

**INFLUENCE OF TOTAL QUALITY MANAGEMENT
PRINCIPLES ON PERFORMANCE OF PUBLIC SECONDARY
SCHOOLS IN KAJIADO NORTH SUB COUNTY, KENYA**

**BY
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**A Research Project Report Submitted in Partial Fulfillment of the
Requirements for the Award of Degree of Masters of Arts in Project
Planning and Management of the University of the Nairobi**

2016

DECLARATION

This Research Project Report is my original work and has not been submitted for an academic award in any other university or institution of learning.

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DEDICATION

This research work is dedicated first to my husband Patrick Ntwiga, inspiration and children Brenda and Ian.

ACKNOWLEDGMENT

First I wish to express my sincere gratitude to God for blessing me with good health, clarity of mind and focused attention without which the completion of this research could not have been possible. Secondly, I sincerely appreciate my supervisor Dr. Ndunge Kyalo for her wise counsel, patience and innumerable suggestions which made it possible for me to complete the work on time. I thank University of Nairobi for providing us with lecturers who are committed in their work and who encourage students and support them throughout the course. God bless you. I sincerely thank and appreciate my respondents for providing the required information without which this work would not be possible. My special gratitude goes to all those who contributed in one way or the other to the success of my project.

Thank you.

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ABBREVIATIONS AND ACRONYMS

BOG	Board of Governors
CIP	Continuous Improvement Process
FPE	Free Primary Education
FSE	Free Secondary Education
KCSE	Kenya Certificate of secondary education
KESSP	Kenya Education Sector Support Program me
MOE	Ministry of Education
PTA	Parents/Teachers Association
QA	Quality Assurance
SMASSE	Strengthening Mathematics and Science in Secondary Education
SPSS	Statistical Package for Social Science
TQM	Total Quality Management
TQS	Total Quality Systems
TSC	Teachers Service commission
UNESCO	United Nations Education Science and Cultural Organization

ABSTRACT

The Ministry of Education is perpetually interested in good performance of schools in the national examinations. This is not always achieved in the many public secondary schools in the country. This performance in national examinations is realized as a result of a number of factors within the school set up that add up to the quality of the school system. Quality in all the facets of the school is what constitutes Total Quality Management, hence excellent performance in the national examinations. Empirical studies done, have not adequately addressed the direct link between TQM and school performance. The purpose of this study therefore, was to establish the influence of TQM principles on performance of public secondary schools in Kajiado North Sub County. Specific objectives of the study include: to establish the influence of Leadership commitment, employee involvement, continuous improvement and customer focus on performance of public secondary schools in Kajiado North Sub County. A review of related literature was carried out and a conceptual framework drawn to express the research premise. A purposeful sampling technique was applied to identify 4 schools out of the 6 public secondary schools in Kajiado North Sub County. To achieve these objectives, data was collected from 4 Principals/ deputy principals, 12 HoD's, 25 Teachers, and 87 Students. This gave a response rate of 69.72% out of target of 185. Data collection was done through questionnaires for students, teachers and HoDs and an interview guide for principals/deputy principals. Data was analyzed using descriptive and inferential statistics and presented using frequency tables, percentages and means. It was established that Employee involvement had the strongest correlation to academic performance at a correlation coefficient ($r = .611$). It was followed by Continuous improvement ($r = .561$), Leadership commitment ($r = .557$) and the least was customer focus ($r = .323$). The study therefore made the following recommendations: i) Principals to be more pro-active in checking students' progress, ii) Principals to require accountability from teachers whenever they have been assigned duties, iii) Principals and Heads of Departments to hold more frequent staff meeting/ departmental meetings in order to bring everyone up to speed, iv) Teachers should learn to share best practices with others after training and the same to be documented for the purpose of knowledge institutionalization and v) Schools are encouraged to have more academic days and prize giving days in order to track performance. The Ministry of Education should make follow up on recommendations made by Quality Assurance Officers for implementation, improve on Teacher- student ratio among other necessary resources.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Total Quality Management (TQM) is an improvement to the traditional way of doing business. It is an established method to guarantee business continued existence in world-class competition. Only by changing the measures of management will the culture and actions of an organisation be transformed. TQM is composed of the three words as: Total as made up of the whole; Quality as degree of excellence a product or service provides; and Management as act, art or manner of handling, controlling, directing, planning, organizing, and staffing. Therefore, TQM is the art of managing the whole to achieve excellence (Bester field et al. (2012). TQM as a philosophy is based on a Set of eight principles: Top management commitment (leadership), Involvement of people, Continuous improvement, Customer focus, Process and System approach, Factual approach to decision-making and Mutual beneficial supplier relationships (Evans,2010).

The real rewards begin to emerge when TQM ideas and practices become embedded in the culture of the organization—the day-to-day work its people and systems—that it is simply “the way we do things around here.” Its greatest benefits come about as a natural part of the evolutionary process of implementing a program of continuous improvement, over time, in a consistent manner was considered at a low rate. Schargel (2009) asserts that many high school graduates couldn't read, add, write or think and the high school dropout rate was staggering. The quest for quality in education has subsequently become a crucial undertaking with Beard (2011) contending that "quality begins and ends with education. Secondary school education in particular is critical in every country for a number of reasons. First, it is central to development because it provides insights, skills and competencies that are needed for economic growth and national development.

Secondly, it is that this level that youngsters consolidate their basic knowledge gained in primary school and acquire the common culture that will them to be useful citizens in a peaceful society. Secondary school education therefore plays a key role in providing the youth with opportunities to acquire human capital that will enable them to pursue higher education and to improve their skills leading to higher labor productivity.

1.2 School performance

The major task of the school is to achieve educational objectives, such as learning gains and the addition of educational value to the learners. School performance is therefore, generating high-quality learner outcomes and in terms of value added to them. Achieving this is the task of both school management and the instructional or classroom level within the school. The main criterion of performance in schools as reflected by research on effective schools and effective teaching is higher achievement as measured by standardized tests (Davis & Thomas, 2005; Fertig, 2000). In order to determine the quality of an individual school, it is usual to observe the facilities of the school and the characteristics of the teaching qualifications, data on student achievement, access to reading materials or textbooks availability, the class size, teacher-student ratios, size of staff and location the school (Chonjo, 2005).

