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Assessment of the Effects of Total Quality Management on School Performance in the Chereponi Education Directorate

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Abstract

Education is the bedrock of every nation's economy and therefore there is the need for quality management in the educational sector, especially at the basic level for improved performance, cannot be overemphasised. This study assessed the effects of total quality management on school performance in the Chereponi district. The key issues the study examined include: factors responsible for quality management in schools; and effects of total quality management on school performance. The study adopted descriptive survey and the use of quantitative techniques in analysing views of respondents. The study found demotion of students and suspension of teachers' salaries are the main factors school authorities always institute to ensure quality management in the Chereponi district. Also, PTAs play important roles in the collective management of schools to improve performance. Effective supervision of teachers, monitoring of students' behaviour and the effective and efficient leadership styles of school heads are important factors to ensuring total quality management of schools in the district. However, inadequate teachers and finances are some of the key problems identified to be hindering the smooth management of schools for effective performance in the district. For effective supervision, teachers and students behaviour should be improved by school authorities to enhance quality education and efficient performance of schools in the district.

Key words: Quality, Total Quality, Total Quality Management, School Performance

Introduction

Education is an important requirement for national development. Hence, the need for quality management in the educational sector especially at the basic level cannot be overemphasised. The system of basic education provides the foundation for the academic future of every nation and this could only be possible when the principles of quality management of basic schools are ensured (Murad and Rajesh, 2010)¹.

The low academic achievement of Junior high School pupils in the rural areas of Ghana has been one of the greatest challenges facing the educational system in the country. Several students recorded low percentage marks in 2003 which is used as admission criterion to the Senior High Schools. Lack of teaching and learning materials as well as poor tuition by the teachers in the schools are some of the factors responsible for the low performance in the basic schools. Other factors include inadequate government financing, poor parental care, absenteeism of both teachers and students from school and lack of effective supervision by Circuit Supervisors. This therefore threatens the government's effort of reducing illiteracy and poverty levels especially in the rural areas as contained in Ghana's Poverty Reduction Strategy policies I and II.

Many stakeholders of education such as government, parents and other development partners in the educational sector also attribute low students' performance in the basic schools in the rural areas in particular to lack of effective human resource management policies such as regular in-service training of Head Teachers on school management and other training programmes for teachers to sharpen their skills for effective teaching. Harris (2000)² describes human resource management as programmes, policies and practices for managing an organisation's workforce. It encompasses a set of direct and indirect policies and programmes with detailed activities which are capable of transforming the institutions' human resource base into modernised productive force.

The challenges associated with the country's educational performance especially at the basic rural schools calls for a concerted effort to identify both immediate and remote management techniques that are needed to improve the situation. This could become possible if total quality management is taken seriously and mainstreamed into the educational development policies and programmes in the country. Oakland (1989:15)³ argues that "Total Quality Management (TQM) needs to gain ground rapidly and become a way of life in many organisations". It is worth noting that time for people's awareness of total quality and human resources are important for TQM success in our educational sector. For Crosby (1984)⁴, quality awareness is not just promoting quality within an organisation, but it is also spreading information around. Therefore, the purpose of this study is to assess the effects of total quality management on school performance in the Chereponi district.

Problem Statement

Education is the key pillar for development as it remains the only medium through which human resource needs are obtained and achievement of quality education remains a major goal of every country and Ghana in particular. According to the Ghana Education Service's (GES) Annual Reports on Basic Education Certificate Examination (BECE) results for 2009, out of the 400 candidates registered for the BECE in the Chereponi district, only 9.5% of the students passed the examination (GES, 2009)⁵. Similarly, only 6.6% of 286 candidates who sat for the BECE in the district recorded pass during the 2010 academic year. This, therefore, presents a worrying trend which calls for attention of stake holders of education in the district to look into the issue of poor performance of students in the district and the factors responsible for it. As a result, the issue of total quality management has become a major concern to government, parents, teachers and other stakeholders who have strong interest in the educational system of Ghana (GES, 2009)⁵. Agodzo and Songsore (2005:99)⁶ maintained that the success of any contemporary based learning programme depends on new approach to curriculum and teaching and learning material development, re-orientation of teaching staff, purposefully staff recruitment and development. Others also include equipping the educational institutions with the basic tools and instituting a framework of quality assurance. The absence of these in many schools in the district undoubtedly poses a great challenge to achievement of quality education.

It is for this reason that the study sought to assess the effects of total quality management on schools performance in Chereponi district. Specifically, the study will seek to ascertain factors responsible for quality management in schools and how they impact on school performance.

Objectives of the Study

The main aim of the study is to assess the effects of total quality management on school performance in the Chereponi Education Directorate. Specifically, the study aims at examining total quality management on school performance in the following specific objectives:

To ascertain factors responsible for quality management in schools in Chereponi district; and

To assess the effects of total quality management on school performance in Chereponi district.

The Research Questions

The study sought to find answers to the effects of total quality management on school performance in the Chereponi Education Directorate. Specifically, the study aimed at answering the following questions on the effects of total quality management on school performance in the district.

What are the factors responsible for quality management in schools in the Chereponi District?

How does total quality management influence on school performance in the Chereponi District?

Significance of the Study

The study is significant to numerous stake holders such as the government (including Ministry of Education and Ghana Education Service), teachers, parents and other researchers as well as development partners in education who work closely for the development of education in Ghana. To the best knowledge of the researchers, no in-depth study has been carried out on the effects of total quality management on school performance in Chereponi district. The study therefore adds to the existing stock of knowledge on issues of education in Ghana by helping to unearth the fundamental factors that are responsible for total quality management of basic schools in the district.

