in the rapidly changing world. On the contrary improper management will not only lesson the life span of these resources but also be an impediment on the attainment of effective teaching and learning in the schools. Since learning resources are subject to wear and tear the quality of materials used in making is very essential in management. Besides head teachers should be acquainted with the state or condition of resources and also make out outmoded resources so as to determine when they need replacements. According to Weedall (2004) management can be a complex process which can end up in disappointment and even failure. A research into school resource management revealed that most schools pay little attention to proper management of learning resources, despite evidence of impact on students learning (Yorke, 2002). For this reason the Ghana Education Service mandate all heads to put into writing for replacement of learning resources (GES, head teacher's handbook, 1994).

Good management also includes the proper and regular inspection of learning resources in the schools. They include checking of the quantity and quality of textbooks, the preparation and regular inspection of the prepared lesson notes. Hence, item 46 of both teachers' and head teachers' questionnaires were formulated to find out how often the textbooks and lesson notes were inspected. The responses are presented in Table 10.

Table 10: Inspection of Lesson Notes and Textbooks in the JHSs

Inspection of L. Resources	Teachers		Head teachers	
	No	%	No	%
Once a week	121	59.9	31	44.3
More than once a week	64	31.7	19	27.1
Termly	6	3.0	8	11.4
Never at all	11	5.4	12	17.1
Total	**272**	**100.0**	**70**	**100**

With regard to the inspection of lesson notes and textbooks, Table 10 shows that while (59.9%) said that the resources are inspected once a week, (31.7%) held that the resources are inspected more than once a week. Meanwhile, (3.0%) also held that they are inspected termly while (5.4%) maintained that the resources are not inspected at all. The head teachers also held that learning resources are inspected once a week. This represented the views of (44.3%). Also, (27.1%) indicated that the resources are inspected more than once a week. This was different from the views of (11.4%) who indicated termly. However, (17.1%) held that the resources are not inspected at all.

With inspection of lesson notes and textbooks Fullan (2005) has mentioned that principals with ill-developed visions in resources are likely to encounter difficulties which can affect the prospect of the school. Pertorium et al (2005) indicated that a principal would achieve successes on inspection when teachers are told to abide by the norms and regulations governing the use of

learning resources. Hall and Stephen (1998) in a study in eight schools in United States came out that schools where supervisors monitored the resources, performances were comparatively higher than schools less monitored, besides teachers of improved schools adequately prepared to teach. Opoku-Asare (2006) shared the views of hall and Stephen that teaching and learning resources in schools are significantly affected by a powerful inspectorate that is mandated to ensure and maintain quality in resource allocation, curriculum delivery and educational standards. He continues that inspections are essential for sustaining teaching and learning effectiveness and maintenance of quality standards in the schools. Furlang (2002) suggest that inspections play a key role in the development and improvement of schools. He indicated that inspections are connected with accountability and its main purpose is to ensure that the standards in education are satisfied. Goddard and Emerson (1997) support this view when they stated that inspections should promote high educational outcomes, in particular, high attainment, good progress, and a positive response from pupils. Bame (1991) support Fulung that head teachers and other educational officials who always find fault and give unfair criticisms when resources are poorly managed should rather offer ideas which would aid teaching. Adepoju (1998), testify that inspections assist in improving classroom instruction because teachers are made competent and efficient, motivating them to work hard to achieve the goals of education. Furthermore it allows for the necessary relevant advice to be given for the improvement of the schools.

Activities of School when Learning Resources are not yet supplied

Learning in the schools to a very large extent depends on the availability of the needed teaching and learning resources. But a times, schools are faced with the greatest challenge of not receiving the requisite materials at the beginning of a new academic year. It is based on this that item 48 on both the teachers' and Head teachers' questionnaires were designed. The responses are indicated in Table 11.

Table 11: Activities of Schools when Learning Resources are not yet supplied

In absence of supplied Learning Resources	Teachers		Head teachers	
	No	%	No	%
Old existing materials are used	136	67.3	36	51.4
Purchase equivalent resources	53	26.2	22	31.4
Same materials are purchased	13	6.4	12	17.1
Total	**271**	**100.0**	**70**	**100**

As displayed on Table 11, (67.3%) teachers and (51.4%) head teachers indicated that they relied on the old existing materials used the previous years when learning resources are not supplied. Also, (26.2%) teachers and (31.4%) head teachers held that they buy the same teaching and learning resources from the market to support learning in the schools. Where the textbooks and other learning materials were unavailable, (6.4%) teachers and (17.1%) head teachers also disclosed that equivalent materials were purchased from the market for the schools.

