

Correlation Between Management of Teaching Learning Resources and Pupils Performance at the Basic Level in Tutuka Circuit Schools of Obuasi, in the Ashanti Region of Ghana

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ABSTRACT

The purpose of this study was to find out whether there was any significant correlation between management of Teaching/Learning Resources (TLRs) available in schools within Tutuka circuit and students' performance at the BECE examinations. A correlational design was used for the study. The sample for the study consisted of head teachers and teachers. The total target population was 127 from which a sample of 125 was purposively selected. Ten head teachers and 115 teachers participated in the study. Data for the study were collected using two sets of questionnaire, one for head teachers and another for teachers. The study revealed that there was an inverse correlation ($R = -0.461$) between management of TLRs and students' performance as measured by the BECE results. This value was not statistically significant. The study also showed that TLRs were released to schools in Tutuka Circuit on time and were efficiently managed by head teachers. The study therefore recommends that management of TLRs be made an essential part of in-service training for all head teachers to ensure that students derive maximum benefit from the available resources.

Keywords: Adansi West District, Basic Education Certificate Examination, Criterion Reference Test, Ghana National Association of Teachers, Ghana Living Standard, JuniorSecondary School, Ministry of Education, Management of Teaching/Learning Resources, Planning, Organising, Staffing, Directing, Co-ordinating and Budgeting, Quantity of Teaching/Learning Resources, Students Performance, Senior Secondary School Certificate, Examination, Teaching/Learning Resources, Teachers and Students Accessibility to TLRs, United Nations Education, Scientific and Cultural Organization, West Africa Examination Council

INTRODUCTION

Background of the Study

Between 1998 and 2000, results of pupils' performance in the Basic Education certificate Examination (BECE) was high in Tutuka Circuit schools. In 1998, for instance a total of 505 candidates were presented for the BECE out of this number 47% :ad aggregate 7 in the best five subjects; 30% obtained between aggregates 8 and 20% had aggregates 21 to 35 (See Table 1). Those who obtained aggregates, which could not allow them gain admission into secondary

school, constituted 3%. Any student who obtains aggregates 30 upwards is not expected to gain admission into secondary school. This is a policy laid down by the Ghana Education Service.

The researcher's experience as a chairman of the Ghana National Association of Teachers (G.N.A.T) in the Adansi West District, Obuasi has put him in the limelight about teachers' attitude towards work when the necessary inputs are available or not. TLRs play an important or significant role in the efficient discharge of teachers' room duties. During the interaction with teachers some of them claimed that TLRs when supplied at the wrong time and in small quantities affect pupils' academic performance. This argument aroused the interest of the researcher to make an investigation into this allegation.

Table 1: Adansi West District Pupils' Performance in the 1998 B.E.C.E.

Aggregate	Number of Candidates	Percentage
7	237	47
8-20	152	30
21-35	101	20
36+	15	3
Total	505	100

Source: West District Education Office.

In the year 2000, the number of candidates who wrote the BECE examinations in the Adansi West district increased to 2, 650 with corresponding and comparatively better result. Table 2 presents the performance of students at the BECE in 2000. Table two below shows the performance of students in the Adansi West District at the BECE in the year 2000. Majority of the students qualified to enter Tertiary Institutions. About 62% of the students failed to qualify to enter Tertiary Institution.

Table 2: Performance of Students in Adansi West District in the BECE in 2000

Aggregate	Number of Candidates	Percentage
7	1410	53.2
8-10	546	20.0
21- 35	529	20.0
Above 36+	165	6.2
Total		100

Source:Adansi West District Education Office

These standards were up to the expectation of parents and society in Obuasi.

This is because education is considered the foundation of any society. Teachers in the Tutuka Circuit were given a lot of respect more than other teachers in the remaining six Circuits because results of pupils' performance were the best. A critical analysis of the results presented in table enables us to draw a conclusion that teachers in this circuit really deserve the appreciation of the people in that circuit. Table 3, is a presentation of 728 candidates' results at the Basic Education Certificate Examination Level in 1999. The results are presented according to grades ranging from 7-9, 10-15, 16-20, 21-25, 26-30, 31-35, 36+ covering the period 1999-2002.

Table 3: BECE Results of Tutuka

Year	Grade						
	7-9	10-15	16-20	21-25	26-30	31-35	36+
1999	30	109	150	100	96	243	-
2000	86	50	90	100	93	151	253
2001	51	20	85	12	60	69	315
2002	4	4	27	12	19	10	431
Total	171	183	352	220	268	473	999

Source: Adansi West District (ADW) Education Office

The data shows that Tutuka Circuit performed very well in 1999. However, in the subsequent years the image of teachers in Tutuka Circuit was severely damaged.

This is because pupils' performance became very poor. In 2002 out of a total of 507 candidates presented for the BECE examination only 0.79% obtained aggregate 7-9 whilst 85.0% had aggregate 36 or worse. The result during the 2000/2001 academic year was satisfactory compared with the 2002 results in this circuit.

The 2001/2002 academic year results sparked off a lot of arguments and unhealthy comments about teachers in Tutuka Circuit. Opinion leaders such as the District Chief Executive, the District Director of Education PTAs and District Oversight Committee on Education have all blamed the poor results of people at the BECE on the ineffectiveness of teachers. The authorities claimed that teachers' negative attitude towards work, the use of obsolete methods of teaching and mismanagement of teaching- learning resources had caused the massive failures of pupils at the BECE.

At the Len Clay Sport Stadium there was an open forum on education, in the district. The focal point of the discussion was that teachers were mismanaging the Teaching/Learning Resources (TLRs) thus the poor performance of pupils in recent years. Teachers in this circuit were even threatened by the District Chief Executive (DCE) with mass transfer. Teachers in this circuit also passed the buck by claiming that pupils poor performance was due to their truancy, pupils unquenchable thirst for quick money through 'galamsey' business (this is an illegal method of

mining and trading in gold), late supply of inadequate quantities of TLRs and parents negative attitude towards their wards education.

Statement of the Problem

During the researcher's interaction with teachers at the Adansi West District it came to light that management problem of TLRs for effective job performance existed in Tutuka Circuit schools. Secondly, evidence of pupils' poor performance at the BECE examinations was not common in the circuit. It was, therefore, important to find out whether there is a correlation between TLRs management in Tutuka Circuit and students' performance.

Purpose of the Study

The purpose of the study was to find out whether there was any significant correlation between management of TLRs available in Schools in the Tutuka Circuit and the performance of students at the BECE examinations in that circuit.

Objectives of the Study

The significance of the study would be a mirage if the study were not guided by certain objectives. The objective of the study is therefore to draw inferences from the data gathered as to whether there is a relationship between management of TLRs and pupils' performance.

Rationale for the Study

The government of Ghana spends over forty percent (40%) of its annual budget to provide educational inputs such as TLRs. This same budgetary allocation is used to pay the salaries of teachers. For this reason the study sought to investigate the correlation between the management of TLRs and pupils' performance.

At the district level, directors of education give to all schools quarterly grants to purchase additional TLRs. Hence, if schools in Tutuka Circuit take these grants we have to investigate whether there is real correlation between URs management and pupils performance at the BECE examination within the circuit.

Research Questions

The researcher was guided by the following research questions. These research questions are:

1. What TLRs are available in the Tutuka Circuit schools?
2. How are the available TLRs managed in terms of their accessibility to teachers and pupils when they are required, and how they are handled.
3. What was the performance of the pupils in Tutuka Circuit during the period 2000 to 2002?

Hypothesis

This null hypothesis was tested:

1. There is no relationship between the management of TLRs and students' performance at the BECE.

Significance of the Study

The results of the study are a contribution to knowledge in the area of the role that TLRs play in the teaching/learning process. The results of the study may be useful to the directorate of

the Adansi West District when they plan training programs for head teachers. The research work results are a contribution to knowledge in the area of Management of TLRs and the relationship of such management to students' academic achievement.

Delimitation

The study was restricted to Tutuka Circuit. The examination results used covered the period from 2000 to 2002. The Adansi West District of Ashanti occupies a very broad geographical area of over 2000km². Therefore, the scope of this study was confined to twelve (12) randomly sampled Junior Secondary Schools (JSS) within the Tutuka Circuit. The TER resources that were considered in the study are maps, charts, textbooks, objects, models, syllabi and teachers' handbooks. Things like environment and human resources were not included.

Limitations of the Study

It is likely that lazy teachers could associate strict headmasters and mistresses with poor management of TLRs. This could make the data misleading. However, the researcher's personal observation during school hours suggested that such biases would not be so serious as to have affected the validity of the data and therefore of the findings and conclusions of the study. It is possible that despite the precaution minor problems might affect the validity and reliability of the items.