Another issue of significance of the study stems from the backdrop that it uncovers how total quality management influences school performance especially in Chereponi district. To this end, the results inform stakeholders of education on measures needed to be put in place to streamline the educational systems especially at the basic level for an improved performance. It also reveals areas that need further studies.

Profile of the Study Area

The study was conducted in the Chereponi district in the Northern Region of Ghana. The district is one of the 20 administrative districts in the Northern Region. It covers an area of 1,675 square kilometres and has a population of 62,781 with one third being adolescents (GSS, 2011)⁷. There are mainly three ethnic groups in the district namely; Anufo, Konkombas and Bimobas. The district is largely rural with 89% of the people living in dispersed settlements and has a very good soil fertility and rainfall is unpredictable for agricultural purposes (Chereponi District Assembly, 2011)⁸. The people depend on rain-fed subsistence farming and rearing of animals for their livelihood.

The Chereponi district has a total of 43 pre-schools, 43 primary schools, 9 Junior High Schools (JHS) and 1 senior High School and 1 Vocational School (Chereponi District GES, 2011)⁹. These educational institutions are mostly run by Ghana Education Service and the District Assembly. The rural features of the District suggests that it may have educational quality concerns. This research therefore assessed the effects of total quality management on schools performance in the district.

Literature Review

Overview of management

The term 'management' is commonly used in everyday conversation. Though it is commonly and simply used, it appears to be a complex and ambiguous concept. "The emergence of management as an essential, a distinct and a leading institution is a pivotal event in social history" (Drucker, 1989:3)¹⁰. That is, management as a concept has become a very important and acceptable tool around which efficient day-to-day running of an organisation evolves. In attempt to write on management, Mullins (2005)¹¹ asserted that it is a generic term and subject to many interpretations. Schneider and Barsoux (2003)¹² similarly argued that an attempt to define the meaning of management shows up differences in beliefs and values. Scholars like Mullins (2005)¹¹ and Craimer (2003)¹³ indicated that at its most basic sense, management could be defined as making things happen through a practical way of influencing the behaviour of employees in an organisation. Craimer (2003)¹³ further commented that management is about developing people, working with them, reaching objectives and achieving

results. He concluded that all the research works on how managers spend their time reveals that they are creatures of moment, perpetually immersed in the nitty-gritty of making things happen.

Commenting further on the meaning of management, Mullins (2005:195)¹¹ argued that ‘managing’ is an everyday activity that involves interactions between people that are not unrelated or entirely dissimilar to other spheres of life, except in the rhetoric and hype that surround management. In other words, this could be interpreted to mean that management involves daily activities. The functions of management depend on the people who discharge those functions. However, these authors failed to describe management distinctively from leadership perspectives in organisational environment. Management focuses on the institutional goal attainment through strict application of rules on the people working in that organisation.

In describing the nature of managerial work in organisations, Mintzberg (1990)¹⁴ suggests some basic purposes of the manager and that every organisation needs a manager. According to him, one basic purpose of a manager is to ensure that the organisation serves its purpose. By this, the manager is to ensure that employees are guided by the core objectives of the organisation in attempt to work towards their achievement. Mintzberg (1990)¹⁴ further asserts that another basic purpose of a manager is to design and maintain the stability of the operations of the organisation in a controlled way to changes in its environment. By this, the manager is expected to design policy programmes with detailed activities that are adaptable to the organisational environment so as to achieve its strategic vision. The adequate utilisation of these basic principles of a manager in an organisation ensures that the organisation serves the needs of those people who control it and also brings about the key informational link between the organisation and the environment and also act as formal authority to operate the organisation’s status system. On the basis of the foregoing conceptualisations of management, one could describe management as a governance strategy which aims at efficient utilisation of organisations’ resources in order to achieve its objectives. Management focuses on efficiency through strict compliance with designed policies and structures that are capable of realising essential administrative functions in an organisation.

Overview of quality

Quality as a concept has been variously explained by many quality assurance scholars in different ways. According to Juran (1988)¹⁵, quality consists of product features which meet the needs of the customers and thereby provides product satisfaction. In another debate, Crosby (quoted in Jie and Idris, 2009:53)¹⁶ postulated the four “absolutes to quality”. According to their view, quality has to be defined as conformance to requirements, not as goodness or excellence. This is to suggest that quality is only achieved when the product or the outcome is in line with the set standard. For example, in the educational circles, quality could be said to have been realised when students perform satisfactorily in their examinations.

Crosby (1979)¹⁶ defines quality as conformance to requirement while Juran and Gryna (1980)¹⁷ define quality as “fitness for use”. Deming (1986)¹⁸ defines quality as “a predictable degree of uniformity and dependability at low cost and suited to the market”. Many organisations found that the old definition of quality which dwells very much on “the degree of conformance to a standard”, was too narrow, hence they now prefer using a new definition of quality in terms of “customer focus” (Pour & Yeshodhara, 2011)¹⁹.

In the view of Ishikawa (1985:45)²⁰, ‘quality means quality of product’. Broadly interpreted, quality means quality of work, quality of service, quality of information, quality of process and quality of people, including workers, engineers, managers and executives. Deming (1986:49)¹⁸ also comments that quality must be built at the design stage. He added that the quality desired starts with the intent, which is fixed by management and that the intent must be translated into plans, specifications, tests, in an attempt to deliver to the customer the quality intended, all of which are management’s responsibility. In addition, Divine et al. (2006)²¹ concluded that quality is easier to identify and measure in some endeavours than in others and that in a manufacturing, quality may be measured by whether a finished component has a diameter within certain dimensions or

whether the viscosity of a fluid has desired properties. It can be inferred that it is difficult to assign a single definition for quality as a concept as different researchers and writers have expressed divergent views on its definition. One can, therefore, describe it as the efficient and effective efforts the individual puts in work to achieve an excellent output.