In support of the outcome in Table 11, the head teacher's handbook (1994) proposes that head teacher can discuss with the School Management Committee (SMC), Parent Teachers Association or the District Assembly for the provision of learning resources. Robbins (1991) notes the presence or absence of resources such as time, money, raw materials and equipment to institutions like a school have a large bearing on the attitude and behaviour of all members of the school. On the contrary Mfum-Mensah (2003) maintains that many junior secondary schools that have been established in Ghana are faced with the problems of poor infrastructure, lack of material input, inadequate logistics and lack of qualified teaching personnel. Also UNESCO (2007) supports that shortage of learning resources in our school premises continue to pose challenges to providing quality education. Furthermore, uneven access and inadequate provision of learning resources and differences in pupil-textbook ratio continues to exist in many African countries including Ghana.

Places that Learning Resources are kept in the JHSs

This section sought from the respondents the places where the learning materials are kept. The learning materials are supplied by the government and other stakeholders to schools must be properly kept. It is the responsibility of schools to ensure that these learning resources are safe and stored. It is for this reason that item 49 of teachers' and item 51 of the head teachers' questionnaire were designed to find out where these learning resources are kept in the schools. The responses are presented in Table 12.

Table 12: Places where Learning Resources are kept in the JHSs

Storing of Learning Resources	Teachers		Head teachers	
	No	%	No	%
Head's Office	121	59.9	33	47.1
Cupboards	68	33.7	24	34.3
Staff rooms	11	5.4	9	12.9
No place of keeping	2	1	4	5.7
Total	**202**	**100.0**	**70**	**100**

Table 12 reveals that while (59.9%) teachers and (47.1%) head teachers held that learning resources in their schools are kept in the head's office, (33.7%) teachers and (35.3%) head teachers indicated that the resources are kept in the schools' cupboard. Also, while (5.4%) teachers and (12.9%) head teachers disclosed that the resources are kept in the staff rooms, (1%) teachers and (5.7%) head teachers maintained that they had no place of keeping learning resources.

In support of Table 12, Kor (2005) reports of the Minister of State in Charge of Basic, Secondary and Girls Child Education asserts that learning resources like books can make little impact on reading learning abilities of pupils if they are hardly allowed access to them. Parajuassu (2008) reported that schools continue to suffer more basic problems. These problems include shortage in necessary materials and equipment and lack of regular maintenance and improvement of school facilities. In a similar view, the Department of Basic Education and Early Childhood (2011) indicated that records on learning resources should be stored in an environment free from dangers such as water, excessive heat, vermin and insects. They continue that records on learning

resources should be properly boxed and labelled so that they can be easily located when needed.

Records taking in the Junior High Schools

Head teachers' are solely responsible of stock taking and keeping records on supplied school learning resources. Item 50 of the head teachers questionnaire was formulated to find how stock and records were taken in the schools. The responses are presented in Table 13.

Table 13: Records taking in the JHSs

Records on Learning Resources	Teachers		Head teachers	
	N	%	No	%
Receipt voucher & Inventory Books	38	55.1	29	41.4
Receipt vouches only	3	4.4	8	11.4
Waybills	12	17.4	12	17.1
Inventory Books Only	15	21.7	18	25.7
No records are taken	1	1.4	3	4.3
Total	**69**	**100.0**	**70**	**100**

It is evident from Table 13 that majority of the respondents (55.1%) teachers and (41.4%) head teachers used two books in keeping records on available learning resources in the schools. Also, while (4.4%) teachers and (11.4%) head teachers also indicated that only one record book was used, (17.4%) teachers and (17.1%) head teachers mentioned waybills. However, (1.4%) teacher and (4.3%) head teachers indicated that no records are taken in their schools.

In view of this Chifwepa (n.d) supports that record books including inventory, waybills and receipt vouchers help to account for materials like