Definition of terms

1. Basic Level: In this research report Basic Level means Primary and Junior Secondary School in the Ghana Education system designated as public schools.
2. Pupils! Students refers to children of schools going age between four and seventeen years attending schools at the Basic Level of the Ghana Educational System.
3. Basic Education Certificate Examination (BECE) is an examination taken at the end of the JSS programme. This examination is both terminal and continual because it is used to select pupils into the second cycle schools/institutions.
1. Performance means the grades obtained by students at the BECE Examination.
2. Teaching/Learning Resources (TLRs) — The tangible or physical things that teachers and pupils use for effective teaching and good performance respectively. For the purpose of this study the following items are TLRs: Textbooks, work book, photographs, models, maps, diagrams, graphs, printed matter, syllabi, and teachers' handbook.
3. Circuit - It is a geographical area or an educational zone made up of at least thirty (30) primary and at least ten (10) Junior Secondary Schools under a school's supervisor called circuit supervisor who reports his/her findings to the District Director of Education.

Organization of the Rest of the article

This article has two reviewed relevant literature. The first literature review is centered on theoretical review which covers management theories, leadership and secondly there is an empirical review which covers management, students' performance in Ghana and the importance of TLRs. The article goes further to highlight on the methodology used in the study. The methodology describes the research design, the study area, the population, the study sample and sampling procedures, instrumentation, pilot study, data collection procedure and data

The results of the study are presented and discussed in relationship to the objectives of study and the literature review. Results of findings from the field are discussed or analyzed to establish whether management of TLRs has any significant correlation on students' performance. A summary of the study, draws conclusions with some recommendations made. Certain conclusions and recommendations are made for the benefit of policy makers, educational authorities and teachers at the tail end of the article just before the references made are provided.

THEORETICAL LITERATURE REVIEW

This chapter reviews literature related to the study. The review is broken down into following subtopics:

- I. Leadership and management;
- II. Teaching Learning Resources;
- III. Importance of teaching learning resources;
- IV. And students performance

A theoretical review is followed by an empirical review. The theoretical review comprises theories of management including the contingency theory, behaviourist theory, human relations theory, the classical theory, and the administrative management theory. The empirical review embodies studies made on TLRs, Importance of TLRs and students' performance.

The Contingency Theory

Management is a concept, which does not easily lend itself to one universally accepted definition. Chester (1938), traces the origin of management to Henry R Towne (1844-1924), considered as the first person to propose a rational and systematic science of management. Over the last ninety years, the science of administration has evolved in three phases:

- I. Classical and Traditional School of thought (1900 — 1930)
- II. Human Relations Movement (1930- 1950)
- III. Behavioural Science Approach or Behaviourist Theory (1950 to date) In the late 1950s development of management theory and the contingency theory emerged. The premise on which the contingency theory thrives is that situations dictate managerial action. What this implies is, different situations call for different approaches and no single way of solving problems is the best in all conditions. Atta, Agvenim-Boateng and Baafi-Frimpong (1999 p.22) best vividly illustrates the non-universality of one approach in solving problems by stating that "No single way of solving problems is the best for all conditions." This kind of thinking challenges the concept of "universality" proposed by Fayol (1949) and other classical writers who believe that managerial principles and practices should be applied consistently in all situations. Contingency theory integrates all the ideas and concepts of the other schools of management. Solutions to problems can be found by using a multi-disciplinary approach. The administrator must first of all identify and understand the forces that shape the environment of the organisation.

Behaviourist Theory

Chester and Herbert (1986) oppose the view expressed about what management the contingency theory. These proponents laid emphasis on two issues, effectiveness and efficiency, as the pillars of management be it formal or informal organisation. Effectiveness is doing the

right thing at the right time to achieve organisational goals. The ability to skillfully use limited resources to achieve optimum organisational goals is efficiency.

Theorists of behaviourism, approach such ideas from a multi-disciplinary angle such as economics, anthropology, sociology and psychology as means by which a manager can become effective and successful. According to the behaviourist approach an administrator who has knowledge in psychology understands why people behave the way they do. Also, the approach suggests that people's behaviour may be linked to cultural pattern, their special physical make-up or their desire for power and wealth. Classical and Human relations theories are combined by behaviourists to become the human relations theory.

The Human Relations Theory

The second major approach to management and administration is the human relations theory. Follet, Mayo and McGregor (1924) are proponents of the human relation theory. Follet claims that the most fundamental problem of every organization is the development of dynamic social and human relationships. Consequently, the interpersonal relationships should engage the attention of every manager. Similarly, Mayo (1945), argues that neither wage incentives nor change in the physical working condition explains why productivity increases. He rather suggests that informal groupings such as cliques and friendship influence productivity with their codes of behaviour.

Based on these expositions, the human relations theory is an administrative theory the head teachers must use to achieve organisational goals. Heads are expected to relate well with their teachers if students' performance is to be high. A cordial relationship enhances love, affection, concern and unity.

However, heads who over fraternise with teachers become familiar and they will take serious commands for granted. Informal groupings can destroy the goals of schools. This is why it is important for head teachers to use leaders of such informal groupings for effective management.

The Classical School of Thought

Management, like psychology, has undergone an evolution. The classical school of thought, also known as structuralism theory, is made up of two separate ideologies, namely the scientific management and the administrative management approach.

Taylor (1911), is the father of scientific management. As a labourer, Taylor rose through the ranks to become a managing director. He believed that workers could be programmed to be efficient machines. In 1911, Taylor published certain principles, which he finally summed up as recommendations. These principles earned him a title known as "human engineer". Taylor described in these principles the fastest methods by which one could perform a given task. To him tools and materials should be combined, controlled and be in front of the operator.

This theory expects head teachers to be very strict and treat teachers as passive logs in a machine. Strict supervision, even though good for high achievement of organisational goals, may not be a good approach in dealing with teachers who are professionals.

Administrative Management Theory

Criticisms leveled against Taylor's scientific management theory gave birth to the administrative management theory. Administrative management theory spelt out.

The functions of the manager in what Gulick and Urwick (1921), devised an acronym Called POSDCoRB. This abbreviations means:

P	-	Planning
O	-	Organisation
S	-	Staffing
D	-	Directing
Co	-	Controlling
R	-	Reporting
B	-	Budgeting

This theory believes in division of labour, clarity of responsibility and disciplined work objectives. When authority exists it is expected that there is hierarchy of leadership with unity of command from one source to enable the subordinates work in unity under 'esprit de corp'.

The school administrator performs a number of tasks and responsibilities. Gorton (1980) has identified seven broad categories of administrative tasks of the school administrator. Some of these administrative tasks are provision of guidance and counselling services, pupils' personnel function; observation and evaluation of teachers their classrooms, and assist them to resolve problems. Teachers are to be helped to improve their performance as a staff personnel function. Gorton believes that in order to design the school plant and curriculum instructional functions, the head is to determine the school needs; and resources to be put together for effective teaching to take place in the school at the right time. He explains that a combination of all the educational implementations of all these management theories as a head in the practical situation will enhance effectiveness and efficiency to provide quality education and quality products for social, political, economic and employers comparable and competitive in international job market.

Available TLRs must therefore be made accessible to teachers and students if our objectives of providing quality education are to be achieved. This is why the researcher unconditionally agrees with twenty-third June two thousand the three, (23-6-03) (p. 16 &17) of the Daily Graphic report of the Minister of state in charge of Basic Secondary and Girl Child Education's assertion that 'books can make little impact on reading and learning abilities of pupils if they are hardly allowed access of them'. The Minister challenged head teachers to make textbooks available to their pupils to enable them make optimum use of them. She said that the government believes that education the bedrock of every nation and as such the government will never relax in her effort to make available the TLRs needed in schools. This management approach is very comprehensive. It spelt out all the tasks of the head. A zealous execution of these tasks leads to maximum output, co-operation, happiness and well feeling. However, the head teacher is expected to be a jack of all trade. He may end up as a master of none.

Management

The Daily Graphic referred to 23-6-03 (p16 &17) also quoted the Minister for Girl Child education to have made an assertion emphasising the fact that leadership and management of

TLRs is paramount if students are to improve in academic performance. Leadership and management are part of the roles of all head teachers, (Steward, 1967). However, most people are less gilled and need to learn some of the skills involved in leadership and management. A leader is responsible for the overall direction and goals of the organization. But he may identify the direction himself and expect others to follow, or he may pose the question and lead others towards finding the answers. Management is concerned with the process of achieving goals through the work of other people to act in particular desired way. Every head teacher is a manager although schools and industries are different. A manager is expected to cause things to happen and know what he wants. For instance, he is expected to exercise responsible stewardship over resources and turn them into something purposeful. He must set a tone conducive to enable the people give off their best and be accountable for the performance of the school as a social unit while promoting effectiveness and continual improvement.

Forecasting, planning, organizing, commanding, co-ordinating and controlling are the administrative tasks of a manager (Fayol, 1949). It is in carrying out these tasks that the traits of an effective leader such as tolerance, respect for others views, self-confidence, persuasive activities, conceptual and interpersonal skills are manifested. In similar vein, Steward (1967) emphatically supported this assertion that, “a wise manager knows the limits of his own authority and as far as possible avoids weakening his authority by trying to exercise it where it is likely to be challenged or ignored” (p.35).

Unlike Fayol (1949), Adair (1983), recommended a different model, as shown in Figure 1 to represent the tasks of a leader or manager. The leader has a task through individuals not forgetting the need for unity or teamwork.