Total quality management (TQM)

Ensuring total quality management in organisations has become a major concern to the actors including employees, customers and business owners who are directly or indirectly involved in the running of the organisations. TQM is a general management philosophy and a set of tools which allow educational institutions to pursue a definition of quality and a means of attaining it (Murad and Rajesh, 2010)¹. They also asserted that TQM can be applied to higher education, but it must be modified to fully recognize some unique aspects of education which are tailored towards the needs of the industry. A baseline technical definition of what TQM is all about has been given by the American Federal Office of Management Budget Circular. Pike and Barnes (1996)²² argue that organisations are not only technical systems, but also human systems. In addition, Oakland (1993)³ stated that TQM attempts to improve the whole organisation's competitiveness, effectiveness, and structure (Dale, 1999 :9) ²³so as to ensure mutual co-operation of everyone in the organisation. This therefore has the tendency of influencing the associated business processes to produce products and services, which meet the needs and expectations of customers. Other scholars like Weller and Hartley (1994)²⁴ who developed unflinching interest on issues of quality management explained that quality philosophy and its principles have become central to international educational reform efforts in many nations. It provides a structured and comprehensive delivery system which may lead improvements in education (Weller & Hartley, 1994)²⁴. Total Quality Management is described as management method used to enhance quality and productivity in organisations, particularly businesses. They also asserted that TQM is a comprehensive system approach that works horizontally across an organisation, involving all departments and employees and extending backward and forward to include both suppliers and clients/customer. This requires talented leadership personnel, though they remain the scarcest resource in the world today (Tichy and Cohen, 1997)²⁵. Weaver (1992)²⁶ has drawn our attention to central role that students play both in the process of quality management and as beneficiaries of quality management. He indicated that the roles of students must be recognized by involving them in their own learning process. Furthermore, students' evaluation in TQM is very important and should be carried out throughout their studies so that corrective measures may be enforced continuously (Weaver, 1992)²⁶.

From the definition, it is obvious that TQM is applicable to all types of business, and it requires total involvement of all parties which have either direct or indirect contact within or outside the organisation. In the context of education, Harris (quoted in Jie and Idris, 2009 :33) ² defines three common approaches to TQM, namely, "customer focus, staff focus, and service agreement stance". On his part, Weaver (1992)²⁶ also asserts that the theory of TQM rests on two tenets. The first and most important is that customers are vital to the operation of the organisation. Without customers there is no business definitely, and without business there is no organisation. Consequently, it should be the primary aim of any group to keep customers satisfied by providing them with quality product (Deming, 1986)¹⁸. The second tenet is that management needs to listen to sources of information in order to institute quality. This is based on the belief that employees want to do quality work, which will be possible if managers listen to them and create a workplace based on their ideas (Deming, 1986)¹⁸.

Overview of school performance

The concept 'performance' has been differently used by many writers. Torrington, Hall and Taylor (2005)²⁷ and Gaither (1996)²⁸ similarly hold the view that a variety of different definitions of performance have been used ranging from bottom line financial performance (profitability), through productivity measures, to measurements of outcomes such as wastage, quality and labour turnover. Performance is defined as how well or badly a person or company does a particular job or

activity (Longman Dictionary of Contemporary English, 2003)²⁹. It further explains performance the act of doing a piece of work or duty. In another perspective, performance in relation to management is described as the process for assessing the overall performance in the context of the individual's job description and occupational standards.

On school performance, educational institutions often equate adequate performance of students to the success of the institution. In his book 'Change Forces' Fullan (1993)³⁰ maintained that an organisation's performance is a factor of its success and Bennis (1997)³¹ commented that problem facing almost all leaders in organisations such as in school setting will be how to develop their organisation's social architecture so that it actually generates intellectual capital or quality student products it is working for. The importance of sound performance in education for the development of excellence, expertise and knowledge leading to overall development of a country's economy cannot be undermined and this has necessitated a sound strategy for the development of education in almost all countries of the world (Murad & Rajesh, 2010)¹. However, the realisation of quality performance in education cannot be achieved without commitment of substantial financial resources.

Factors Responsible for Quality Management in Schools

The role of quality assurance policies in enhancing quality education cannot be overemphasised. Quality in schools focuses on the inputs rather than on outputs (Sims&Sims 1995)³². They maintain that quality of products of educational institutions is determined primarily by its structural characteristics. The indicators of a school's quality with regards to performance include average entrance examination scores, acceptance rates, faculty qualifications, endowments, library holdings and student/faculty ratios (Sims and Sims 1995)³². Divine, Miller and Wilson (2006)³³ argue that proponents of Total Quality Management (TQM) in education have challenged this traditional view by suggesting that quality needs to focus more on the outcomes of the educational process than on the inputs. They conclude that quality should be defined as the extent to which the needs of a school's stakeholders are satisfied by the outcomes of the educational process.

According to Allen (2007:5)³⁴, assessment is defined as "an ongoing process designed to monitor and improve student learning." Assessing students' performance involves definition of clear objectives in academic programmes for students, by ensuring that these objectives are incorporated in their curriculum, measure the extent to which their students have attained these objectives and then make adjustments to their curriculum in order to improve the learning as well as performance of future students (Allen, 2004)³⁴. In likening school to normal business organisation, de Jager and Nieuwenhuis (2005)³⁵ hold the view that employers are a very important customer of business school outputs (graduates) and therefore schools need to look for ways to more effectively interject employers' needs and perceptions into the continuous improvement process. On their article on "the empowered classroom", Durlabhji and Fusilier (1999)³⁶ identified that the surest way to ensure efficient performance in a school environment is to ensure that the necessary materials for teaching and learning (TLM) are made available. That is, TLMs including textbooks and other requisite materials for teaching and learning. They also comment that a well-resourced library with competent teachers as well as adequate funding from state agencies and other stakeholders could be additional factors for improved school performance.