1.3 TQM Principles

Before an organization can clip the benefit from TQM implementation it requires effective change in organization culture and this can only be made possible with the deep involvement /commitment of management to the organisation strategy of continuous improvement, open communication and cooperation throughout the organisation. TQM implementation improves the organisation performance by influencing other TQM dimensions (Kaynak, 2003). Employee involvement, means sharing knowledge, organizing their contribution and experience in a way that gains some synergy. Employee involvement, responsibility and innovation produce long-term success (George & Arnold, 2006). Continuous Improvement or Kaizen principle means small but continuous improvements (Bester field, 2003). It is a commitment to constant examination of the technical and administrative process in search of better methods (Fuentes –Fuentes et al,

2004). Corrigan,2009) gives a definition of quality with an emphasis on customer satisfaction that "TQM is a management philosophy that builds a customer-driven, learning organization dedicated to total customer satisfaction through continuous improvement in the effectiveness and efficiency of the organization and its processes" The principles are discussed :

1.4 Leadership commitment and performance

Horwitz (2000) asserts that quality will not be achieved by accident or by management dictate as it requires cultural change in management behaviour and the attitude of everyone toward quality. This process of change must be managed. Managers who are fully dedicated and committed have to manage this process of change (Kachar, 2002). Although other management jargons are also doing well, the TQM process does promote sound management practice which facilitates a quality service (Kachar, 2002). The role of leadership within the TQM context can be summarized as follows: There is a common understanding of quality and the need to change; Management develop operating principles and values which create an environment for continuous improvement; leadership create the organisation and provide the systems and resources to support the process, and everyone is contributing to services given to the user (Horwitz, 2002).

Furthermore, leadership has to lead the process by achieving a definition of the constant purpose of the organisation, the principles of improvement and the values. They also have the responsibility to remove all barriers that prevent quality being achieved and ensure that all their actions demonstrate the integrity of the quality improvement process. The culture change is started by a continuous programme of education and improvement for everyone which begins at the top and is cascaded down (Horwitz, 2002). The leadership role of the principal is vital. Studies on performances have acknowledged the importance of leadership in keeping the school headed in the right direction. Essential to school performances is strong instructional leadership by the principal. The pivotal, causative feature of virtually every effective school is a principal with vision, energy, and a dedication to leading the staff and learners toward better school attitudes and higher performance levels (Horwitz, 2002). Slater (2006) cites research, which suggests that

effective principals emphasize academic goals and understate the other functions that schools perform. In downplaying non-academic activities in this manner, effective principals avoid sending out mixed messages about what is important. Effective principals also tend to spend more time observing classrooms, giving educators' feedback, mediating the adoption of more effective teaching practices and guarding academic time.

According to Middlehurst and Gordon (2002), the achievement of quality is a difficult and complex process involving a number of elements and transactions. It takes time and effort to understand the range of elements involved, to interpret their significance and relationships and to negotiate these interpretations with others. They argue that leadership of a high order, spread at many levels of an organisation, is required to achieve a critical mass of shared meanings and commitment to go forward. Furthermore, they assert that the establishment and operation of quality systems by themselves will not produce quality outcomes or institutional performance, particularly where such systems are generated solely or primarily in response to external assessment and accountability. Leadership is also required to explain, justify and promote the utility and effectiveness of quality models and processes.

1.5 Involvement of People and Performance

TQM has a major influence on the role people play within an organisation. It is crucially important that the skills and abilities of each member of an organisation should be utilized optimally. TQM requires from senior management to utilize the talents, expertise and skills of every member of the staff. Every employee is encouraged to act on his initiative and be creative so as to bring improvement to his work. They are empowered to solve problems, propose improvements and satisfy customers (Kachar, 2002). Participation of staff members in the management of the organisation is required. Simplification of the school structure in order to focus upon the person closest to the learner (home room or classroom teacher) is necessary. (Murgatroyd, 2002; Van Kraden Burg, 2007). "TQM is a value-based, information-driven management process through which the minds and talents of people at all levels are applied fully and creatively to the

organization's continuous improvement" (Rhodes, 2005). "It is all about involving people closest to the client to make decisions about how best to improve" (Quang & Walker, 2002). "TQM has been presented as a radical departure from the current educational paradigm, by freeing educators from their bureaucratic shackles and providing a model for involvement." (Capper & Jamison, 2000). "TQM is a philosophy that needs people to make it happen. Quality is the result of people's work". (Wong & Kanji, 2008).

The effective utilization of human and physical resources seems to be essential in order to improve quality. People, however, are not to be seen as cogs in a machine, but should rather be allowed to function and make decisions autonomously. Effective schools tend to emphasize more communication with their parents. These schools communicate regularly with the parents, informing them of the progress of their children. They also notify parents of the goals and expectations set for their children and they encourage parents to take responsibility for ensuring that their children reach them

1.6 Continuous Improvement and Performance

Quang and Walker (2002) regard continuous improvement as "perhaps the most influential of TQM beliefs". The old adage 'if it's not broken don't fix it' appears to be the antithesis of TQM. The philosophy underlying TQM is that the production system is the means by which quality is constantly improved. TQM seeks to provide the means to monitor, control, and improve production systems. Quality improvement relies on systems thinking, customer feedback, worker empowerment, and data based methods to build quality into the manufacturing process (Capper & Jamison, 2007; Hsieh et al., 2002; Dalu & Deshmukh, 2002). According to Rau (2009), TQM is a way of managing an organisation to achieve continuous improvement. In TOM, every element of the organisation is involved in the enterprise of continuous improvement, with each individual sharing responsibility regardless of his or her position or status (Berry, 2008). TOM is an approach to improving the performance and flexibility of business as a whole. It is essentially a way of organizing and involving the whole organisation; every department, every activity, every single person at every level. TOM is based on the notion of organisations as systems and sub-systems which function as a unified whole,

with emphasis on the interface between the various elements of the organisation as much as on the nature of the elements themselves. Therefore, it can be stated that TOM is based on systems thinking (Berry, 2008).

The Deming doctrine of generating quality by building it into the process, rather than by inspecting defects out of the end product is applicable (Holt, 2000). An organisation must prepare and implement strategies that would achieve and implement continuous improvement. This can only be performed if all the activities are well coordinated and reliable (Kachar, 2002). Educators will be more receptive to changes if they participate in the process. Participation in work groups and teaching teams is more likely to result in improved teaching.

1.7 Customer Focus and Performance

TQM refers to the systematic management of an organization's customer supplier relationships in such a way as to ensure sustainable steep-slope improvements in quality performance (Murgatroyd & Morgan, 2002). TQM calls for excellence in people management since the human behaviour elicited is a direct effect of management style. Modern management science addresses the fact that behaviour is determined by unsatisfied needs and that individuals have different needs as well as different levels of need. The human element is crucial in implementing TQM because it is through people that excellence comes to pass. The selection, training and development of staff are critical to the success of any organisation and warrants considerable investment (Beard, 2011; Dahlgaard & Dahlgaard, 2002). The meaning of quality is quite simple: complete customer satisfaction. TQM is a dynamic set of activities to achieve this goal (Gilbert, 2006; Weaver, 2010). TQM is a people-focused management system that aims at continual increase of customer satisfaction at continually lower real cost. It is a total system approach and not a separate area or programme. It works horizontally across functions and departments, involves all staff members and extends backwards and forwards to include the supply chain. The foundation of Total Quality Management is philosophical. It includes systems, methods and tools (Total Quality Leadership Steering Committee in Cincinnati, Ohio - Siegel & Byrne, 2009). This definition of TQM

explicitly states that all aspects of an organisation (or school) have to be dedicated to the goal of achieving the highest standards of performance as required by their customers (Murgatroyd & Morgan, 2003).