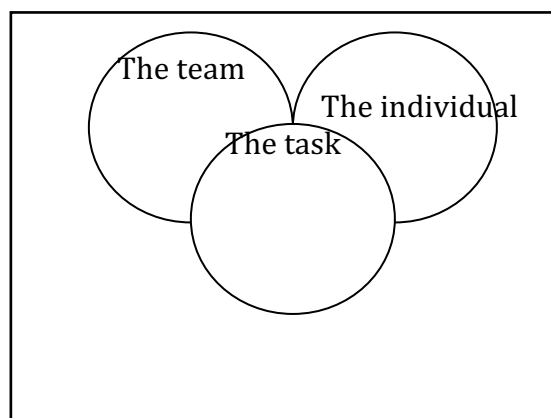


Figure 1: Management Model

Source: Adair John (1983) Effective leadership (p. 145)

Teachers in Tutuka Circuit Basic Schools are under tension labelled as “critical psychological state” because they are not achieving the desired students’ performance. Lewin (1944), contends that a psychological need (tension) persists if one is not satisfied with a performance resulting in the “Zeigarnick effect”. This is the tendency to recall and resume incomplete activities in order to achieve the school levels of aspirations. Level of aspiration, according to Lewin, refers to the standard of performance, which one expects to attain at a task. Performance below that level is generally perceived as failure.

Should head teachers and teachers be blamed for their pupils' poor performance cause of ineffective management of teaching/learning resources? Students' poor performance may be due to socio-cultural factors. Maehr and Nicholas (1980), strongly suggest that socio-cultural factors affect achievement by defining what success and failure mean. Socio-cultural factors define how one should obtain success and failure.

Apart from socio-cultural factors environmental factors may also shape the efficiency of teaching and learning. Teachers' mere interaction with other teachers within their environment provides reference point for self-evaluation of their effectiveness and practice.

Buhr, Crocker and Ashton (1979), contend, for example, that the degree to which the goals of the school are emphasised, initiative taken to improve their practice promote co-operative relationship, cordial interaction, teachers perception of their importance are instrumental in getting students learn towards good performance. Leaders' expectations of teachers for good performance firmly based on one factor are baseless. Eggleston (1979), observed that, no authority outside the individual classroom can make decisions of the teacher who is in the class because no external authority can have access to the evidence of what happens in the classroom.

From these expositions it is obvious that leadership or management is a complex responsibility. Any attempt to have a comprehensive definition is always an illusion. Despite the widespread use of the term and the large amount written about the subject it not easy to find an agreement on a simple comprehensive definition of management or the manager (Mullins 1985), Stewarts (1967), from the numerous definitions of the Concept, came up on manager's job as deciding what should be done and getting other people to do it. Adding his voice to the search for meaning of the same concept Marfo Yiadom (1998), argued that management in a nutshell is the process of planning, organising, leading, controlling and co-ordinating efforts of organization's members and using all other organizational resources to achieve stated organizational goals.

Head teachers management level is lower or first line or bottom level management but he/she has the formal authority by appointment from the Ghana Education Service (GES). Authority and status give rise to interpersonal relationships with subordinates, peers and superiors who provide the manager with information for decision making. Mintzberg (1973))identified a set often roles of the leader, which he classified into three areas. These are interpersonal, informational and decision roles.

The manager's unique access to information puts them in the better position to make important decisions. Information received by the manager is disseminated, monitored and periodically he becomes a spokesman who has to negotiate, settle disturbance and allocate resources.

Vision 2020 document reported on why there was a decline in the academic performance and standards of education, educational constraints, school education and productivity, parameters of quality education, measuring quality of performance and what factors influence standards of education. Secondly, empirical reviews are in abundance about teaching/learning resources. The provision, accessibility and importance of TLRs are highlighted in this review. Do class size

and the environment factor influence students' performance? Answers to these questions are sought in the ensuing literature review.

EMPIRICAL LITERATURE REVIEW

Students Performance in Ghana

Between 1982 and 1985 it was realised that there was a drastic decline of educational standards and students' performance in Ghana's educational system. This decline was attributable to a negative attitude that people had about schooling, brain drain especially on the part of teachers and deterioration of infrastructure in educational institutions (MEO. Report, 1985).

Investigations were made into these problems and certain visions were recommended to be achieved by the year 2020. To halt the decline in education there was the need to halt this canker within a suggested time frame, improve the infrastructure in schools and enhance quality education. These visions can be achieved if there is collaborative effort to increase access to education, provide vocational training and increase access to tertiary education with the view to increasing human development and capacity building (Vision 2020 document, p 23).

The Vision 2020 document identified poor quality in education, low literacy rate unemployment and negative attitude towards productivity as serious problems militating against the development of Education in Ghana and as such schooling did not prepare its products to best fit the present and future needs of the learner and the global community. Leacock (1969) believes that standards tell us how much enough is. They also tell us when goals have been reached. Education must involve the comprehensive preparation for working life.

Does the educational system meet the parameter of quality education? Some of the parameters of quality education outlined by UNESCO (1980) are:

- I. Overall literacy should be at least 80% of the total population.
- II. Dropout rate must decrease to the minimum level if not completely eliminated.
- III. Enrolment rate must increase to at least 80%
- IV. (There must be equal boy-girl admission ratio.
- V. Children of school going age and consumers of education must have access to education.

In 1999, for example, the literacy rate in Ghana reported by the Vision 2020.

Document was 42%. According to the Ghana Living Standards (GLS) survey in 1992, Only about ten per cent (10%) of those who completed school achieved literacy skills.

Only 11% of children aged nine to fourteen years were able to write a letter. Also 40% of children who complete school sufficiently literate relaxed back to illiteracy. Illiteracy level was still 38%. Brong-Ahafo and Northern Regions by the year 2000 recorded a drop of fifteen per cent (15%) in literacy. Again, it was realised that school leavers or candidates lack fundamentals of the grammar of all languages (WAEC, Chief Examiners Report, 2000).

How do we measure quality of students' performance in Ghana? In the context of performance, measurement is usually based on test conducted by the West African Examinations Council

(WAEC) on behalf of the Ministry of Education (MOE). This includes the BECE through SSSCE (Senior Secondary Certification Examination) which is either Criterion Reference Test or Norm Reference Test. Even though the BECE shows that the passes in English and Mathematics have continuously seen an increase since 1990 the system being used (Norm Reference) does not provide sufficient prove that standards have improved, (MOE report, 1992), Criterion Reference Test (CRT) report from the Ministry of Education (MOE) showed that a large number could neither read nor understand simple mathematical operation. In mathematics only 10 % of pupils achieved 53% and above. In English only 2% achieved over 60%. At the SSSCE level, WAEC report has shown that the major cause of students' failure is the lack of control over use of language and poor understanding of questions in mathematics and other subjects (WAEC Chief Examiners Reports, 1996 - 1999).

Another parameter of quality of education is the teacher-pupil ratio. By 1993 there was an estimate by the MOE of one (1) teacher to 28 pupils in the primary schools but for the JSS it was one teacher to 19 pupils. However, this could be deceptive for two reasons:

- A. For instance in 1993, 5,000 teachers were detached, 15,000 were on study leave; so in reality 25 % of the teachers do not interact with pupils.
- B. There are imbalances, for example, in 1993 there were class sizes of 65 and in some cases 5 pupils or below in the rural areas. (UNESCO Report on Education 2002).

The MOE report of 1 970s indicated that 57% increase was recorded of trained teachers and this shot up to 72% in 1990 for primary schools and from 655 to 725 at the JSS. Teachers also increased by 3%. Textbook supply is yet to be adequate despite the government and the Department for International Development's effort to supply textbooks to schools (MOE Report, 1990) some teachers are provided with bungalows and the Best Teacher Award is a package of incentives introduced to boost the morale of teachers. The Vision 2020 document believed that these measures put in place if consistently and continuously provided will lead to remarkable improvement in education in Ghana by the year 2010.

A question one needs to ask is, were there other factors that affected performance of pupils/students leading to lowering of standards? So far the above literature review has revealed that were certainly there some factors that have affected standards. Increase fri population, economic decline, low teacher population etc. is factors that have affected the standards of education in Ghana.

According to Vision 2020 document report, in 1970's there was an economic decline in Ghana, which resulted in the reduction of expenditure in Ghana. In 1 980s so many teachers left the country and this resulted in 51% of the teachers in primary school being untrained. Other effects of the decline were that materials, textbook and facilities have all run down and no new classrooms were constructed. Vision 2020 document showed that school certificate examination fell drastically from about 68% in 1968 to 46% ;n 1981, about 81% were recorded and this reduced to 57% by 1990.

As a result of these problems education lost its status to trading and commercial activities. Teachers and pupils lost the habit of reading. Good students refused to take teaching as career. Those few teachers who remained on job took on subsidiary jobs and could not get time to

prepare lessons and teach effectively. Worse of all due to population increase large classes led to teachers low moral, stress and attrition. (MOE Report, 1987).