Total Quality Management and School Performance

Issues of total quality management in educational institutions have been taken seriously as it may help to add values to products of these institutions. This has led to establishments of quality assurance units in higher academic institutions. Total quality researchers such as Murad and Rajesh (2010)¹ are of the view that quality of education takes into account external environment in which institutions operate: internal environment where teaching and learning take place and home environment of learners. They also argue that systems approach to education comprises inputs, processes and outputs, all

encompassed in an arbitrary boundary, and the environment and these inputs are acted on within the transformation/production process and finally released from the system back into the environment as outputs.

As noted by Tavena (2003)³⁷, the quality of students and their academic performance are key indicators in appraising university teaching activities. Ideally, one should seek to measure the “added value” of university provision, meaning the difference between the quality of students at the outset of their chosen programme and the quality of graduates Tavena (2003)³⁷. He added that unfortunately, such overall measurement of “added value” for an entire student population is not readily possible at the current stage of knowledge about measurement and evaluation. Commenting further, Tavena (2003)³⁷ asserts that without any such global measurement of “added value”, no possible performance indicators can offer anything more than a partial representation of the activity under consideration. He then concluded that they therefore have to be used with caution and, preferably, in clusters of related indicators to obtain a “pointillist picture” of the activity concerned, with the understanding that the selection and range of different indicators have a direct impact on the quality of the picture obtained. Tavena’s (2003)³⁷ views are similar to that of Osseo-Asare and Longbottom (2002)³⁸ where they asserted that the image of an academic institution largely depends on quality of its students’ academic performance and how they function in the industry.

In examining the perception of secondary school teachers on total quality management in education, Pour and Yeshodhara (2011)¹⁹ revealed that more than half secondary school teachers exhibited average level of perception about TQM in education. However, the percentage of teachers with above average level of perception about TQM was more (24.3%) than that of teachers with below average level of perception about TQM (19.9%). The study revealed that there was significant difference found between male and female teachers in the perception of total quality management. Female teachers had higher mean score than male teachers. Pour and Yeshodhara (2011)¹⁹ again indicated that there was no significant difference between Arts and Sciences secondary school teachers in the perception of TQM in education.

Researchers maintain that TQM in education surfaced in 1988 at Mt. Edgecombe High school in Sitka, Alaska, when David Langford, the school’s technology teacher/coordinator, applied Total Quality concepts in his classes (Pour & Yeshodhara, 2011)¹⁹. They further asserted that it has also spread into mainstream of educational organisations. From the contingency school, Fiedler (1967)³⁹ identified three potential focus areas of the leader for an organisation that wants to achieve total quality and maximise output. These include: task focus; people focus; and power focus.

From the charismatic school, Bass (1990)⁴⁰ also identified two types of leadership necessary for efficient management of an organisation, namely transactional, primarily task-focused, and transformational, primarily people-focused. Mäkilouko (2004)⁴¹ showed that project managers are primarily people-focused, with 40 out of 47 project managers in his sample being purely people-focused. On the other hand, Lee-Kelley, Leong,& Loong (2003)⁴² found that half of their sample was relationship-oriented. Keegan and den Hartog (2004)⁴³ predict that a project manager’s leadership style needs to be more transformational than transactional, but found no significant link. What they did find is that, whereas for line managers there is a significant correlation between the manager’s leadership style and employees’ commitment, motivation, and stress, there was no such correlation for project managers.

Total quality management in educational institutions comes with some challenges. According to Srivanci (2004)⁴⁴ critical issues in implementing TQM in higher education includes leadership, customer identification, cultural and organisational transformation. Unlike business organisations, chancellors and heads of higher educational institution do not enjoy ultimate authority in hiring and firing of personnel and allocating resources (Murad & Rajesh, 2010)¹. They further commented that lack of necessary authority makes it difficult to deploy their values and goals through layers of higher education institutions.

Owlia and Aspinwall (1997)⁴⁵ concluded that customer orientation is a more problematic principle of TQM when applied to universities because of special nature of many academics whose motivation to work is often independent of market issues as the effectiveness of leadership is adversely affected by individualism among academic staff and due to absence of team working. The impact of TQM in higher education is small due to organisational inertia to change, failure to focus on important questions, of academic culture to TQM (Koch, 2003)⁴⁶.

The basic principles for the Total Quality Management (TQM) philosophy of doing business are to satisfy the customer, satisfy the supplier, and continuously improve the business processes (Kurtus, 2001)⁴⁷. The first and major TQM principle is to satisfy the customer and if the user of the product is different from the purchaser, then both the user and customer must be satisfied, although the person who pays gets priority (Kurtus, 2001)⁴⁷. He concludes that a company that seeks to satisfy the customer by providing them value for what they buy and the quality they expect will get more repeat business, referral business, and reduced complaints and service expenses.

It is imperative to state the essence of these principles in ensuring quality management. First, quality is dynamic and not static and companies must put in place mechanisms that will work with customers' complaints. Second, quality is a process. Therefore, attention must be paid to tasks that cause bottlenecks. Third, quality management requires effective monitoring and evaluation. In addition, quality control is an ongoing and enduring activity. Moreover, quality control requires continuing input of time, money and efforts, and it is designed to help you find long-term success.