equipment, furniture, textbooks and exercise books which are stored in head's offices. Furthermore records keeping constitute a vital task for every school and all school leaders are obliged to regularly and constantly keep proper records for evaluation purposes. The head teacher's handbook (1994) has indicated that receiving and borrowing of school materials should be recorded. The handbook indicated further that textbooks must be stamped and numbered. In a similar view Mills (2009) indicated that resources can be kept in the head teachers' office, staff room or at the school library. Durosaro (2000) in supporting Mills assertion revealed that a record keeping is an important tool for effective planning and administration of schools and according to (Shehu, 2007) keeping records in school is not an end in itself rather it is a means to an end. However a study conducted by Gule and Makina (1993) further revealed that head teachers are unable to keep records in schools due to the absence of learning resources and lack of organizational management skills and self- confidence.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The study sought to find out the opinions of respondents on management of learning resources in the JHSs. The main objective of the study was to find out the availability, adequacy, state and management of learning resources in the JHSs in the Mfantseman Municipality in the Central Region of Ghana. The research adopted the mixed method approach. The accessible population was 614 made up of 524 teachers and 90 head teachers. The sample of the study was made up of 217 teachers and 73 headteachers making a total of 290 respondents taken from eight circuits. Out of these 202 teachers representing 93.1% and 70 head teachers representing 95.9% responded to the questionnaires. Multi-stage sampling was employed using proportional allocation of circuits and the simple random technique. Questionnaires and observation checklist were the main data collection instruments. The instruments were pre-tested in ten schools within the Komenda, Edina Eguafo Abrem Municipality in the Central Region of Ghana. The schools were: Methodist A JHS, Methodist B JHS, Shariff JHS, Anglican JHS, Elmina M/A JHS, Catholic Boys JHS, Catholic Girls JHS, Model JHS, Atonkwa JHS and Broyibima JHS. The result from the pilot test helped in editing the main instrument used for the study.

Summary of the Key Findings

The main findings of the research were that:

1.   Availability of Learning Resources

Majority of the teachers agreed that playground (98.5%), textbooks (94.6%), classrooms (91.6%), student furniture (96.0%) and exercise books (92.6%) are available in the schools. The outcomes of the views of the head teachers were not different from that of the teachers. Majority agreed that school furniture, textbooks are available.

2.   Adequacy of the Learning Resources

With regard to the adequacy of learning resources in the schools, the study revealed that both teachers agreed that textbook (64.2%), classroom (72.6%), playground (75.6%), toilet/urinal (62.8%), student furniture (75.7%) and exercise books (75.7%) were available. The outcome from the head teacher supported that of the teachers. Majority shared the same opinion that these resources are adequate.

3.   **State of Learning Resources**

On the state of the learning resources in the school both respondents were also in agreement. The teacher held view that school furniture (83.7%), exercise books (82.2%), textbooks (84.2%), classrooms (78.2%) in good state. The response from the head teachers supported the views of the teachers. However the both teachers (85.0%) and head teachers (88.3%) indicated that science equipment were in poor state.

4. **Management of Learning Resources**

The results also indicated that teachers (44.1%) and head teachers (39%) shared that learning resources are replaced yearly. However both respondents maintained that resources are not replaced termly. Teachers (60%) and head teachers (44.3%) responded that resources are inspected once a week. The teachers (67.3%) and (51.4%) of head teachers held that when resources are not supplied the existing resources are used or the equivalent resources are purchased. The teachers (59.9%) and head teachers (47.1%) went ahead to say that resources are kept in either the head teachers office or in the cupboard. Finally, the teachers (55.1%) and head teachers (41.4%) concluded that they take records by using the receipt voucher and inventory books.

Conclusions

1. It can be concluded that while playground, textbooks, classrooms, student furniture and exercise books are available, equipment, TLM's, libraries, toilet/urinals although available, they are not in adequate supply.

2. Also while equipment is in poor state, TLMs, classrooms, exercise books, student furniture are in good shape.

3. It can further be concluded that resources are sourced from the PTA/SMC and are replaced yearly. Also resources are inspected regularly specifically once a year and are kept mainly in the headteachers' offices.

Recommendations

The following recommendations have been made based on the outcome of this study:

1. Since the study showed that majority of the resources are available and adequate in the Junior High Schools, school authorities should see to it that these learning materials are kept in proper place to ensure their perpetuation.

2. The study revealed that science equipment was in poor state. It is recommended that the Ghana Education Service in collaboration with school authorities should renovate resources that are in poor state.

3. Heads and teachers must regularly write to the Municipal Education Director for the replacement of outmoded learning resources in the schools.

4. Provision of learning resources must be seen by the Ghana Education Service to be different from the management of the learning resources. The Ghana Education Service should regularly organize in-service training for both head teachers and teachers to train them on management skills for the proper management of learning resources in the schools.

5. Regular visits should be done by the Municipal Directorate of education to the schools to identify problems encountered by head teachers and teachers and offer suitable solutions to them.

6. GES should ensure that Schools without SMC/PTA are encouraged to establish one to support the schools with learning resources.

7. The government should recognize all subjects as important in the basic schools. Therefore textbooks for French, Religions and Moral Education and Basic Design and Technology and their manual should be sent to all the Junior High Schools.

8. It is also equally important to encourage headteachers to use part of their capitation grants to buy adequate learning materials to replace old ones since pupils' are motivated when learning with new learning resources.