In the 1980s a huge investment was made to improve the situation. Heavy inflow of donor support also helped to arrest the situation. The government budgetary allocation for education increased from 17% in 1980 to 36% in 1992. There was a corresponding increase in infrastructure, the number of primary schools increased from 9,193 in 1987 to 11,270 in 1993. However, the number of JSS remained the same (5,440) within the same period (Vision 2020) document. Did the government's heavy investment in education have any influence on education in the Adansi West District? Has government huge investment yielded the desired quality performance of students especially in the Adansi West District? Did the Adansi West District get adequate supply of TLRs and made this available to schools in Tutuka circuit? Are TLRs of any significance in the teaching/learning process? Answers to these questions can be seen in chapter three of this study. Since the Adansi West District is part of the country it receives a fair share of the national cake. Teaching/Learning Resources are also supplied in adequate quantities and one expects the head teachers do effective management of these resources. Probably effective management functions when performed expeditiously students performance may be made to improve.

Teaching/Learning Resources (TLRs) and their Importance

Mere provision of Teaching/Learning Resources (TLRs) to school per se is not necessarily a guarantee for their effective and efficient utilization. This means that TLRs are useless in the instructional process unless teachers put them to good use. A report on the 1974 Educational Development Conference at Wellington confirms this assertion.

According to the report:

Unless the teacher is supplied with those resources, and unless he is given training in their use, it is unrealistic and unreasonable to expect him to make changes in his teaching method or content. (p. 167)

Philip and Tacey (1971-1973) provided a prescription of how TLRs should be meaningful utilized. According to them TLRs are essential in the classroom interaction and as such they fulfill a function. To fulfill their function they must be aesthetical and linked as far as possible with the child's own environmental interest and at the same time encourage competition activities which can help develop capability for application and also can create an enjoyable way of testing their insight and skills. Achievement of a number of major curriculum objectives, depend to a significant extent on the skillful and effective use of a range of learning resources. A UNESCO year study on "Lifelong Education" quoted by the 1973-1974 Education Development Committee claimed that teachers' interest in the use of TLRs is beset with problems. Their interest is stifled by problems of accessibility to equipment, lack of knowledge about suitable materials their sources and problems such as the lack of space specially designated for the use of TLRs. The effect of these problems is that TLRs are not frequently fully and effectively used.

The UNESCO study advocated that a prime function of education is to produce individuals who have 'learnt how to learn' for continuous education in life. However, the question is can

student/pupils “learning to learn” take place if these resources for learning and teaching are not accessible even though they may be supplied? The same UNESCO study provides as answer to this question in the following words:

“Without readily-accessible, well stocked and well staffed libraries and other resources and individuals familiar with their use through in-service experiences, the ‘learning to learn’ approach cannot succeed and the effectiveness of lifelong education will be reduced” (p.112).

Some teachers are not keen enough to concern themselves with students’ methods of learning by using TLRs, the development of TLRs, selection of appropriate TLRs, their management let alone evaluate the effectiveness of these resources in learning.

Sources from which schools can obtain TLRs are important. This is why the call for in-service training is crucial. All professionals need periodic in-service work as an essential part of school life; this is how the quality of teacher and caliber of leadership is enhanced and monitored (Tony Charlton and David, 1993). Kopp, (1977) recommended that there are three sources of obtaining TLRs: from suppliers, the market and those “manufactured” by teachers.

Hawley and Rosenholtz (1984) affirmed this assertion. In their view large classes restrict opportunities for teachers to work and interact effectively with individual students in class. This increases the likelihood of classroom management difficulties such as class control. Doyle (1986) advanced an argument to support this issue of classroom management difficulties. He postulated that teachers who teach large classes and try to systematically pursue academic objectives of students often run into the problem of eliciting high achievement from them due to lack of effective classroom management. Large class size may inhibit teachers’ explanation and innovation due to actual or anticipated problems of management and control. These arguments advanced above means that the classroom environment and perception of teachers influence teaching and learning. Koonison (1990) concluded that a school environment could influence the perception and performance of teachers and students who live and work in the environment

Importance of Teaching Learning Resources

A report on Quality Improvement in Primary Schools (QUIPS) in 2001 unequivocally declared the immense role TLRs play in the teaching/learning process as follows:

All of these particular benefits of Teaching/Learning Materials serve to remind those involved in teaching that teaching/learning materials can make the oral presentation glow with new meaning and more universal understanding. As we examine the vehicles and methods that modern society has placed at the disposal of teachers, teachers should keep asking the question ‘How can I make the learning situation more meaningful? Carefully selecting and effectively using teaching/learning materials helps to answer this question. (p. 147)

In support of this research findings (Koomson, 2003) has this to say. “Just as with most of the good teaching practices we have, the pupils benefit far more than the teacher,” when teaching/learning resources are used (p. 144 & 145). This means that when URs are not used pupils lose more than the teacher. He catalogued six benefits students can derive when teaching/learning resources’ are used by teachers are as follows:

- I. Pupils’ attention is attracted to what is being taught.
- II. It is easier for pupils to understand what is taught.
- III. Pupils communicate with each other and the teacher.
- IV. Pupils are helped to remember what has been taught for a long time.
- V. Pupils easily transfer what is learnt to real life when TLRs are used.
- VI. TLRs promote self-learning.

The above-mentioned importance of using TLRs in schools can be achieved if teachers plan the use of TLRs, arrange them logically and making sure the TLRs suit the topic. Similarly, teachers must have a clear idea of the skills at their disposal in relation with the use of TLRs. In order to achieve the objectives of the school, teachers are expected to arrange and assemble all physical and human resources. Head teachers are expected to monitor teachers’ use of the physical resources available in schools, (Adjei-Mensah, 2001). He further stated that Adjei-Mensah also advised that pupils should not be allowed to write on tables and chairs let alone stand on them. Furniture must be inspected from time to time. The few books and materials available should be well utilized by assisting pupils in that direction. One recommendation that runs through the 2000 BECE Chief Examiner’s

Report was that:

Only dedicated and qualified teachers should be recruited to teach candidates. School libraries should be established and candidates encouraged to go and read so that they acquire reading habit. They should also read magazines and other materials apart from their set texts. This shows that with the right teachers, textbooks and dedication, candidates would be able to perform well (Chief Examiners Report 2000pp. 1—2).

In the 1999 BECE Chief Examiner’s Report WAEC offered a number of suggested remedies to help bring improvement in candidates performs such as: “provision of textbooks and other teaching and learning aids and re-training of teachers teaching subjects for which they have not been trained” (Chief Examiners Report, 1999 p. 2). One common weakness of candidates, which ran through the 1999 WAEC Report, was that the candidates’ poor performance due to their inability to communicate their thoughts in all the languages.

Summary

Even though democracy is the best option for successful management, the Contingency theory is also good for the management of TLRs. This is because Condition which the manager finds himself/herselfwifl determine the kind of leadership style to use. In solving problems of TLRs the head of an institution could use Either the democratic or autocratic or the laissez-faire style depending on the conditions Behaviourist theory cautions head teachers to do away with rigidity and be flexible. Heads should open up themselves to change. Junior Secondary School

heads should be flexible in managing TLRs without fear of being audited so that effective teaching and learning can take place.

The human relation's theory emphasizes the fact that leaders must be sensitive to the human factor. It is to be remembered that in both the formal and informal organisations, informal groupings exist. Human beings according to this theory must not be treated as passive logs in a machine. Taking arbitrary decisions must be avoided because some teachers may depend on the informal groupings to protect themselves.

Lor's principles outlined in the classical school of thought have some educational implications for administrators. For instance good management ensures effectiveness and efficiency. The mechanistic approach of Taylor's principles however, cannot be applied in the school situation because teachers are professionals. Moreover, teachers and students should not be treated with rigidity. On the other hand when standardised conditions and the right calibre of teachers are engaged as recommended by this theory, institutional goals can be achieved.

Administrative management theory does not see the reason why there should be duplications of functions. There must be unity in command and co-ordination. Ideals of this theory are relevant to this research because whenever the head of the school and classroom teachers issue different commands and duplication of functions in relations to the management of TLRs optimum organisational goals cannot be achieved. Heads must have a well spelt out chain of commands without so many leaders all giving commands at the same time.

From the reviewed literature it is easily discernible that teaching/learning resources are important for students/pupils good academic performance. This is why the present study tries to establish whether there is a significant relationship between TLRs and students performance.

Both theoretical and empirical literature reviewed pointed to the fact that the style of leadership and management of heads in relation to TLRs have some significant relationship with both students and teachers performance. Is this assertion valid and to what extent is this true in the Tutuka circuit schools of Obuasi? This information has given the researcher a clue to pursue further through scientific investigation to ascertain whether the hypothesis that management of TLRs does not have any significant relationship with students' performance in Tutuka circuit should be accepted or rejected.

The literature reviewed has posed more challenges and questions to the researcher and future researchers who would be interested in carrying out a similar research. Some of such questions may be answered through this study. However, other researchers can investigate those that can not be addressed by this research later. These following questions emanate from the reviewed literature:

1. Which of the models of management is most suitable for head teachers to apply in order to achieve good performance of students or reverse students' poor performance?
2. Given that the optimum quantities of TLRs are available can head teachers in Tutuka Circuit exercise the right managerial and leadership skills to make sure students and teachers have access to such resources for effective teaching and learning?