Materials and Methods

Research Design: A descriptive survey was used in the conduct of the study. This was employed because the district had its Junior High Schools sparsely located across all the communities. It was therefore seen more feasible to use a survey to sample all the students and other stakeholders to ensure representativeness.

Target population and sample size: Chereponi district is one of the twenty (20) districts in the northern region of Ghana with a population of 62,781 (GSS, 2011)⁷. The district has 43 primary schools, 9 Junior High Schools (JHS) and 1 Senior High Schools (SHS) (GES, 2010)⁴⁸. The study focused on 5 JHSs out of the 9 JHSs. The choice of JHS over primary schools and SHS for the study was informed by its unique nature as it serves as the stage where students are introduced to external examination for the first time.

Since logistical constraints confront every researcher, a section of the population is often selected and studied as a reflection of the entire population (Obeng, 2003)⁴⁹. This study was conducted among JHSs in Chereponi district Students, Parents, Teachers and Staff of GES were sampled to obtain in-depth information on how total quality management impacts on school performance in the district. A sample of one-hundred and twenty (120) respondents was selected from the target population for the study.

Sampling technique and procedure: A multistage sampling procedure was used to select five (5) JHS from the total of number 9 JHS in the district. The 5 schools were deemed representative enough to provide adequate data to address the objectives of this study. The selection of these 5 schools was taken into accounts of the spatial distribution and spread of the JHS in the district to ensure that variability in terms of location of schools was catered for. The researchers selected the schools based on the following procedure. A list of all JHS in the district was obtained and used as the sampling frame. In addition, a quota of 5 was allotted to the sample frame. Following this, a list of these schools was obtained and numbered from 1 to the last digit. A simple random sampling procedure was then used to select the required number of schools from the list. The schools selected from the list were then listed and used as selected sites for data collection.

The next stage of the sampling procedure was on the selection of respondents from the schools selected for the data collection. In this regard, purposive sampling technique was applied to select thirty (30) parents who had their wards in the schools selected and ten (10) GES staff. In addition, forty (40) teachers and forty (40) students were selected from the 5 schools using the purposive sampling technique, bringing the total number of respondents to one-hundred and twenty (120). This technique was deemed suitable for the selection of these respondents because of the convenience.

Research instrument: The study was conducted with the use of questionnaire as the research instrument. The questionnaire was structured to elicit respondents' views on total quality management on school performance in the Chereponi district. Other specific issues the study covered included factors responsible for quality management in schools, effects of total quality management on school performance and roles that education stakeholders play in improving school performance.

The researcher used semi-structured questions and administered them to all respondents. The open-ended questions provided an opportunity for respondents to elaborate and provide further details while the closed ended questions gave them time to provide appropriate answers to the questions by choosing from possible options made available to them.

Data Analysis: Quantitative data were analysed by means of elementary statistical analysis. Frequency distribution, percentages and bar-chart/pie-chart were used for simple reporting purposes and easy understanding by readers. Data was then analysed with the use of frequency distributions to establish relations between total quality management and school performance in the district. The Statistical Package for Social Sciences (SPSS) was used to process and analyse the data.

Results and Discussions

Respondents' Views on Factors Responsible for Quality Management in Schools

This section presents detailed data, analysis and discussions of views of respondents on possible factors responsible for quality management of schools in the Chereponi district. The key issues presented include respondents' views on forms of disciplinary actions taken by schools against non-performing teachers and students and whether these actions are deterring enough. The section concludes with presentation on other factors responsible for efficient school performance in the district. As part of ways to identify factors responsible for quality management of schools in the district, the study took into consideration views of respondents on the forms of disciplinary actions taken by school authorities against non-performing students. Analysis of the data revealed that respondents expressed divergent views on the four objective variables presented. For example, 6% of the respondents indicated that withdrawal was the main disciplinary action taken against non-performing students and 19% of them also indicated that corporal punishment was applied to non-performing students. The results are illustrated in Figure 1.

Commenting further, 43% of the respondents revealed that non-performing students were demoted to serve as a deterrent to the affected students and to other non-performing students. However, none of the respondents indicated suspension. This revelation affirms the view of as Murad and Rajesh (2010)¹ that quality management in education goes beyond the curriculum and takes into consideration external factor which includes discipline. On the basis of this, it can be inferred that non-performing students were often demoted by school authorities in the district.

The study also looked at disciplinary actions taken by school authorities against non-performing teachers. With the analysis of data obtained from the field, it was revealed that suspension of salary was the main disciplinary action taken by school authorities against non-performing teachers in the Chereponi district. Statistically, respondents who represented 2.5% indicated that non-performing teachers were withdrawn from schools by school authorities (as illustrated in Table 1). On a more significant note, 50% of the sample population revealed that non-performing teachers often had their salaries suspended to serve as a punishment for their actions.

In addition, 29.2% of the respondents indicated that transfer is the main disciplinary action whilst the remaining 18.3% indicated 'other'. The results therefore showed that non-performing teachers always faced a disciplinary action of having their salaries suspended. From the analysis, one could observe that school authorities could not take enough disciplinary actions against non-performing students and teachers in the district. This is likely to have a negative impact on quality management of schools in the district. The net effect is that, students' performance could also be lower due to lack of effective disciplinary actions in the schools.

The study tried to find from respondents whether they were satisfied with the disciplinary actions taken by school authorities. This was to ensure whether enough measures were being put in place to ensure quality teaching and learning in schools in the district. Out of the 120 respondents Selected for the study, 38% of them indicated 'yes', whilst the remaining 64% of them indicated 'no'. The field data are shown in the Table 2.