"TQM is about creating a quality culture where the aim of every member of staff is to delight their customers and where the structure of their organisation allows them to do so. In the total quality definition of quality the customer is sovereign. It is about providing the customers with what they want, when they want it and how they want it. It involves moving with customer's expectations and fashions to design products and services, which meet and exceed their expectations" (Sallis, 2002). TQM emphasizes the development of organisational plans and priorities directed toward increasing the sense of satisfaction felt by those who are the clients or customers of organisations. In other words, when the external environment perceives that it is satisfied with what happens within an organisation, then the organisation is, in fact, effective (Daresh & Playko, 2002). Deming realized that Total Quality resides effectively in the eye of the beholder. It is what the agent of quality believes it to be: for the line worker quality may be pride in workmanship, for the owner, increasing earnings and for the consumer, reasonable priced products. Ultimately, the result of quality is what the consumer determines it to be. The customer is the judge of quality, therefore all quality initiatives must be customer-focused (Covey, 2006; Sagar & Barnett, 2002).

1.8 Statement of the Problem

During the last five years, a great proportion of schools in Kajiado North Sub County have continued to perform poorly. The mean scores for the schools show either very minimal positive index or a downward trend. This poor performance represents a challenge thus the need to gain an insight into the causes and possible solution to the problem. This study was seeking to collect qualitative and quantitative data to determine the possible influence of TQM principles to academic performance in Kajiado North Sub County.

Table 1.1 : Performance in K.C.S.E

Year	Mean Grades per year				
	2009	2010	2011	2012	2013
Sub county mean	6.1 C	5.2 C-	5.1 C-	4.9 D+	5.0 C-
Deviation		-0.91	-0.14	-0.2	+0.13

Source: DEOs office, 2015.

Despite having previous research on TQM, the truth on the ground is that most secondary schools have not improved their KCSE grades. The reason is lack of involving people in which Parents are left out during decision making and management of school processes, most schools have mission statements but are not reflected in the school's academic performance. They state the desired situations in schools but don't focus towards customer satisfaction and meet their needs hence poor academic performance. Although a number of studies have been done on the concept and context of quality management and education respectively, the outcome of the results in public secondary schools still remains a dream. There was need therefore for a study to be carried out focusing on the academic performance in conjunction with the TQM principles. Given the weaknesses of the past studies as identified above, the present study was trying to fill this knowledge gap by studying the influence of TQM principles in Public Secondary Schools academic performance, a case of Kajiado North Sub County.

The following three research questions were focused in this study: In what ways does leadership commitment have on academic performance of public secondary schools in Kajiado North Sub County? Second, how does employee involvement influence school academic performance of public secondary schools in Kajiado North Sub County? Third, how does continuous improvement influence academic performance of public secondary schools in Kajiado North Sub County? And finally, what influence does customer focus have on academic performance of public secondary schools in Kajiado North Sub

County? A considerable number of researches have been conducted on TQM and their influence on academic performance like one conducted by Ngware et al. (2006) that alluded to likely mismanagement of quality assurance could cause poor performance. However, the influence of TQM principles and their academic performance has not been adequately studied and cannot be generalized for Kajiado North Sub County. This study was seeking to investigate the influence of TQM principles on academic performance in Kajiado North Sub County.

1.9 Purpose of the Study

The purpose of the study was to investigate the influence of Total Quality Management principles on the performance of public secondary schools in Kenya. It identified the influence of top leadership commitment, continuous improvement, employee involvement, and customer focus on academic performance of public secondary schools in Kajiado North Sub County.

1.10 Objectives of the Study

The objectives of the study were:

- i. To examine the influence of leadership on academic performance of public secondary schools in Kajiado North Sub County.
- ii. To establish the influence of employee involvement on academic performance in public secondary schools in Kajiado North Sub County.
- iii. To assess the influence of continuous improvement on academic performance of public secondary schools in Kajiado North Sub County.
- iv. To examine the influence of customer focus on academic performance of public secondary schools in Kajiado North Sub County.

1.11 Research Questions

Research questions that were used to guide the study were:

- i. In what ways does leadership influence academic performance of public secondary schools in Kajiado North Sub County?

- ii. How does employee involvement influence academic performance of public secondary schools in Kajiado North Sub County?
- iii. How does continuous improvement influence academic performance of public secondary schools in Kajiado North Sub County?
- iv. In what ways does customer focus have on academic performance of public secondary schools in Kajiado North Sub County?

1.12 Significance of the Study

The study findings were to give the government policy makers insight in forming policy issues on quality assurance and management of public secondary schools. This was aimed at continually improving academic performance over the long term by focusing on customers (students and teachers) while addressing the needs of all stakeholders.

The research findings also assisted the secondary school leadership to embrace quality management. The leadership was to be proactive and lead by example, understand and respond to changes in the external environment, establish a clear vision of the organization's future, establish shared values and ethical role models at all levels, build and eliminate fear, inspire, encourage and recognize people's contribution. This was to bring about a culture of quality in the public schools in all the facets of operations. Consequently, there was excellence in academic performance as well as value addition to the students.

The study also stimulated interest of future researchers' to undertake further investigations in this field by identifying areas for further study. The research findings formed a basis for generalization of the recommendations for other schools in Kenya.

1.13 Limitations of the Study

The study was limited to public secondary schools in one Sub County. This was due to inadequate time. The study area was vast between schools which made the researcher spend much time. Further the time scheduled to undertake the data was limited. For a more conclusive result, a sample of all public secondary schools in all the Counties in

Kenya should have been studied. However, this was not possible due to geographical vastness, financial constraints and time limit.

1.14 Basic Assumptions of the Study

Well performing schools have been applying TQM principles in managing academic performance that are not employed by poorly performing schools. By adopting TQM principles the academic performance management strategies employed by well performing schools, poor performing schools can also improve their academic performance. The researcher assumed that the questionnaires would give the relevant information and consequently the respondents would find the study useful thus giving relevant responses. The researcher also assumed that all respondents would provide the information necessary for the study and give honest responses to the best of their knowledge on Total Quality Management practices in their schools.

1.15 Delimitation of the Study:

The study was delimited to 4 public secondary schools in Kajiado North Sub County out of six (6) registered schools. (DEO's office, 2015).It was not possible to carry out research in all the schools due vast geographical area. The study involved Heads/ Deputy Heads, HoDs, teachers and students. However, parents were not involved in the study since they are not direct implementers of TQM principles.

1.16 Justification of the study

The study therefore was seeking to fill the gap of giving an account of influence of TQM principles by examining the influence of leadership innovativeness in setting policies and implementing them in schools and supervision of classroom activities.

The study provided the influence of customer focus on meeting the various needs expectations and requirements of the students, need for extracurricular activities, recognition of academic excellence and proper syllabus coverage.

Continuous improvement shows those small activities for example guidance and counseling, self assessment, audits and their role in academic performance.