3. Would the effective management of TLRs have any significant relationship with the performance of students?

All these questions need in-depth investigations to determine their degree of significance in relation to students' performance. This study sought to fill some of these gaps because proponents of the theoretical literature framework have addressed issues raised from questions one to five listed above. What is relevant in this literature review is that all the theories of leadership and management play significant role in teachers' classroom output and students learning. One can also say with certainty from the empirical literature reviewed that TLRs are very essential in improving teaching and learning leading to good performance of student. Out of these questions this study will address questions one to three stated above to fill the gaps concerning the correlation between management of TLRs and students performance in Tutuka. However, questions which the researcher is still seeking solutions or answers to, remain very obvious and challenging. Does management of TLRs have any significant correlation with students' performance especially in Tutuka Circuit Schools, Obuasi?

METHODOLOGY

Overview

The study has a research design. It also describes the population, sample size, sampling procedure and data collection procedure and techniques. What kind of research instruments used for data collection, the data analysis plan and methods are presented.

Research Design

Correlational Design

To investigate into the correlation between management of Teaching/Learning Resources and pupils' performance at Basic Level in Tutuka Circuit schools Obuasi, the research followed the correlation design and a correlation analysis was used to determine the relationship of the two variables. The Pearson's correlation coefficient was used for computation

Therefore, this research is purely correlational and the author correlated the management of TLRs and students performance. Since correlation research attempts to determine whether there is a degree of relationship between two or more quantifiable variables Gay, (1987) supports the use of this design for such correlational studies. The design is suitable for this present study because it seeks to find the relations between the Management of TLRs and students' performance (SP.)

The presumed outcome of the MTLRs is examined with the aim of establishing an association or relationship with students' BECE results.

Another important aspect of this research design chosen was that it is a valuable exploratory tool that will yield useful information concerning the relationship between MTLRs and students' performance. A correlation coefficient makes it possible for the author to determine what goes with what under what conditions. The correlational design enabled the researcher to explore the relationships between the MTLRs and students performance in a meaningful way. The results did not establish cause and effect but suggested a relationship between the variables.

No research design is absolutely perfect. For example the design did not enable the investigator to manipulate the variables. Randomization of the subjects did not make it clear and for certain whether the variable students' performance at the BECE was affected by other variables apart from MTLRs. Students' performance was probably the result of different causes or different variables but not necessarily due to the MURS. For example, in the 2000/2001 academic year, BECE results were cancelled by WAEC. Candidates had to resit all the papers. The question is after the cancellation of the papers were the candidates adequately motivated psychologically to rewrite the examination? If they were not adequately motivated, could not lack of motivation have affected the performance and not necessarily due to the influence of other variables like MTLR? On the other hand, was it not possible that the students sitting the examinations for the second time were test wise and produced results which were better than the previous results. Even when a correlation statistic establishes the fact that relationship exists TLKS and Students performance it does not establish cause and effect. This is a handicap in the use of the Correlation research design. As a matter of fact these shortcoming made it impossible for the researcher to single out the really significant factor or factors that affect students' performance. Consequently the researcher could neither nullify nor confirm any other factors apart from management of TLRs and their effect on students' performance at the BECE in Tutuka Circuit schools. However, a Correlation coefficient statistic would suggest that a relationship exist between Management of TLRs and students' performance

Population

The target Population of the study consisted of all the head teachers and teachers in the twelve Junior Secondary Schools within Tutuka circuit. There are twelve head teachers' (12), forty-one (41) male teachers and seventyfour (74) female teachers in the 12 schools concerned. This gives a total target population of one hundred and twenty seven (127) from which the sample was drawn.

Sample and Sampling Procedure

Through simple random Sampling eighty five Percent (85%) of the twelve schools were selected. Names of these 12 schools were written on pieces of paper, folded and put in a container. A student in Akrokerrj Training College was blind folded and after shaking the container the Student was asked to pick ten (10) schools out of the lot for me. Picking was done ten times without replacement and on each occasion the container was shaken. Those pieces of paper picked were opened and results indicated the following schools were randomly sampled:

- I. Boete 'A' J.S.S
- II. Boete 'B' J.S.S
- III. Independence 'A' J.S.S
- IV. Independence 'B' J.S.S
- V. Kwabenakwa J.S.S
- VI. Kwabrafofo J.S.S
- VII. OwusuSampa J.S.S
- VIII. Pomposo J.S.S
- IX. St Joseph's J.S.S. and
- X. Tutuka J.S.S

All the head teachers and all the teachers in these schools were included in the sample. Thus the researcher's sample size was 10 Junior Secondary Schools made up 125 teachers. This

number included the 10 head teachers. On the other hand, 90.6%, That is $125/127 \times 100\%$ of head teachers and teachers in the sampled schools were purposively sampled because all teachers who have taught in a particular school for at least 3 years and all head teachers were also purposively sample. In all, the sample comprised 10 head teachers and 115 teachers. Such teachers had relevant experience and information needed by the researcher to help him gather reliable data.

Research Instruments

The instruments consisted of two sets of questionnaires designed by the researcher, one for the head teachers and one for the subject teachers. Questionnaires for the teachers were intended to cross check responses from the questionnaire responded to by the head teachers. Head teachers' questionnaire was used to gather data on how many TLRs were available and how they are managed. The instrument on the "Quantity of TLRs found in schools" was released to the researcher by use of inventory from teachers and head teachers. Data was collected based on questionnaires under the following subheadings.

- I. Personal data of head teachers
- II. Head teachers inventory of TLRs received and released.
- III. Teachers and pupils accessibility to TLRs in the school
- IV. Management of TLRs
- V. Types and Quantity of TLRs in the school
- VI. Release of TLRs to students and teachers and duration of use and return of TLRs.

Questionnaires for the teachers were meant to provide information that would be used to cross check information obtained from the head teachers' questionnaires. The questionnaire for teachers also asked for teachers' personal information and history of their stay in the present school. It also contained Likert type scales meant to measure the teachers opinions regarding the availability, accessibility, usefulness and management of TLRs in their schools.

Validity & Reliability of the Instruments

The face validity of the questionnaire was determined by submitting the questionnaire to the supervisor for his perusal and comments. The comments helped to remove ambiguity and address all issues implied by the research questionnaire. Furthermore the questionnaire was pre-tested and the results of the pretest helped to further improve the clarity and relevance of the questionnaire items. The questionnaire for teachers also asked for teachers' personal information and history of their stay in the present schools. It was also meant to measure the teachers' opinions regarding availability, accessibility, usefulness and management of TLRs in their schools.

Pilot Study

To check the appropriateness of the instruments used for data collection, a minor preliminary study was conducted before the main study. The purpose of this exercise was to unearth the deficiencies in the items and to have adequate knowledge of the research target population. Two of the Tutuka Circuit schools not involved in the study were used. Also, head teachers of two schools who were not used for this study and subject teachers who had taught in those schools for at least three years were used for the pilot study.

Cronbach, alpha coefficient was used for the questionnaire administered to the head teachers and this gave coefficient of 0.8. (See appendix B). This is because the questionnaires from the respondents have been scored giving each item based on a range of values determine by the coefficient alpha developed by Cronbach alpha. The Cronbach alpha was deemed as a useful formula (Mehrens and Lehman 1973). A coefficient of 0.75 according to Borg and Gall (1983) is a satisfactory criterion for a reliable research instrument.

Pilot Study Results

Values of coefficient calculated were 0.9 and 0.79 for head teachers and teachers' questionnaires respectively. The computed scales of coefficient can be seen at Appendices A& B. The pilot study results revealed that additional control measures were need on the following questionnaire:

Quantity of TLRs Released for Use

Positive signals in responding to questionnaire were realised. Mechanical difficulties were identified. For example, head teachers did not understand the questionnaire item on the duration for use of TLRs released. "Are teacher queried on the use of TLRs?" It was reframed to read, "Are teachers not queried for failure to return TLRs?" A number of alternatives provided for responding to these question items

Data Collection Procedure

Cupboards in which head teachers stored their schools TLRs were inspected to cross-examine the responses of items with records available and TLRs still available. The quantity and types of TLRs available in schools were revealed to the investigator by use of questionnaire having the rating scale. All respondents were assured of anonymity and confidentiality of the exercise after explaining the rational of the study. Questionnaires for head teachers were administered and responses retrieved on the same day.

This was because they have more influence and authority over their teachers than the investigator. Teachers' Responses served as a means of cross checking head teachers' responses on the same issue to eliminate inconsistencies and unreliable data.

Data Analysis Plan

Instrument on students' performance at the B. E. C. E from 2000 to 2002 academic were not constructed for this study because the West African Examination Council (WAEC) had already conducted the test for the final year students in the JSS Level. Results released by WACE are readily available. Therefore a request was made for that documentary evidence. WAEC used objective and essay test item to test the students in nine subjects. Results of students for all candidates in each school graded by WAEC as aggregates were converted into mean or average. The researcher extracted from the year results broad sheets the number of candidates presented each year and the grades obtained.