In all, the study also revealed a number of general factors necessary for efficient performance of schools in the district. The results suggested that authorities of the Chereponi education directorate are exhibiting the required leadership for quality management in education as postulated by Bass (1990)⁴⁰. One key factor the study revealed was the need for all stakeholders of education in the district to play their part to ensure collective development of schools. That is, students, parents, teachers, Ghana Education Service, the District Assembly and the communities where these schools are located should endeavour to contribute their quota towards the improvement of performance situations of schools in the district. By this, adequate classroom infrastructure could be provided and teachers motivated to put up their best. Respondents also suggested that parents should assist in ensuring regularity and punctuality of their wards to schools so as to improve their performance.

Total Quality Management and School Performance

This section presents data, analysis and discussions of views of respondents on ways schools could ensure total quality management to improve their performance in the Chereponi district. Key issues under this section include whether there is the need to involve PTAs in school management and ways to ensure effective school management system. Further this section also presents at school heads' leadership styles, monitoring and supervision of students' behaviour and problems faced by schools as determinants of total quality management and school performance in the district.

In this regard, respondents were asked to indicate whether it is necessary to involve school PTA in school management so as to ensure total quality management and efficient performance. Out of the 120 respondents selected for the study, 90% of them indicated 'yes' as illustrated in Table 3.

On the contrary, only 10% of the respondents disagreed with the assertion that PTA involvement was necessary to ensure total quality Management and performance of schools in the district. In brief, the study revealed from the discussion that the role of school PTAs was relevant in the collective management of schools to improve performance and this goes in tandem with Bass (1990)⁴⁰ assessment of quality management through appropriate leadership service as may be provided by the PTAs in the directorate.

Another key area the study considered was the use of teachers' supervision as an effective school management strategy. Analysis of the results obtained indicated that 74% of the respondents answered 'yes' and the remaining 26% of them chose 'no', Graphical illustration of the field data are shown in the Table 4.

The results indicate that this was an effective way of ensuring effective school management system of most schools in the district. The second indication is that effective supervision of teachers in the district could help improve the total quality management for efficient school performance.

The study took into consideration the leadership styles of school heads and their implications on quality management of schools as well as their efficient performance. Responses obtained revealed that the leadership styles of school heads were important factors to ensuring total quality management of schools in the district. For example, on the ranking of importance of school heads' leadership styles on school management and performance, 45% of the respondents indicated 'very good' as seen in Figure 2. In addition, 32% of the respondents indicated 'good' whilst 23% of them indicated 'somehow'. However, none of the respondents indicated 'bad'. This was to suggest that the leadership styles of head teachers were important factors for quality management of schools in the district.

The study considered the supervision of students' behaviour on school quality management and performance in the Chereponi district. Analysis of the results revealed that this was an effective way of ensuring total quality management and school performance in the district and the results are shown in Figure 3. In all, 38% of the respondents indicated 'good' whilst the remaining 15% of them indicated 'somehow'. This therefore suggests that effective supervision of students' behaviour help in improving quality management and performance of schools in the district.

In addition, respondents were also asked to identify the problems faced by school managements in the running of their institutions in the district. Information obtained revealed that inadequate teachers and finances as some of the key problems hindering the smooth management of schools in the district.

Summary of Findings

The study assessed total quality management on school performance in the Chereponi district. As a result of the detailed analysis and discussions of the data presented in Chapter Four of this study, the following key findings were unearthed.

First, the study identified that demotion of students and suspension of teachers' salaries are the main factors school authorities always institute to ensure quality management of schools in the Chereponi district. Other factors such as withdrawal and transfer of none-performing teachers as well as award of corporal punishment and withdrawal of none-performing students are not frequently applied by school authorities in their quest to ensure total quality management of schools in the Chereponi district.

Second, the study further established that the role of school PTAs was relevant in the collective management of schools to improve performance. In addition to this is the effective supervision of teachers, monitoring of students' behaviour and the effective and efficient leadership styles of school heads were important factors to ensuring total quality management of schools in the district. However, inadequate teachers and finances were identified as some of the key problems hindering the smooth management of schools for effective performance in the district.

Recommendations and Conclusion

The analyses of the views of the respondents on effects of total quality management on school performance in the Chereponi district called for the following recommendations:

It is recommended that the effective supervision of teachers and students behaviour should be intensified by school authorities to enhance quality education and efficient performance of schools in the district.

It is also recommended that school management committees and PTAs should be strengthened by each school in the district. In addition, these bodies should be allowed to ensure grass-root participation in the governance process of schools in the district.

It is the recommendation of the study that the heads of schools in the district be given further trainings on leadership styles to help improve their leadership skills. By this they will be able to exhibit quality leadership styles that could promote harmony among stakeholders of schools and also promote conducive atmosphere for effective teaching and learning.

The government in collaboration with the District Assemblies and the GES should also help to provide adequate classroom infrastructure, learning materials and adequate financial resources to help meet the learning needs of schools in the district.

Areas for further study

In order to expand the frontiers of quality management and school performance, the study also that further research be conducted on the prospects of girl-child education-the role of school authorities in the district.

Further research should be conducted into the effects of total quality management on effective school administration in the district. This will help enrich literature on quality management and school performance to help ameliorate poor performance of schools in the district.