Involvement of people provides that every person within the organization should be empowered to solve problems, propose improvements and satisfy customers.

The teachers and students were the main target in this study as they played a major role in determining what happens in the school. Parents however were excluded in this study because they were not direct implementers of TQM.

1.17 Definition of Significant Terms

Academic performance : Refers to grades achieved by students in a particular examination. In this study, the grades achieved in the Kenya Certificate of Secondary Education were used.

Customer driven quality : (Fitness for use or market-driven): notion of quality in which those who are to receive a product or service make explicit their expectations for this product or service.

Customer focus : It is putting customers at the centre of business by providing quality products and services.

Employee Involvement : It is an environment in which people have the ability, the confidence and the commitment to take the responsibility and ownership to improve the process and initiate the necessary steps to satisfy customer requirements within well refined boundaries in order to achieve organizational values and goals.

Human resource : Refers to the workers or staff of a given school that supports the running of school activities.

Financial resources : Refers to the schools ability to cater for all the purchases that it has to make for all operations of the school to run.

Leadership commitment : It is the dedication and constant involvement of frontline

		supervisors of day to day implementation of activities.
Leadership	:	It is the process of social influence in which a person can enlist the aid and support of others in the accomplishment of a common task.
Management	:	It is the process of achieving the goal of an organisation through the execution of five financial and material resources. These functions are: planning, organizing directing, staffing and controlling.
Quality	:	The totality of features and characteristics of a product or service that bears on its ability to satisfy given needs.
Quality Assurance	:	(Established standards) determination of standards, appropriate methods and quality requirements by an expert body, accompanied by a process of inspection or evaluation that examines the extent to which practice meets the standards.
Total Quality Management:		It is the application of quantitative methods and human resource to improve all the processes within an organisation and exceed customer needs now and in the future through continuous improvement.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of literature on some of the studies carried out over the years on influence of TQM on organization performance and performance in schools. Attention was paid to influence of TQM on academic performance in public secondary schools. The aim of this chapter was to analyze school performance, to identify the core principles of TQM and to discuss their influence and application of TQM principles in public secondary schools; discuss the theories related to study; discuss the conceptual framework; analyze research gaps and give the summary to the literature review.

2.2 Theoretical literature

2.2.1 The TQM concept

TQM is ideologically culturally based system of managerial operation that seeks to improve continuously the total organizational system that produces goods or services to satisfy customers every time. TQM is a way of managing to improve the effectiveness, flexibility and competitiveness of a business as a whole. It involves whole company getting organized in every activity and every single person at every level. TQM is about managing the whole organization so that excellence is achieved in all dimensions of product or service that are important to the customer (Summers, 2006). There are a number of standards and awards that have furthered the TQM idea. These include; The International Standards Organizations' Standards (ISO 9000); The Investment in people (IIP); The European Quality Awards; The Malcom Baldrige Quality Awards and the Deming Prize. ISO has a number of quality management. ISO 9000 is a series of standards that provide a framework for the improvement of quality systems in an organization. By the end of 2006, over seven hundred firms from over 161 countries had obtained the highly valued ISO 9000 quality management certification from the international Organization for Standards. (ISO)

Leadership theories are important within the context of TQM. The well- informed manager, engineer or technician should be aware of these approaches and use them to broaden their understanding of how leadership can effect behavior in workplace and lead to the successful adoption of TQM. According to these theories developed over the last 20 or 30 years, leadership effectiveness can be improved with the correct mix of the leader's style of management, the characteristics of those who are led, and the situation (Evans, 2005).

Attributional theory states that leader's judgment on how to deal with subordinates in a specific situation is based on their attributions of the internal or external causes of the behaviors of their followers. For example, if a leader observes an employee producing poor- quality material, the leader may attribute the problem to internal factors within the person's control, such as poor efforts, commitment, or lack of ability. Alternately, the leader could attribute the problem to external factors, such as bad materials or defective equipment. Depending on these attributes, (and how whether they are justified) the leader will decide whether to use punishment (reprimand, demotion, firing) or corrective solutions (problem finding, job redesign, and training) to resolve the problem. Transactional (charismatic) theory assumes that certain leaders may develop the ability to inspire their subordinates to exert extraordinary efforts to achieve organizational goals, owing to the leader's vision and understanding of how to tap into the development needs of the subordinates. Transformational leadership theory falls under transactional theory and can help to explain the impact of leadership in a TQM environment. According to this model, leaders adopt many of the behaviors of traditional management. They take a long term perspective, focus on customers, and promote a shared vision and values, work to stimulate their organizations intellectually, invest in training, take some risks and treat employees as individuals. Some empirical evidence found in research suggests that transformational leadership is strongly correlated with lower turnover, higher productivity and quality, and higher employee satisfaction than other approaches.

The substitute for leadership theory takes the view that in many organizations, if characteristics of subordinates (team members), the nature of the task that they perform, and the guidance and incentives provided by the organization are aligned, the formal leadership tends to be unproductive or counterproductive. It is suggested that this leadership approach may be useful in case of how leadership effectiveness where the leader cannot be removed for various political reasons or other reasons. In such situations, self- management, professional education, or computer technology can be developed or built in the subordinate for leadership. The implication for TQM-focused organization is that each situation calls for just the right amount of leadership (not too much and not too little) in order to attain high - quality results.

Goleman (1998) defines five components of emotionally intelligent leaders in The Emotional Intelligence Theory. These components are self- awareness, self- regulation, motivation, empathy, and social skills. His premise is that too much reliance was placed on the rational side of leadership in leadership research studies and training done over the years. He argues that expectations for emotional intelligence are generally not captured in performance evaluation systems but that the self- management and interpersonal skills represented by the five components are as essential for executive- level leaders as "traditional" intelligence (measured by IQ tests) and technical competence. The significance of emotional intelligence for effective total quality lies in translating the vision of an integrated leadership system and long- range planning process into action. TQM seeks to improve quality and performance which will meet or exceed customer satisfaction. This can be achieved by integrating all quality - related functions and processes throughout the company. TQM looks at the overall quality measures used by a company including managing quality design and development, quality control and maintenance, quality improvement, and quality assurance.

In summary, TQM process has the following advantages in an organization. To the customer, there are fewer problems with the products or services; there is better customer care; and greater satisfaction. To the company, quality improves; it motivates staff; increases productivity; reduces costs; reduces defect; resolves problems faster; makes a

company a leader; and reduces resistance to change. To the staff, there is empowerment; more training and more skills; and more recognition (Gopal & Janakiraman, 2006). The organizations practicing the quality concept try to protect themselves from adverse hazards, breakdown or adjustments of machines and late deliveries to the next stage of production (Mulili, 2008).