Scores obtained for Management of TLRs (MTLRs) is the independent variable. Students' performance (SP) at the BECE is the dependent variable (DV).

The MTLRs Vrs SP was correlated MTLRs refers to Management of TLRs SP refers to Students performance at the BECE. Students' performance in the BECE was obtained on request from the

Adansi West District Education Officer in charge of Examination and Data processing Centre. Junior Secondary School results at BECE were collected at the main data bank at the District Education Officer because whenever

WAEC release results of students, the District Director of Education collects them first. After processing and storing the information on computer; the original results of each school are then photocopied for collection. It is these photocopied master list of each school together with WAEC printed results slips for each candidate that are handed to the schools for declaration to parents, teachers, candidates and continuing students. As the most reliable source it was most appropriate to collect these vital documentaries from the Adansi West District Education Office. The hard copy of the results is sent to the District Education Office and a photocopy made for each school. These results were extracted from the broad sheet sent to the District Education Office for the research work data analysis.

Data gathered were scored using rating mean values. The rating mean values of student's performances and managements of teaching learning resources were given Y and X respectively on Table 17. A correlational coefficient was computed using the rating mean values in Table 17. Management of Teaching Learning Resource and Student performance were the variables used to compute the correlational co-efficient.

Scoring of the Questionnaire Items

In scoring items under the heading "Management of TLRs" mean rating values were given to the number of students who obtained a given range of grades as against the rating mean values on the excellence of management of TLRs. For example the following rating values for management were given:

Rating Value	Value Interpretation
i. 1	—————> V.V.Poor
ii. 2	—————> V.Poor
iii. 3	—————> Poor
iv. 4	—————> Good
v. 5	—————> V. Good
vi. 6	—————> Excellent

The rate at which the questionnaires were retrieved by the researcher at the sampled schools was between 81.2% and 100%. The rate at which the questionnaires were not retrieved was between 7.6% and 18.8%. (See Table 4)

Table 4: Questionnaire Distribution and Rate of Retrieval Level in the Randomly Sampled Schools

Sampled School	No. of Questionnaire Distributed	No. Retrieved	Percentage (%)	No. Not Retrieved	Percentage (%)
Bootee 'A' J.S.S	9	8	88.8	1	11.1%
Bootee 'B' J.S.S	10	9	90.0	1	10.0%
Independence 'A' J.S.S	11	11	100.0	-	-
Independence 'B' J.S.S	11	9	81.1	2	18.1
Kwabenakwa J.S.S	6	6	100.1	-	-
Kwabrafoso J.S.S	16	13	81.2	3	18.8
Owusu Sampa J.S.S	7	6	85.7	1	12.2
Pomoposo J.S.S	13	12	92.3	1	7.6
St. Joseph's	16	16	100.0	-	-
Tutka J.S.S	16	16	100.0	-	-
Total	115	106	929.8	9	79.8

Each respondent's score on an item was computed. The mean for all the scores under the topic Management of TLRs was calculated. The overall mean scores under the same topic were computed.

Challenges Encountered

Despite this approach aimed at retrieving all the questionnaires it was not hundred percent successful. Some of the respondents did not see the reason why the same questionnaire had to be answered the second time. To some of them it was a wasted of time and the researcher seemed not to have trust or confidence in their responses.

The following measures were used to overcome the problem:

- Teachers in all schools concerned were met briefly for ten minutes and they were told the importance of the exercise.
- Findings of the research work would help improve teachers' duty performance, In order to yield better BECE results and in the long run improve the image of teachers in Tutuka Circuit.
- A pilot study was conducted followed by the actual administration of the questionnaires. By this approach the respondents readily made available information needed. With the Pilot Study conducted the questionnaire items were scrutinized to ensure their reliability and validity.

The Pearson Product Moment Correlation Coefficient was used for computation. A level of significance of 5% was used for the computation. The results of the hypothesis tested are reported in the section of this article.

RESULTS AND DISCUSSION

Overview

This chapter presents results and discussions of the study. It is divided into two parts. The first part presents the demographic characteristics of head teachers and teachers. Part two deals with the main results of the study. The results are presented under the following headings:

- i. Length of experience as head teachers
- ii. Problems of teaching J.S.S. students in Tutuka Basic Schools
- iii. Number of training courses attended
- iv. Hypothesis testing
- v. Summary of the main findings

Presentation of Preliminary Data

Characteristics of Respondents

Altogether 106 respondents participated in the study. Ten head teachers whose characteristics in terms of gender qualification and teaching experience are presented in Tables 8, 9, 10 and 11.

Table 5: Distribution of Head Teachers by Sex and Age

Age	Sex			
	Male		Female	
	No	Percentage	No	Percentage
34 – 44	1	20	2	40
45 – 54	3	60	1	20
55+	1	20	2	40
Total	5	100	5	100

The statistics shown in Table 5 indicate that 50% of the head teachers were male and the remaining 50% were female. Consequently, there was gender balance in the appointments of head teachers in the Tutuka *Circuit* Basic School level. Majority of the head teachers were aged 54 years (80% of the ten respondents) whilst 60% of the ten head teachers were evenly distributed between the ages of 45—54 and above (60% each).

Table 7 represents the distribution of head teachers by experience and academic qualification. With regard to head teachers teaching experience and academic qualification 40% of them had between 11 and 30 years' teaching experience. They also possess MSLC, GCE 'A' as their highest academic qualification. Almost one-third of the entire head teachers' Population had between 0—20 years' teaching experience.

Table 6: Distribution of Respondents by Teaching Experience and Academic Qualifications

Teaching Experience	Academic Qualification		
	Middle School Leaving Certificate	G.C.E 'O' Level	G.C.E 'A' Level
0 – 10	0 (0%)	1 (10%)	1 (10%)
11 – 20	2 (20%)	0 (0%)	2 (20%)
21 – 30	2 (20%)	0 (0%)	0 (0%)
31+	1 (10%)	0 (0%)	1 (10%)

Table 6 presents the distribution of the ten head teachers by experience and professional status or rank.

Table 7: Distribution of Head Teachers by Experience and Professional Status				
Teaching Experience	Professional Status			
	Superintendent	Senior Superintendent	Principal Superintendent	Assistant Director
0 – 10	20%	0%	1 (10%)	0(0%)
11 – 20	0%	0%	1 (10%)	1 (10%)
21 – 30	0%	0%	2(20%)	4(40%)
31+	0%	0%	0(0%)	1 (10%)

Majority of the head teachers represented by seven (7) of them has been heads of a school or the Junior Secondary School for at least 11 years. This means 70% of the ten head teachers has at least II to above 26 years of experience headship. However, 30% of the head teachers are relatively young leaders in school administration.

Characteristics of Teacher Respondents

A total of 6 teachers in the randomly sampled schools provided responses to the questionnaire administered on subject and teachers. Table 9 shows the characteristics of teachers in Tutuka circuit schools by gender and age.

Table 9: Distribution of Teachers by Sex and Age				
Age	Sex			
	Male		Female	
	Frequency	Percentage (%)	Frequency	Percentage (%)
21 – 30	16	40.0	22	39.29
31 – 40	17	42.5	19	33.93
41 – 50	5	12.5	11	19.64
51 – 60	2	5.0	4	7.4
Total	40	100.0	56	100.0

Table 9 shows that about 82.5% of male teachers were aged between 21 and 40 years whilst 17.5% of them were relatively old, they were aged between 41 and 60 years. In a similar vein the female teachers aged between 21 and 40 years are 73.1% of the total female teacher population in the schools. This implies that majority of the female teachers were relatively young. About 26.78% of the 56 female teachers were aged between 41 and 60 years. One obvious thing seen from Table 10 is that female teachers were more than the male teachers in Tutuka Circuit basic schools.

Table 10 is a presentation of teachers by teaching experience and professional qualifications.

Table 10: Distribution of Teachers Respondents Teaching Experience and Qualifications

Teaching Experience	Professional Qualification			
	Cert 'B' Post Middle	Cert 'A' Post. Secondary	Diploma	Degree
0 – 5	0(0%)	30(32.25%)	3(3.13%)	6(6.25%)
6 – 10	1(1.04%)	25(26.04%)	2(2.08%)	1(1.04%)
11 – 15	13(13.54%)	1(1.04%)	0(0%)	0(0%)
16+	11(11.46%)	3(3.13%)	0(0%)	0(0%)
Total	25(26.04%)	59(61.46%)	5(5.21%)	7(7.29%)

Certificate 'A' Post-Secondary teachers are majority in terms of educational qualification compared with Diploma, Certificate 'B' Post-Middle and degree holders. About 61% of 96 teachers in the circuit were post-secondary teachers. One important revelation by the data gathered, was that diploma and degree holders were teaching at the basic level in the Tutuka Circuit. About 5% of the teachers were diploma holders whilst 7.29% of the teachers are degree holders. The degree holders had accumulated up to 10 years teaching experience. Fifty-five out of the 59 post-secondary teachers had up to 10 years teaching experience.

Table 11 presents the distribution of teachers by professional status and qualification. A total of 96 subject teachers participated in the study.