References

1. Murad, A. and Rajesh, K. S. 'Implementation of Total Quality Management in Higher Education.' *Asian Journal of Business Management*, (2010). 2(1): pp.9-16.
2. Harris, Q. *Total Quality Management (TQM)*. Newbury Park: California, Sage. (2000).
3. Oakland, J. *Total quality management*. Oxford, UK: Heinemann. (1989).
4. Cosby, P. B. 1984, *Quality Without Tears. The Art of Hassle-Free Management*, New York, New American Library.
5. Ghana Education Service 2010 BECE Results for Schools in Chereponi District. Chereponi District Education Directorate. (2009).
6. Agodzo, S. K & Songsore, J. (2005). Con competency based learning: the Case of Wa Polytechnic of Ghana Proceedings of the Commonwealth Association of Polytechnics in Africa (CAPA) Seminar on the Role of Technical Education in Africa in the Post Secondary Millennium Era Qualitytype Limited, Accra.
7. Ghana Statistical Service Our Population at a Glance. *Daily Graphic*: (2011). Friday, February 4, pp.1-2.
8. Ghana Districts, *Economy of the District Structure of the Local Economy*. Chereponi District Assembly (2011).
9. Ghana Education Service, 2009 Progress of Development Projects Undertaken in Chereponi District. Chereponi District Education Directorate (2011).
10. Drucker, P.F. *Managing for Results*, Heinemann Professional (1989).
11. Mullins, L. J. *Management and Organisational Behaviour*. Artes Graficas: Mateu-Cromo. (2005).
12. Schneider, S. C. and Barsoux, J. 2003. *Managing Across Cultures*. Harlow, UK. Financial Times and Prentice Hall.
13. Cramer, S. *Key Management Ideas: Thinkers that Changed that Management world*, 3rd ed. Financial Times. (2003).Prentice Hall.
14. Mintzberg, H. 'The Managers Job: Folklore and Facts.' *Harvard Business Review*:(1990). March -April, pp.163-76.
15. Juran, J. M., *Juran on planning for Quality*, The Free Press, 1988.
16. Crosby, P. B. *Quality Is Free*. New York: McGraw-Hill.(1979).
17. Juran, J. M. and Gryna, F. M. *Quality Planning and Analysis*. McGraw-Hill, New York. (1980) .
18. Deming, W.E. (1986). *Out of the Crisis*. Cambridge: Massachusetts Institute of Technology.
19. Pour, M. H. and Yeshodhara, K. *Total Quality Management in Education-Perception of Secondary School Teachers* (2011).<http://www.ejournal.aiaer.net/Retrieved on June 7, 2011>.
20. Ishikawa, K, *What is Total Quality Control? The Japanese way*. Englewood Cliffs, NewJersey: Prentice- Hall. (1985).

21. Divine R., Miller R. and Wilson J. H. 'Analysis of Student Performance in an Internship Program in a U.S. university.' *International Journal of Quality and Productivity Management*, December, (2006). 6 (1), pp.1-11.
22. Pike, J., and Barnes, R. *TQM in Action: A practical approach to continuous performance improvement*. London: Chapman and Hall. (1996).
23. Dale, B. G. *TQM: An overview*. In B. G. Dale (Eds.), *Managing Quality* (3rd ed., pp. 3-33). Oxford, UK: Blackwell-Business. (1999).
24. Weller, L.D. and Hartley, S.H. *Total Quality management and School Restructuring: Georgia's Approach to Education Reform*. *Quality Assurance in Education* (1994). 2(2).
25. Tichy, N. M. and Cohen, E. *The Leadership Engine: How Winning Companies Build Leaders at Every Level*. New York: (1997). Harper Business.
26. Weaver, T. *Total Quality Management*. ERIC Digest (1992). No 73.
27. Derek T. Laura H. AND Stephen T. *Human Resource Management*. (2005), FT Prentice Hall.
28. Gaither, N. *Production and Operations Management*, Duxbury Press, Cincinnati, (1996). OH, p. 7.
29. *Longman Dictionary of Contemporary English*, 4th Edition (2003), ISBN-10: ISBN-13.
30. Fullan, M. *Change Forces*. London: Falmer. (1993).
31. Bennis, W. "Cultivating creative genius," *Industry Week*. August 18, (1997). pp.84-88.
32. Sims, R. R. And Sims, S. J. 'Toward an Understanding of Total Quality Management: Its Relevance and Contribution to Higher Education.' *International Journal of Quality and Productivity Management*(1995) 6(1), p.14.
33. Miller, J. McL, Wilson, C. J. L. and Dugdale, L. J. *Srawell gold deposit: a key to unravelling the Cambrian to Early Devonian structural evolution of the western Victorian goldfields*. *Australian Journal of Earth Sciences*, (2006) 53,677-695. 6 citations (Web of science).
34. Allen, M. J. *Assessing Academic Programs in Higher Education*. Bolton, Massachusetts: Anker Publishing Company. (2004).
35. de Jager, H. J. and Nieuwenhuis, F. J. "Linkages between total quality management and the outcomes- based approach in an education environment" *Quality in Higher Education*.(2005) 11(3); pp. 251-260.
36. Durlabhji, S.G. and Fusilier M.R. *The empowered classroom: Applying TQM to college teaching*, *Managing Service Quality*, (1999). 9(2): 110-115.
37. Tavena, F. *Quality Assurance: a Reference System for Indicators and Evaluation Procedures*. European Universities Association,(2003). April, 2003, pp.21-25.
38. Osseo-Asare A. E. and Lon gbottom D. " the Need for Education and Training in the Use of the EFQM Modle for Quality Management in UK Higher Education Institution" *Journal of Quality Assurance in Education* (2002), Vol. 10 less: 1, pp.26-36.
39. Fiedler, F. E. *A Theory of Leadership Effectiveness*. *Managing Projects in Organisations*. New York: McGraw-Hill. Frame, J. D. (1987). San Francisco: Jossey Bass. (1967).
40. Bass, B. M. *From transactional to transformational leadership: Learning to share the vision*. *Organisational Dynamics*.(1990). 18(3); 19-31.
41. Mäkilouko, M. *Coping with multi-cultural projects: The leadership style of Finnish project managers*. *International Journal of Project Management*, (2004). 22(5); 387-3.
42. Lee-Kelley, L., Leong, K., and Loong. *Turner's five functions of project-based management and situational leadership in IT services projects*. *International Journal of Project Management*, (2003). 21(8), 583-591.