2.2.2 .Leadership commitment

Management is the planning, organizing, leading and controlling of resources to achieve organizational goals effectively and efficiently. Resources are assets such as people machinery, raw materials, information, skills, and financial capital. Managers are the people responsible for supervising the use of an organization's resources to achieve its goals (Gareth et al. 2003). To perform efficiently and effectively, organizations traditionally have three types of managers; first-line managers, middle managers, and top managers- arranged in hierarchy. Typically, first-line managers report to middle managers and middle managers report to the top managers. Managers at each level have different but related types of responsibilities for utilizing organizational resources to increase efficiency and effectiveness.

The top managers are responsible for the performance of all departments. They have cross-departmental responsibility. They establish organizational goals, they decide how different departments should interact, and they monitor how well middle managers in each department utilize resources to achieve goals (Weimerskirch, 2006). Top managers are ultimately responsible for the success or failure of an organization, and their performance is continually scrutinized by people inside and outside the organization, such as other employees and investors. Due to their job specific responsibilities, top managers require conceptual skills. Conceptual skills are demonstrated in the ability to analyze and diagnose a situation and to distinguish between cause and effect. They also require human skills and technical skills. Human skills include the ability to understand, alter, lead and control the behavior of other individuals and groups, the ability to communicate, to coordinate and motivate people and to mold individuals into a cohesive

team. Technical skills are the job -specific knowledge and techniques that are required to perform an organizational role (Gareth et al 2003).

According to Ross (2002) quality starts in the boardroom. The top management should steer the fight for quality. This is in accordance to Deming's five principles that states; the central problem in lack of quality is the failure of management to understand variations. Everything varies. Statistics help us to predict how much it is going to vary; it is management's responsibility to know whether the problems are in the system or in the behavior of the people; Teamwork should be based on knowledge, design, redesign and redesign. Constant improvement is management's responsibility. Most causes of low quality and productivity belong to the system; Train people until they are in statistical control, until they are achieving as much as they can within the limits of the system you are using; It is management's responsibility to give detailed specifications. In addition to Deming five principles, he has fourteen points for the management referred to as Deming's Fourteen Points; Create consistency of purpose with a plan; Adopt the new philosophy of quality; Cease dependence on mass inspection; End the practice of choosing supplies based solely on price; Identify problems and work continuously to improve the system; Adopt modern methods of training on the job; Change the focus from production numbers (quantity) to quality; Drive out fear; Break down barriers between departments; Stop requesting improved productivity without providing methods to achieve it; Eliminate work standards that prescribe numerical quotas; Remove barriers to pride of workmanship; Institute vigorous education and retraining; Create a structure in top management that will emphasis the preceding thirteen points every day. Therefore leadership is very crucial in the performance of an organization (Ross 2003).

According to A. Blanton Godfrey, (2010), chairman and C.E.O of the Juran Institute, top management should be prepared to answer the specific questions that may be posed by each member of the organization. "What do you want me to do tomorrow that is different from what I am doing today?" Thus they must balance the need for structural dimensions like hierarchy, budgets plans, controls, procedures on the one hand with the behavioral or personnel dimension on the other. The two dimensions need not be in conflict. The

commitment and involvement of management need to be demonstrated and visible. Many managers send mixed signals. They endorse quality but reward bottom line or production. They insist on cost reduction even if it means cancelling quality training. Still worse, some executives perceive workers to be the cause of their quality problems (Arrington, 2009). This is hardly behavior that encourages individual involvement in decision making and personal "ownership" of the improvement process. Employee buy-in is unlikely in such a climate, where worker empowerment is talked about but not operationalized.

2.2.3 Employee involvement

According to George & Arnold (2006), employee empowerment, responsibility and innovation produce long-term success. The management should be prepared to give employees control over their activities, freedom to make important decisions and responsibility for their actions. Employee involvement is a long term commitment, a new way of doing business, a fundamental change in culture. Employees who have been trained, empowered and recognized for their achievements see their jobs and their companies from a different perspective. They "own" the company in the sense that they feel personally responsible for its performance. Managers who try to take back some of that power end up with bitter, frustrated, and disillusioned employees. Performance will suffer, and future attempts to involve employees will be met with cynicism.

Employees can be empowered through the strategic planning process to contribute individually and in teams to corporate objectives. Companies also empower people through training, rewards and recognition. Employee empowerment begins with change in management's attitude. It can be taken as the key to continuous improvement. Most people want to do their jobs well, are proud of their work, have valuable ideas to share, and want responsibility. Employees should be encouraged to be proactive in identifying and addressing quality related problems. (George & Arnold, 2006).

The process of empowerment begins with a willingness by managers and supervisors to give others responsibility, training supervisors and employees in how to delegate and accept responsibility, communication and feedback to tell the people how they are

working, and through rewards and recognition. Empowerment should not be confused with delegation or job enrichment. Delegation refers to distributing and entrusting work to others. Employee empowerment requires that the individual is held responsible for accomplishing a whole task. The employee becomes the process owner, thus the individual is not only responsible but also accountable. Job enrichment is aimed at expanding the content of an individual's job; whereas empowerment focuses on expanding on the context of the job such as its interactions and interdependencies to other functions of the organization (Besterfield, 2003).

In order to create the empowerment environment, everyone must understand the need for change, the system needs to change to the new paradigm, and the organization must enable its employees. Managers must also recognize the performance-enhancing possibilities of a diverse workforce, such as the ability to take advantage of the skills and experiences of different kinds of people. (Gareth et al, 2003). Managers who value their diverse employees interest in developing these employees' skills and capacities and link rewards to their performance, are the managers who best succeed in promoting performance over the long-run. Employee involvement, teams and employee empowerment enable people to make decisions about their work. It increases loyalty and foster ownership. Successful teams and teamwork fuel the accomplishment of the strategic plans. Effective work teams magnify the accomplishment of individuals and enable serve the customer better.

Organizations that are committed to the ongoing growth of their employees recognize employee empowerment as one of their most important strategic methods to motivate employees. Employee empowerment is also a key strategy to enable people who have the need, the answers, and the knowledge, to make decisions about how best to serve customers. When an organization empowers employees, they grow their skills and the organization benefits from their empowerment (Hayes, 2011). Employee empowerment is a corporate structure that allows non-managerial to make autonomous decisions. The main benefits are improved morale, increased productivity, healthier coworker relationships or team cohesion and creative thinking or innovation.

Employee empowerment techniques involves; change of management roles from supervisory to coaching; grow employee empowerment through productive coaching like motivation, questioning and adopting management style to an employee's ability to function at a given level; delegate to empower employees; and finally communicate confidence in and set goals for employees (Gopal & Janakiraman, 2006). Reynolds & Cuttance (2009) suggests that schools are likely to improve if teachers are involved in decision making and develop their own curriculum guidelines.

2.2.4 Continuous Improvement

Continuous Improvement or Kaizen principle means small but continuous improvements (Besterfield, 2003). These small improvements are achieved due to small performance improvements from quality circle or quality improvement team activities. No major investments are involved. Continuous improvement of overall performance should be a permanent objective of the organization. An organization can never be satisfied with the method used, because there can always be improvements. Certainly the competition is improving, so it is very necessary to strive to keep ahead of the game. Continuous improvement is working smarter not harder. Some companies have tried to improve by making employees work harder. This may be counterproductive, especially if the process is flawed. For example, trying to increase worker output on a defective machine may result in more defective parts. Examining the source of problem and delays and then improving them is what is needed. (Mosley, 2008).