Table 11: Teacher Respondents by Teaching Experience and Professional Status

Teacher Experience	Professional Status		
	Class Teacher	Asst. Supt	Senior Supt.
0 – 5	58	4(4.17%)	13(13.54%)
6 – 10	(60.42%)	16(16.67%)	5(5.12%)
11 – 15	0(0%)	0(0%)	0(0%)
16+	0(0%)	0(0%)	0(0%)
Total	58(60.42%)	20(20.83%)	18(18.75%)

With regard to professional status or rank 60.4% of the teachers had not been promoted to the rank of Assistant Superintendent. Such teachers were either newly posted to the school just after training or had not yet served the required number of years expected of them before they are promoted. The rank of Assistant Superintendent is attained in the Ghana Education Service (GES) after three years of service. Thus 58 out of 96 teachers were serving as classroom teachers awaiting promotion at the appropriate time. They had been posted to the schools after successful completion of their training programme. These teachers were not very experienced. As shown in Table 11 they had less than six years teaching experience.

Table 11 shows that there is no teacher who is either Principal Superintendent or Assistant Director in the Circuit. This is because Principal Superintendent and Assistant Director are expected to be head teachers at the basic level according to the condition of service and regulations for basic level teachers in the Ghana Education Service. Interestingly, no teachers from the data gathered had served sixteen years without a rank. What this may imply is that all the Assistant Superintendents have not yet attained the number of years that would merit promotion to the rank of Superintendent

Number of Training Courses Attended

In-service training is very crucial in the GES if teachers' knowledge, skills, proficiency in teaching and management techniques is to be abreast with current events. As the saying goes, "he who rests rusts" so every teacher must keep on learning how to learn before he/she can remain effective and efficient. Table 13 presents the number of in-service courses teachers had attended on how to use TLRS.

Table 12 indicates that 69 out of 96 teachers had attended up to five in-service courses on how to use TLRs. Also 28 (29.2%) had undergone up to 20 in-service training courses. One would expect that they would be competent in using TLRs to facilitate their teaching.

Table 12: Distribution of Teacher Respondents by the Number of In-service Training Courses Attended.

Number of Training Courses Attended	Frequency	Percentage (%)
1 – 5	68	70.8
6 – 10	23	24.0
11 – 15	4	4.2
16 – 20	1	1.0
Total	96	100

Hindrances to Teachers

Teachers preparing candidates to sit the BECE encounter a number of obstacles, which prevent effective teaching and learning. Prominent among the issues stated by teachers as hindrances are shown in Table 13.

Table 13: Hindrances to Preparation of JSS 3 Students Towards their Final Examination

Types of Hindrance	Frequency	Percentage (%)
Insufficient Textbooks	45	46.5
Lack of many TLR's	41	42.7
Parents and helpful	10	10.4
Total	96	100

As represented in Table 13 the hindrances to preparation of JSS students towards their final examination include: Insufficient textbooks, lack of many TLR's and Parents not being helpful. About 47% of respondents stated that insufficient textbooks is a hindrance towards preparing J.S.S.3 students for the B.E.C.E. in Tutuka circuit Basic Level. Forty one teachers (42.7%) indicated that lack of many TLR's is also an important hindrance. Parents play an important role in the education of their children. Nevertheless the information gathered from the field has it that they are not helpful when it comes to the period of preparing their wards for the final examination about 10% of the teacher respondents stated that parents are not helpful when it is time to prepare their was for the BECE.

Table 14 shows Head Teacher's inventories of the type and quantity of TLRS managed in the 10 sampled schools. These inventories were the up to date records in the 200 1/2002 academic year.

Data shown in Table 14 indicate that TLRS supplied in large quantities to Tutuka Circuit basic level schools are textbooks and concrete materials or real objects are the least TLRS supplied in the sampled schools. For instance, six, seven and eight real objects are available for head teachers of Boete 'B' JSS, Independence JSS and St. Joseph's JSS respectively.

Table 14: Distribution of Head Teacher's Inventories of the Type and Quantity of TLRS Managed at all the Ten Sampled Basic Level School in Tutuka Circuit

School	Texts books	Work books	Photograph	Teachers hand books	Graphics	Models	Maps	Diagrams	Manila Cards	Charts	Syllabi	Printed materials
Boete 'A' JSS	300	10	15	9	41	35	42	47	11	16	38	20
Boete 'B' JSS	350	16	25	6	51	19	14	6	17	24	39	25
Independence 'A' JSS	400	21	30	7	42	28	16	7	57	17	52	30
Independence 'B' JSS	380	20	40	19	12	23	19	35	33	18	53	40
Kwabentakwa JSS	315	35	51	21	5	3	7	11	45	19	50	35
Kwabentakwa JSS	409	36	30	28	24	26	38	17	11	15	31	36
Owusu Sampa JSS	401	67	12	19	11	23	21	40	23	24	36	31
Pomposo JSS	450	31	10	20	16	15	25	36	52	13	32	50
St. Joseph JSS	500	14	27	8	13	29	38	26	7	14	37	25
Tutuka JSS	325	27	23	39	11	26	51	54	14	16	15	34

Source: Head Teachers inventories as at September 2002 in each of the sampled schools of Tutuka Circuit.

The general conclusion drawn from Table 14 was that various types of TLRS are available in the ten sampled schools. With nine subjects offered at the BECE by JSS candidates it is obvious that all the subjects do not have a least two syllabi. (Refer to Table 14).

Table 15 presents data about students' performance in the ten sampled schools within Tutuka Circuit. The table therefore, contains range of aggregates and the weighted values of the number of candidates who obtained the aggregates.

Table 15: Student performance - Represented by Grades and Rating Values as well as the Number of Students who Obtained the Various Ranges of Aggregates (2000/2002)

School	Aggregates (Y) / Rating / Frequencies						Mean rating
	6-9	10-15	16-20	21-30	31-35	36-45	
	6	5	4	3	2	1	
Boete 'A'JSS	50	50	100	50	200	200	2.6
Boete 'B' JSS	100	100	50	50	150	100	4.6
Independence 'A' JSS	50	100	50	200	50	200	2.7
Independence 'B' JSS	50	100	100	100	250	100	3.0
Kwabentakwa JSS	50	250	50	200	150	250	2.7
Kwabentakwa JSS	150	50	100	200	300	150	3.1
Owusu Sampa JSS	100	150	150	250	200	300	3.0
Pomposo JSS	100	100	200	250	300	200	3.0
St. Joseph JSS	150	100	50	150	300	250	2.9
Tutuka JSS	50	50	100	300	200	150	2.8

B. Mean Value

Student's performance Interpretation

- | | |
|------------|-----------|
| 1. 0-1.5 | Average |
| 2. 6-2.5 | Good |
| 3. 6-3.5 | V. Good |
| 4. 3.6-4.5 | Excellent |

Table 16 presents the rating values for the following items aimed at eliciting data from 106 respondents about head teachers management of TLRs:

- I. TLRs are willingly released
- II. The use of TLRs is strictly controlled.
- III. Supervision is done on the use of TLRs
- IV. Orders without compromise on the use of TLRs
- V. Failure to return TLRs attracts no punishment
- VI. Pupils/Teachers damage of TLRs attracts.

Respondents were told to rate these TLRs management items by giving six (6) to the most likely situation, five to the next and so on. The least likely situation is given a rating of one (1). An interpretation was given to the rating values and mean rating as TLR management as follows:

- | | | | |
|------|---|--------|-----------------|
| I. | 1 | —————→ | Very, Very Poor |
| II. | 2 | —————→ | Very Poor |
| III. | 3 | —————→ | Poor |
| IV. | 4 | —————→ | Very |
| V. | 5 | —————→ | Good |
| VI. | 6 | —————→ | Excellent |

- | | | | | |
|------|-----|---|-----|-----------|
| I. | 2.0 | - | 2.5 | Poor |
| II. | 2.6 | - | 3.5 | Good |
| III. | 3.5 | - | 4.5 | Very Good |
| IV. | 4.6 | - | 5.5 | Excellent |

With regard to the release of TLRs being done willingly by the head teacher the head of St. Joseph's JSS very poorly managed teaching TLRs. This is because the rating value of one (1) recorded a total rating of 36 from the respondents (See Table 16).

Table 16: Distribution of Rating and Mean Rating Values of Head Teacher Management of TLRs in Tutuka Circuit

School	Aggregates (Y) / Rating / Frequencies						(X)
	6	5	4	3	2	1	Mean rating
Boete 'A' JSS	62	21	3	21	2	7	4.6
Boete 'B' JSS	16	19	5	38	5	23	3.4
Independence 'A' JSS	16	18	7	50	6	9	3.6
Independence 'B' JSS	30	29	6	53	7	11	5.0
Kwabenakwa JSS	15	12	10	31	11	28	3.1
Kwabenakwa JSS	13	14	22	42	10	9	3.7
Owusu Sampa JSS	8	15	8	22	23	30	2.8
Pomposo JSS	21	9	10	28	20	18	3.3
St. Joseph JSS	25	17	1	07	9	36	3.4
Tutuka JSS	6	39	17	33	7	4	3.9

The lowest total rating of six (6) from the respondents were recorded in Independence 'A' JSS, Independence 'B' JSS, and Tutuka JSS representing ratings one (1), four (4) and six (6) respectively. (Refer to Table 16). The data in Table 16 shows that Boete 'A' JSS excellently managed TERs even when teachers/pupils damage the TLRs.