43. Keegan, A. E. and Den Hartog, D. N. “ Transformational Leadership in a Project-Based Environment: A Comparative Study of the Leadership Styles of Project Managers and Line Managers” *International Styles of Project Management*, (2004)Vol. 22, pp.609-617.
44. Srivanci, M.B., Critical issues for TQM implementation in higher education. *The TQM Magazine*, (2004). 16(6): 382-386.
45. Owlia, M. S. & E. M. Aspinwall TQM in higher education – a review. *Internal Journal of Quality & Reliability Management*, (1997), 527-43.
46. Koch et al. Delegation of mdmA impairs mitochondrial distribution and morphology in *Aspergillus nidulans*. *Cell Mot. Cytoskel*, (2003), 55,114-124.
47. Kurtus, R. *Basic Principles of Total Quality Management (TQM)*. Newbury Park: California, Sage. (2001).
48. Ghana Education Service 2010 BECE Results for Schools in Chereponi District. Chereponi District Education Directorate. (2010).
49. Obeng, S.A. *Introduction to Research Methods*. Cape Coast (2003). University Press.

Appendix a: Tables illustrating data on the research

Table 1: Disciplinary Actions taken against non-performing teachers by School

Variables	Frequency	Percentage (%)
Withdrawal	3	2.5
Suspension of salary	60	50
Transfer	35	29.2
Other	22	18.3
Total	120	100

Source: Field data, 2011, n=120

Table 2: Enough disciplinary actions taken by school authorities

Variables	Frequency	Percentages (%)
Yes	46	38
No	74	64
Total	120	100

Source: Field data, 2011, n=120

Table 3: Work of school PTA and quality management

Variables	Frequency	Percentage (%)
Yes	108	90
No	12	10
Total	120	100

Source: Field data, 2011, n=120

Table 4: Supervision of Teachers as a Way of Ensuring Effective School Management

Variables	Frequency	Percentage (%)
Yes	89	74
No	31	26
Total	120	100

Source: Field data, 2011, n=120

Appendix b: List of Figures illustrating data on the research

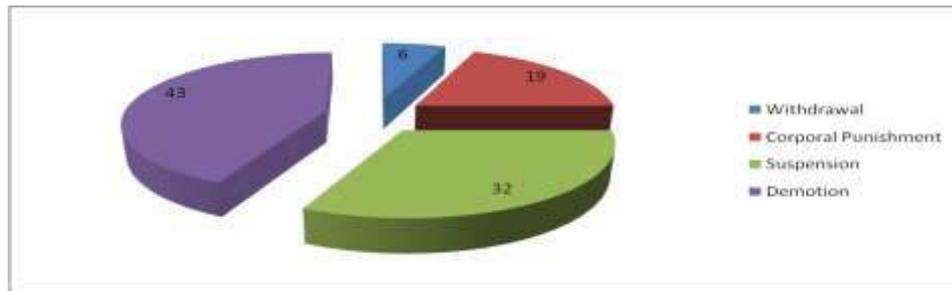


Figure 1: Forms of Disciplinary Actions Taken against non-performing students by School

Source: Field data, 2011, n=120

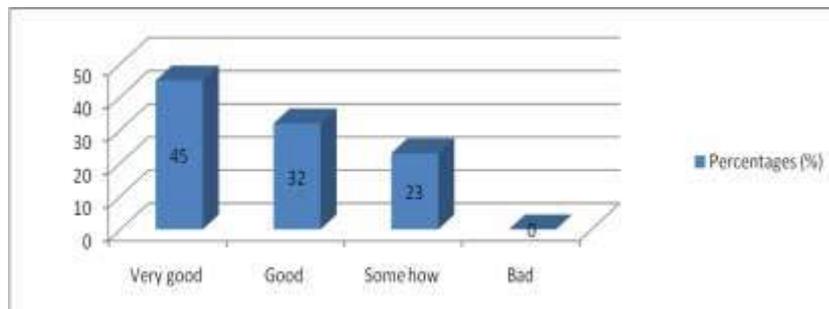


Figure 2: Head teachers' leadership styles and school quality management

Source: Field data, 2011, n=120

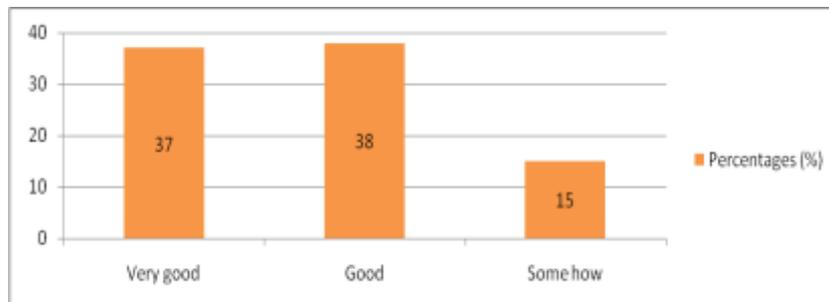


Figure 3: supervision of students' behaviour on school quality management and performance

Source: Field data, 2011