According to Masaaki, (2010) delivery (customer valued) processes are constantly evaluated and improved in the light of their efficiency, effectiveness and flexibility. Deming saw it as part of the system whereby feedback from the process and customer were evaluated against organizational goals. The management makes the decisions about the implementation of the delivery process itself. The core principle of CIP is the self reflection of processes (feedback). The purpose of CIP is the identification, reduction and elimination of sub-optimal processes (efficiency). The emphasis of CIP is an incremental, continuous steps rather than giant leaps (evaluation).

Key features of Kaizen include: Improvements are based on many, small changes rather than the radical changes that might arise from Research and Development; As the ideas come from the workers themselves, they are less likely to be radically different, and therefore easier to implement; Small improvements are less likely to require major capital investment than major process changes; The ideas come from the talents of the existing workforce, as opposed to using R&D, consultants or equipment - any of which could be very expensive; All employees should continually be seeking ways to improve their own performance; It helps encourage workers to take ownership for their work, and can help reinforce team working, thereby improving worker motivation. The elements above are the more tactical elements of CIP. The more strategic elements include deciding how to increase the value of the delivery process output to the customer (Effectiveness) and how much flexibility is valuable in the process to meet changing needs. Workers are often a source of continuous improvement. They can provide suggestions on how to improve a process and eliminate waste or unnecessary work. There are also many quality methods, such as just-in-time production, variability reduction, and poka-yoke that can improve process and reduce waste (Mosley, 2008).

The key benefits of continuous improvement include performance advantage through improved organizational capabilities; Alignment of improvement activities at all levels to an organization's strategic intent; and flexibility to react quickly to opportunities. Continuous improvement leads to employing a consistent organizational - wide approach to continual improvement; providing people with training in the methods and tools of continuous improvement; making continuous improvement of products, processes and systems an objective for every individual in the organization; and establishing goals to guide and measures to track continuous improvement; and recognizing and acknowledging improvements. (ISO 9000).

2.2.5 Customer Focus

The first and major TQM principle is to satisfy the customer- the person who pays for the product or service. The 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. Some top quality not only provides quality products, but they also give extra service to make their customers feel important and valued. Organizations depend on their customers and therefore should understand current and future needs, should meet customer requirements and strive to exceed customer expectations. The "meeting the customer requirements" definition of quality is not restrictive to the functional characteristics of products or services. The requirements for status symbols account for the sale of some executive cars, certain bank: accounts and charge cards, and even hospital beds. The requirements are of paramount importance in the assessment of the quality of any product or service. By consistently meeting customer requirements, it moves to a different plan of satisfaction- delighting the customer. Many organizations have so well ordered their capabilities to meet their customers' requirements, time and time again that this has created a reputation for excellence. A development of this thinking regarding customers and their satisfaction is customer loyalty, an important variable in an organizations success (Oakland, 2000).

Research shows that focus on customer loyalty can provide several commercial advantages. Customers cost less to retain than acquire; the longer the relationship with the customer, the higher the profitability; a loyal customer will commit spend to its chosen supplier; and about half of new customers come through referrals from existing clients- indirectly reducing acquisition costs (Oakland 2000). People will go out of their way and pay more for good services, which indicates the importance placed on service by customers (Milwaukee, 1989). Improving quality and service to customers is the key to competitive success, and providing superior service is one of the key responsibilities.

Corrigan (2009) gives a definition of quality with an emphasis on customer satisfaction that "TQM is a management philosophy that builds a customer-driven, learning organization dedicated to total customer satisfaction through continuous improvement in the effectiveness and efficiency of the organization and its processes" According to Kaufinan (2008).TQM provides what is required as judged by the client. TQM emphasizes that it is important for all elements to fit together to turn raw materials into products and deliverables that satisfy clients. Customer satisfaction is the result most

addressed by TQM (Crosby 2003). The customer in the education set up includes the students, parents, community, the government and the teaching staff as internal customer. Key benefits of customer focus are increased revenue and market share obtained through flexible and fast responses to market opportunities; increased effectiveness in the use of (organization) resources to enhance customer satisfaction; and improved customer loyalty leading to repeat business. Applying the principle of customer focus typically leads to researching and understanding customer needs and expectations; ensuring that the objectives of the organization are linked to customer needs and expectations; communicating customer needs and expectations throughout the organization; measuring customer satisfaction and acting on the results; systematically managing customer relationships; and ensuring a balanced approach between satisfying customers and other interested parties such as owners, employees, suppliers, financiers, local communities and society as a whole. (ISO 9000).

2.3. The Systems Theory

Organisations work as systems. A system is a network of function components that are interdependent and synergistic and which, taken together, can attain clearly stated goals. The system makes its boundaries explicit by defining which people, functions, components and aims are included and which are not. The components must serve the total system, not the individual components themselves. Leaders work on the system to attain the total system's aims (to optimise it) and the workforce works in the system. Effective communication and common understanding about roles and responsibilities is important to the optimisation of the system. When one component, function, or subsystem benefits without concern for the impact on the total system, then the total system is sub-optimised. The aim of the system must be clear to all and consistent with the needs of the system's customers. Each component has suppliers and customers within and/or outside the system. A school is a system that should be optimised. Some of the school activities may not contribute to the aims of the total system: optimising the extra-curricular and assigning extra resources to one department may optimise the total system or programme may damage the curricular programme, or vice versa it may not. Each action taken for improvement of one function has implications for the others. It is

essential that schools make explicit their aims or mission and make sure that the whole school community supports the aims. These total system aims must actively guide decisions about priorities, experimentation and allocation of resources.

In order to improve a process, it must be based on some predictive theory on how the system would react to certain changes or adjustments. The theory, in turn, should be based on knowledge or experience or on some restructuring of elements within and/or outside the present process. Knowledge can only be advanced with the existence of a theory.

2.4 Conceptual Framework

The framework figure 3 highlighted the relation between the independent variable that influences academic performance which was the dependent variable. The identified independent variables in the framework are leadership which looked at aspects of the school policies, Supervision of teaching and learning activities and provision of school equipments. Continuous improvement was another variable that looked at discipline, remedial classes, learners and teachers' attendance register and how they influenced performance. The third independent variable was involvement of people. This looked at aspects such as problem solving, proposes improvement team work, and provision of training. Customer focus, the last variable looked at how well a school met the customer needs hence focused on extracurricular activities, syllabus coverage and recognition of academic success. The study considered student entry grade and government policy as moderating variable to management that influenced the results.