9. School head teachers can also be taught by the Municipal ICT co-ordinator on modern methods of using computers in taking records.

10. Parents should be educated though community meetings to know the essence of supporting their wards in the schools with learning resources. Besides parents with particular skills should be encouraged to support schools in repairs, renovations and development of new projects.

Areas for Further Research

The following areas have been suggested for further study.

1. Perceptions of PTA/SMC on the management of school learning resources in Junior High Schools.

2. The role of students in the management of teaching and learning resources in the Junior High Schools.

3. The role of teachers and head teachers in the management of learning resources in private junior high schools.

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Appendix A

Questionnaire for Headteachers

This study seeks to find out how learning resources are managed in Junior High Schools in the Mfantseman Municipality. Please kindly provide frank responses to the items. The information provided will be treated confidential and will be used for academic purposes only.

SECTION A-Personal Data

1. **Highest Professional Qualification**

   a) Specialist Certificate   [ ]   b) Diploma/Certificate A   [ ]

   c) Graduate   [ ]   d) Higher degree (M.ed.,M.Phil, Ph.d)   [ ]

   e) Other(s), specify…………………………………...

2 **Rank**

   a) Superintendent   [ ]

   b) Senior Superintendent   [ ]

   c) Principal Superintendent [ ]

   d) Assistant Director   [ ]

   c) Other(s), specify…………………………………………………….

3. **Years of classroom teaching experience**

   a) 1 – 5yrs [ ]   b) 6 – 10yrs [ ] c) 11 – 15yrs   [ ] d) 16yrs and above [ ]

SECTION B

Please tick [√] against the **availability** of these learning resources in your school.

Number	Items	Available	Not available
4	Equipment(Science)		
5	Libraries		
6	Textbooks		
7	Classrooms		
8	TLM'S		
9	Toilets/Urinals		
10	Playground		
11	Cupboards		
12	Student Furniture		
13	Exercise Books		

SECTION C

Please tick [√] against the **adequacy** of these learning resources in your school.

Number	Items	Adequate	Not Adequate
14	Equipment (Science)		
15	Libraries		
16	Textbooks		
17	Classrooms		
18	TLM'S		
19	Toilet/Urinals		
20	Playground		
21	Cupboards		
22	Student Furniture		
23	Exercise Books		

Please put a tick [√] against these subjects and to indicate the pupil-textbook ratio.

Item	One is to One Textbook	Two or more children to one book	One child to two or more books	No textbooks
24.Eng.language				
25.Mathematics				
26.Int. Science				
27.R.M.E.				
28.S. Studies				
29.ICT				
30.Gh.Language				
31.French				
32.BDT				

SECTION D

Please tick [√] against the **state** of these learning resources in your school.

Number	Items	Good	Poor
33	Equipment (Science)		
34	Libraries		
35	Textbooks		
36	Classrooms		
37	TLM'S		
38	Toilet/Urinals		
39	Playground		
40	Cupboards		
41	Student Furniture		
42	Exercise Books		

MANAGEMENT OF LEARNING RESOURCES

43. What part do you play as a head teacher in sourcing learning resources for your school?

a) Past students [   ] b) PTA/SMC [ ]c) Philanthropist [   ] d)NGO'S [   ]e)None [ ]

44. How frequent do you replace the learning resources out of date.

a) Yearly [   ] b) Termly [   ] c) Monthly d) Hardly [   ]

45. How many times in a week do you inspect lesson notes and other textbooks from your teachers?

a) Once a week [   ]b) More than once a week[   ] c) Termly [   ] d) Never at all [ ]

46. How many times within a week do you as head monitor your teacher's using the available learning resources for effective teaching?

a) Once a week [   ]   b) More than once a week [   ]c) Never at all [   ]

47. How do you teach when the needed learning resources for academic year are not yet supplied?

a) the old existing materials are used b) the school purchase equivalent resources

c) the same textbooks are purchased d) teaching is suspended

48. How often are learning resources received for learning?

a) Very promptly   b) Promptly   c) Quite promptly   d).Not promptly

49. How do you take records of learning resources in your care?

 a) Store Receipt Voucher and Inventory Books b) Store Receipt Voucher

c) Waybill d) Inventory books e) No records are taken

50. Where are learning resources kept in the school?

a) Head's office   b) Cupboard   c) Staff room   d) No place to keep them

Appendix B

Questionnaire for Teachers

This study seeks to find out how learning resources are managed in Junior High Schools in the Mfantseman Municipality. Please kindly provide frank responses to the items. The information provided will be treated confidential and will be used for academic purposes only.