Table 17 is an extract from tables 15 and 16 mean rating of student performance and Head teachers' management of TLRs.

Table 17: Mean Rating values of Management of TLRs (K) and Students performance (Y)

School	X	Y	X ²	Y ²	XY
Boete 'A' JSS	4.5	2.6	20.25	6.76	11.70
Boete 'B' JSS	3.4	4.6	11.56	21.16	15.64
Independence 'A' JSS	3.6	2.7	12.96	7.29	9.72
Independence 'B' JSS	5.0	3.0	25.00	9.00	15.00
Kwabenakwa JSS	3.1	2.7	9.61	7.29	8.37
Kwabenakwa JSS	3.7	3.1	13.69	9.61	11.47
Owusu Sampa JSS	2.8	3.0	7.84	9.00	8.40
Pomposo JSS	3.3	3.0	10.89	9.00	9.90
St. Joseph JSS	3.4	2.9	11.56	8.41	9.89
Tutuka JSS	3.9	2.8	15.21	7.84	10.92
Total	$\Sigma X=36.7$	$\Sigma Y=30.4$	$\Sigma X^2=138.57$	$\Sigma Y^2=92.36$	$\Sigma XY=110.98$

These mean ratings in Table 17 are used for the computation of the Pearsons Product Moment Correlation coefficient. The management of TLRs is the independent variable (X) whilst the dependent variable (Y) represents students' performance at the BECE.

Pearson's Product Moment Correlation Coefficient computed using the Statistical Package for Social Sciences (SPSS) approach, can be seen at Appendix E As shown in Table 18 at 0.05 alpha value and degree of freedom 8 the R observed (- 0.46 1) was less than the critical value of 0.575. There was therefore, no reason why the null hypothesis should be rejected since the computed R falls within the confidence region. The R-value of —0.461 implies an inverse relationship between students' performance and management of TLRs. Association between management of TLRs and student performance thus, can be deduced that, there is an inverse medium in strength relationship between management of TLRs and students performance at Tutuka Circuit basic level schools. In order to determine the strength of the relationship Cohen (1989) suggests the following guidelines:

- I. $r = 10$ to .29 or $r = 10$ to - .29 , . small
- II. $r = 30$ to .49 or $r = 30$ to -49 medium
- III. $r = 50$ to 1.0 or $r = 50$ to - 10 large

Since r — observed is less than the r critical it implies that we have to fail to reject the null hypothesis that there is no relationship between management of TLRs and students' performances in Tutuka Circuit schools, Obuasi.

In Table 18 r represents the Pearson's Product Moment Correlation Coefficient, r -cal stands for the computed correlation coefficient, r -tab is the tabulated correlational coefficient read from the table at degree of freedom (df) 8 with the alpha value being 0.05.

Table 18: Computed and tabulated Correlation Coefficient

P	r -cal	r -tab	Df(N-2)
0.05	-0.461	0.575	8

DISCUSSION

It can be deduced from the findings that experienced head teachers and teachers are teaching and managing basic schools in Tutuka Circuit. Since the teachers are experienced one can assume that they will lead students to the threshold of their minds. Gibran (1900) on his exposition on the nature of teaching says that the teacher does not bid you to enter the house of his wisdom but rather leads you to the threshold of your mind. This is similar to Ryburn's (1975:1) assertion that "Our object in teaching is to help those who we teach to live fully, now at present stage, and in the future; to help learn the art of living with others. No one can live, in any real sense, alone. Therefore, our ultimate aim in all we do for our children is a social one."

The research results show that teachers in Tutuka circuit Basic school encounter students' disciplinary problems whilst preparing them towards the BECE. Indiscipline has become a social problem rearing its ugly head in our educational institutions. Disciplinary problems might have some positive relationship with students' poor performance at the B.E.C.E from 1999 to 2002.

Asiedu-Ajcrofl (1978) made an assertion that disciplinary problems exist in Ghanajan schools. His belief was that student and teacher performance had positive relationship. As he puts it, "Most disciplinary problems in our schools are attributed to the level of teachers and students performance in teaching and students' final examination results respectively" (p7).

Teachers gave positive responses to items dealing with their head teachers' effective and efficient managerial skills. They were of the view that TLRs are effectively and efficiently managed by head teachers. What this means is that teachers are satisfied with head teachers' leadership styles and management as far as the release and use of TLRs in Tutuka are concerned. With teachers expressing the view that TLRs are effectively managed, the GES should also begin to play their part on supervision and monitoring of teaching.

Another area of the findings, which is inconsistent with previous or earlier studies, was that there is no relationship between management of TLRs and students' performance. Buhr, Crocker and Ashton (1983) argued that the degree to which the goals of the school are emphasized, initiative taken to improve their practice, promote co-operative relationship, cordial interaction (Management) teachers' perception of their importance are instrumental in getting students learn towards good performance. However, the work of Maecher and Nicholas (1980) is supported by result of the present study that apart from management, Socio-cultural factors have relationship with or define how one should obtain success and failures.

Consequently further investigations need to be made into this area by researchers in the future. For us to overcome the problem of students' poor performance there is the need for a multi-dimensional approach. Supervision, monitoring, TLRs availability, access to TLRs, effective leadership, managerial skills, students' attitude towards learning, teachers' perception etc. are some of the few approaches among others that must be applied in schools. If these multi-purpose approaches are not used students' performance in Ghana will continue to be poor or become poorer. And if performance of students gets poorer every year then Ghana is an endangered country since our human resource base is uncertain making the future socio-economic development of the nation too to be endangered.

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

This section of the article is a summary of the study. It draws conclusions from the research findings and provides recommendations.

Summary

Information was gathered from head teachers and teachers in ten Junior Secondary Schools within Tutuka Circuit about the availability of TLRs, the time of supply; management of TLRs, access to TLRs to students and teachers, and problems involved when preparing JSS students for the BECE. The study was conducted under the assumption that management of TLRs has no significant relationship with students' academic performance in Tutuka circuit Basic Schools. The study was designed to investigate the correlation between management of TLRs and students' performance.

Research Method and Procedures

Literature review was conducted to provide the foundation for the study. Areas in which the literature review was done included theories of management, students' performance in Ghana, TLRs and their importance. Correlational approach was used to analyse the information gathered. The researcher administered the questionnaire items in October 2003. The total return rate was 92.2% representing 106 respondents of the sampled size. A pilot study was carried out on 2 head teachers and the reliability of instruments computed before the questionnaires were administered. The computed reliability coefficients from the results of the

pilot study were 0.76 and 0.9. Minor changes or revisions were made in the wording of items as a result of the pilot study. All the head teachers and teachers in the 10 sampled schools were purposively sampled because they deal directly with J.S.S. candidates being prepared for the BECE. The size of the population was 127 made up of 12 head teachers and 115 teachers out of which 125 respondents were selected to form the sample. The 125 sampled size included 10 head teachers.

The major findings of the study were the following:

- 1 Teachers preparing candidates for the BECE encounter problems such as insufficient textbooks, parents not being helpful and lack of teaching/learning resources.
- 2 Teachers testify that the quantity of TLRs supplied was inadequate.
- 3 Ineffective and inefficient management of TLRs does not exist; instead head teachers skillfully manage the TLRs.
- 4 Management of TLRs had no relationship with students' performance even though there was an inversely medium in strength correlation between management of TLRs and students' performance exist.
- 5 The overall responses indicated that apart from management of TLRs other variables may have relationship with students' performance at the BECE.

CONCLUSIONS

The major results of this study gave rise to the following conclusions:

- 1 The study has confirmed that there is an inverse relationship between management of TLRs and students' performance. However, in the case of the Tutuka Circuit, the management of TLRs explained only 10.8% of the association between management of TLRs and students performance. This suggests that there exist other factors that influence performance in this circuit, which were not covered by the present study.
- 2 Parents at Tutuka Circuit basic level schools failed to support their children during the preparation towards the BECE. This might have accounted for the poor academic performance of the student.
- 3 The cause or reason why students performed poorly could not be solely blamed on the management of TLRs since the correlation coefficient indicated an inverse relationship.

Recommendations

- 1 Head teachers should be given regular short courses in educational leadership to sharpen their skills in order to sustain the good management of TLRs they were seen to be exhibiting.
- 2 Since the result of the study suggest that factors other than the management of TLRs accounted for a large portion of the students' poor performance at the BECE circuit supervisors should intensify in-service training for teachers to enhance their instructional effectiveness. Also during PTA meetings head teachers should impress upon parents to support their children in their studies especially by providing the things that they need to facilitate their studies at home.
- 3 The District Directorate should commission a study that would identify the real causes of students' poor performance at the BECE in Tutuka circuit.

Area for Further Study

The result of the present study contradicted the notion that the management of TLRS influences students' academic achievement. It is necessary for further research to be made in other circuits to determine whether the management of TLRS in other schools has any relationship with students' academic performance.

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