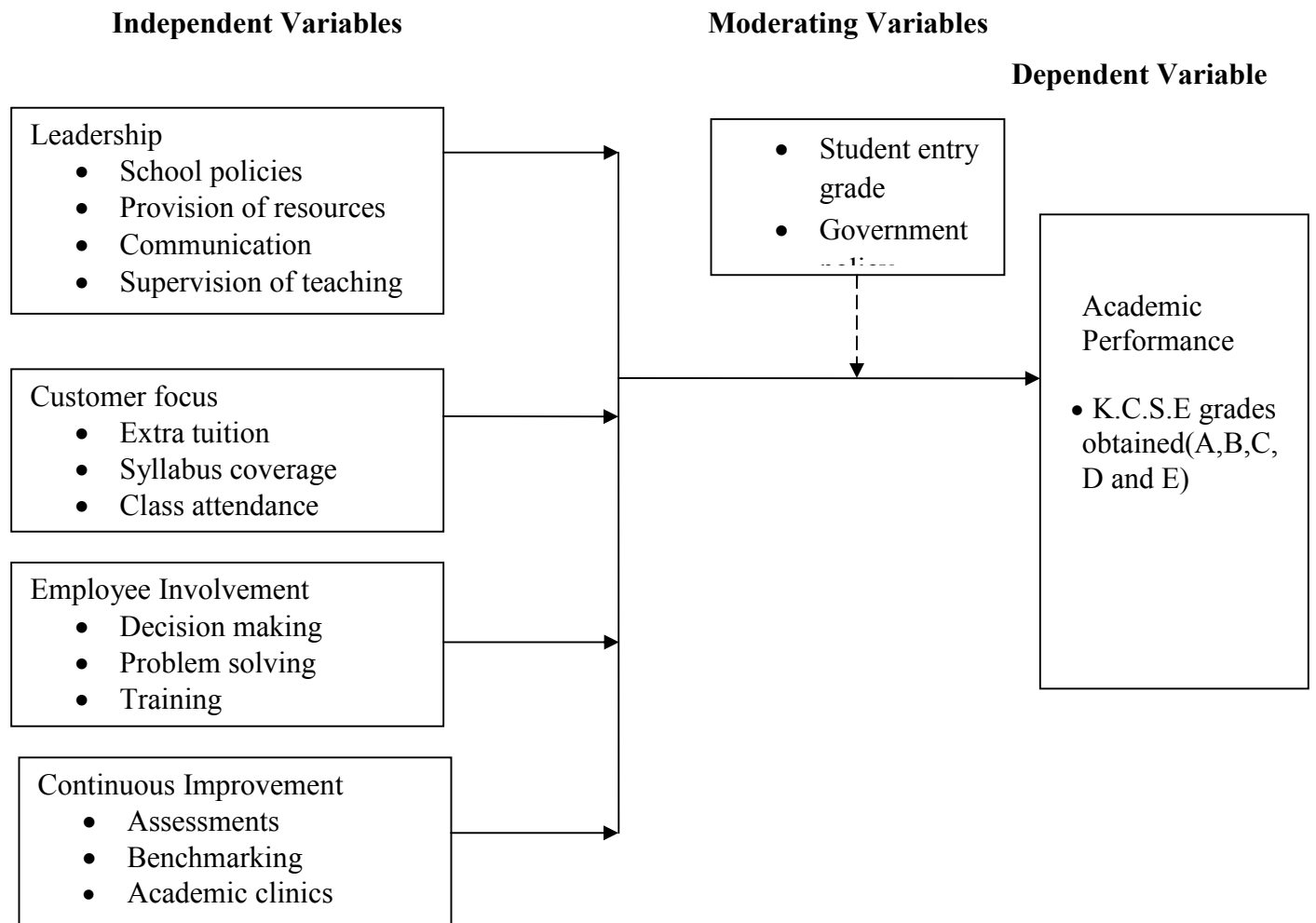


Figure 1: Conceptual Framework

2.5 Summary of Literature Review

The literature review established that high performing schools have well established systems with committed leaders; involvement of people, continuous improvement and customers focus. It was noted that leadership was essential in running an effective and high performing schools. Involvement of people calls for people at all levels to forge toward full involvement of their abilities to benefit the organization through freely sharing knowledge, extracurricular activities and proper and timely syllabus coverage. Continuous improvement enabled an organization through problem solving and proposing improvement. Customer focus states that organizations or schools that perform must focus on customers (students' present and future needs through communication and managing the relationship).

The study therefore was seeking to fill the gap of giving an account of influence of TQM principles by examining the influence of leadership innovativeness in setting policies and implementing them in schools and supervision of classroom activities. Involvement of people provides that every person within the organization should be empowered to solve problems, propose improvements and satisfy customers. Continuous improvement shows those small activities for example guidance and counseling, self-assessment and audits and their role in academic performance. The study provided the influence of customer focus on meeting the various needs expectations and requirements of the students. Need for extracurricular activities, recognition of academic excellence and proper syllabus coverage.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research design that was used in the study. The chapter describes target population, the sample size, instrumentation, piloting, and data collection procedures and data analysis.

3.2 Research Design

The study employed a descriptive survey research design. The intention of the study was to give a detailed description of the influence of Total Quality Management principles on academic performance of public secondary schools in Kajiado North Sub County. Kisilu and Tromp (2006) points out that descriptive survey research design is the most appropriate when the purpose of the study is to create a detailed description of a phenomenon. Descriptive Survey research design was considered appropriate for the study because the purpose was to obtain information which described the existing phenomena by asking individuals about their perceptions, attitudes, behaviors or values (Mugenda & Mugenda, 2007). The researcher therefore was able to describe the influence of TQM principles on performance of public secondary schools from the survey which made the design appropriate for the study.

3.3 Target Population

Mugenda and Mugenda (2007) define target population as that population to which a researcher wants to generalize the results of the study. The target population comprised of all the principals/Deputy Principals, HODs, teachers and students from public secondary schools. There are 6 schools in Kajiado North Sub County (DEO's office (2015)).The unit of study was the schools. The total number of teachers engaged in teaching including principals in the sub county are 84. There are 1537 students which gave a total population of 2381 for this study. The teachers and students were the main target in this study as they played a major role in determining what happens in the school. Parents however were excluded in this study because they are not direct implementers of TQM.

Table 3.1: Total Population of Teachers and Students in the Public Secondary Schools in Kajiado Sub-County

School	No. of teachers	Total No. of students
Upper Matasia	10	180
Kibiko	13	124
Oloolua	12	203
Oloolaiser	21	450
Enoomatasian	15	386
Ngong Hills	13	194
Total	84	1537

Source: DEOs Office, 2015.

3.4 Sample Size

The sample size in this study comprised of a total of 184 respondents determined using the Small-Sample Techniques (Yamani, 2010). The respondents were divided equally from the 4 selected schools. In each school the respondents included 1 principal/deputy principal, 5 HOD's, 10 teachers and 30 students.