SECTIONA-Personal Data

1. **Status**

   a) Professional   b) Non-Professional

2. **Highest Professional Qualification**

   a) Specialist Certificate [   ]   b) Diploma/Certificate A   [   ]

   b) Graduate   [   ]   d) Higher degree (M.ed.,M.Phil, Ph.d) [   ]

   e) Other(s), specify……………………………………………………

3 **Rank**

   a) Superintendent   [   ]

   b) Senior Superintendent   [   ]

   d) Principal Superintendent [   ]

   e) d) Assistant Director   [   ]

   f) Other(s), specify………………………………………………….

4. **No of years served as a teacher.**

   a) 1 – 5yrs [   ] b) 6 – 10yrs[   ] c) 11 – 15yrs   [   ]   d) 16yrs and above [   ]

SECTION B

Please tick [√] against the **availability** of these learning resources in your school.

Number	Items	Available	Not available
5	Equipment (science)		
6	Libraries		
7	Textbooks		
8	Classrooms		
9	TLM'S		
10	Toilets/urinals		
11	Playground		
12	Cupboards		
13	Student furniture		
14	Exercise books		

SECTION C

Please tick [√] against the **adequacy** of these learning resources in your school.

Number	Items	Adequate	Not Adequate
15	Equipment (science)		
16	Libraries		
17	Textbooks		
18	Classrooms		
19	TLM'S		
20	Toilet/urinals		

21	Playground		
22	Cupboards		
23	Student furniture		
24	Exercise books		

Please put a tick [√] against the subject(s) that you teach to indicate the pupil-textbook ratio.

Item	One is to One Textbook	Two or more children to one book	One child to two or more books	No textbooks
25.Eng. Language				
26.Mathematics				
27.Int. Science				
28.R.M.E.				
29.S. Studies				
30.ICT				
31.Gh.Language				
32.French				
33.BDT				

SECTION D

Please tick [√] against the **state** of these learning resources in your school.

Number	Items	good	Poor
34	Equipment (science)		
35	Libraries		
36	Textbooks		
37	Classrooms		
38	TLM'S		
39	Toilet/urinals		
40	Playground		
41	Cupboards		
42	Student Furniture		
43	Exercise books		

SECTION E

MANAGEMENT OF LEARNING RESOURCES

44. What part do you play as a teacher in sourcing learning resources for your school?

a)Past students [   ] b)PTA/SMC [   ]c)Philanthropist [   ] d)NGO'S [   ] e)None [ ]

45. How frequent are the learning resources out of date replaced.

a) Yearly [   ] b) Termly [   ] c)Monthly [   ] d)Hardly [   ]

46. How many times are your lesson notes and other textbooks in your care checked by your head?

a) Once a week [   ] b) More than once a week [   ] c) Termly [   ] d) Never at all[ ]

47. How many times within a week does your head monitor you using the available learning resources for effective teaching?

a) Once a week   [   ] b) More than once a week [   ] c) Never at all [   ]

48. How do you teach when the needed learning resources for academic year are not yet supplied?

a) the old existing materials are used b) the school purchase equivalent resources

c) the same textbooks are purchased d)teaching is suspended

49. Where are learning resources kept in the school?

a)head's office b)cupboard c)library d)staff room e) no place to keep them

Appendix C

Observation Checklist

Tick [√] against the corresponding box on the availability, adequacy and the state

of learning resources in the public schools in the Mfantseman Municipality

ITEM	AVAILABILITY		ADEQUACY		STATE	
	Available	Not available	Adequate	Not adequate	Good	Poor
Equipment(Science)						
Libraries						
Textbooks						
Classrooms						
TLM'S						
Toilet/Urinal						
Playground						
Cupboards						
Student's Furniture						
Exercise Books						

Appendix D

UNIVERSITY OF CAPE COAST
FACULTY OF EDUCATION
INSTITUTE FOR EDUCATIONAL PLANNING AND ADMINISTRATION

Tel. No. : 042-33824	University Post Office
Fax No. : 042-30588	Cape Coast
E-mail : ucciepa@yahoo.co.uk	Ghana

Our Ref: EP/90/Vol. 3   1st October, 2010.

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LETTER OF INTRODUCTION

The bearer of this letter, **Samuel Acquaah** is a graduate student of the Institute for Educational Planning and Administration of the University of Cape Coast. He requires some information from your outfit for the purpose of writing a Thesis as a requirement of M.Phil degree programme.

We should be grateful if you would kindly give him the necessary assistance to enable him collect the information he requires from your outfit.

While anticipating your cooperation, we thank you for any help that you may be able to give.

Mr. Y. M. Anhwere
Assistant Registrar
For: Director