3.5 Sampling Procedure

Brinker (2008) defines sampling as a systematic selection of representative cases from the larger population. The objective of sampling was to get accurate empirical data at a fraction of the cost that it would take to examine all possible cases. The sampling procedure adopted in the study was use key informants who were Principals/deputy principals, systematic random sampling for the HOD's, teachers and students. Due to the nature of the respondents from whom the data was be collected, a two stage sampling technique was adopted for the study, the first stage constituted selection of the schools and the second stage involved the selection of the students to be interviewed at the school level.

In the first stage, stratified sampling was used to select the four (4) schools included in the study. To facilitate the sampling method, the units were chosen from the population of all the public secondary schools in Kajiado North Sub County. In the second stage, the researcher randomly selected 5 HOD's and 10 teachers from each school while 30 students per school were selected using a systematic random sampling method. This involved obtaining student registers and using it to form a master sampling frame for all the students in each of the schools then a specific sampling interval was computed to select them. The next step was identification of the selected students by their school admission numbers in their respective classes from form one to form three.

3.6 Research Instruments

This section indicated the type of instrument employed for data collection. For all the respondents, self-administered questionnaires were used to collect the primary data. The researcher was seeking information on demographic data and information related to age, qualification, teaching and administrative experiences in section A. Several items were constructed to gather information on influence of TQM principles of on performance of public secondary schools in section B, C, D and E.

3.6.1 The Questionnaire

Four self-administered questionnaires used (Appendices I – IV). The questionnaires were filled by the Principals/deputy principals, HoDs, teachers and students. Each questionnaire contained both closed – ended and open – ended questions and was divided into five sections. Section A was seeking to capture the background information of the respondents. Section B obtained data on leadership commitment, section C is on involvement of people, section D on continuous improvement and section E is on customer focus.

3.6.2. Piloting

According to Kerlinger (2005), a valid research instrument should measure what it purports to measure. A pilot study was conducted in one public secondary school in

Kajiado North Sub County. This included 1 principal, 10 teachers, 5 heads of departments and 30 students. Pilot study provided a check on the questionnaire making it possible to determine whether the questionnaire would provide data required in the study as well as check its clarity to the respondents. Piloting was done to enable the researcher modify, restructure and remove any items which were likely to be ambiguous.

3.7 Validity of the research Instrument

An important aspect of the data collection instrument to the study is its validity. The Content was used to assess the validity of the instrument. It is a measure of the degree to which data collected using a particular instrument represents a specific domain of indicators or content of a particular concept (Mugenda & Mugenda, 2007). Content validity also refers to whether an instrument provides adequate coverage of a topic. Expert opinions and pre-testing of open-ended questions helped to establish content validity (Wilkinson, 2009). The researcher prepared the instruments in close consultation with the supervisor, whose expert judgment helped improve content validity.

3.8 Reliability of the Instrument

Reliability of instruments is the degree of consistency that the instruments or procedure demonstrates (Best and Kahn, 2000). To determine the reliability of the research instrument, it was split into two; by placing all odd numbered in one sub-set and all even numbered items in another subset. Split-half reliability requires one testing session. The entire instruments were then administered to a sample of 184 respondents and calculated the coefficient of internal consistency. The reliability of a standardized test was expressed as a correlation coefficient, which measured the strength of association between variables. The coefficient varied between 0.5 and above which means that the instrument was reliable.

3.9 Data Collection Procedures

The researcher personally administered questionnaires to the HOD's, teachers, principals and students. The questionnaires were self-administered and the respondents were given ample time to respond to all the items adequately. The data collection process was

estimated to take about one month. The study also involved the examination of records of the scores obtained by students. The records used were that on performance of KCSE in the year 2014 as provided by the KNEC.

3.10 Data Analysis Techniques

Data analysis refers to the computation of certain measures along with searching for patterns of relationship that exists among data groups. It helps in interpreting data, drawing conclusions and making decisions. Both qualitative and quantitative data analysis was done. Data was analyzed in frequency tables, percentages, means and standard deviation. The Statistical Package for Social Science (SPSS) was used to analyse both descriptive and inferential data. The responses on open-ended questions were reported by descriptive narrative. The results of the study were compared with literature review to establish the influence of TQM Principles on performance in public secondary schools in Kajiado North Sub County.

3.11 Ethical issues

Ethical considerations involve seeking approval from the schools' administration. The study was designed in a way that ensured confidentiality of all the respondents and this was achieved through dissemination and collection of the questionnaire by the researcher. The researcher also issued an informed consent along with each questionnaire such that only willing respondents participated in the study. The respondents were also assured that they were free to refrain from filling the questionnaire when they want to and there was no penalty for this.

Table 3.2: Operational Definition of Variables

Objectives	Types of Variables Independent	Indicators	Measure Merits	Data collection	Level of Scale	Tool analysis	Type of level of analysis
In what ways does leadership commitment have on academic performance	Leadership commitment	Implementation of policies	Number of indiscipline cases handled	Interview schedule	Ordinal	Qualitative	Inferential
		Provision of adequate resources	Adequate resources Improved grades	Questionnaire		Quantitative	Descriptive
		Communication	Adequate resources	Interview schedule Questionnaire	Ordinal Interval	Qualitative Quantitative	
		Supervision of teaching		Interview schedule Questionnaire	Ordinal Interval	Qualitative Quantitative	
How does the employee involvement influence academic performance	Employee involvement	Right decision being made	Factual approach to decision making	Interview schedule Questionnaire	Ordinal Ordinal	Qualitative Quantitative	Inferential Descriptive
		Problem solving	No conflicts		Interval	Qualitative Quantitative	Inferential Descriptive
		Employee training	Certificates achieved	Interview schedule Questionnaire	Ordinal Interval	Qualitative Quantitative	Inferential Descriptive
				Interview schedule Questionnaire			
How does continuous improvement influence academic performance	Continuous improvement	Supervision and marking assessments	-Number of assessment exams done	Interview schedule Questionnaire	Ordinal Interval	Qualitative Quantitative	Inferential Descriptive
		Bench marking	-Number of schools visited -Records of parents attendance	Interview schedule Questionnaire	Ordinal Interval	Qualitative Quantitative	Inferential Descriptive
		Academic clinics		Interview schedule Questionnaire	Ordinal Interval	Qualitative Quantitative	Inferential Descriptive
				Interview schedule Questionnaire			
.In what ways does customer focus have on academic performance	Customer focus	Remedial classes attendance (extra tuition)	-Number of remedial for each -Schemes of work and progress records	Interview schedule Questionnaire	Ordinal Interval	Qualitative Quantitative	Inferential Descriptive
		Early syllabus coverage	-No of entries recorded	Interview schedule Questionnaire	Ordinal Interval	Qualitative Quantitative	Inferential Descriptive
		Classroom attendance		Interview schedule Questionnaire	Ordinal Interval	Qualitative Quantitative	Inferential Descriptive

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1: Introduction

This chapter provides statistical presentation and analysis of the data collected. The data has been presented in tables, figures, frequencies, and percentages with summaries being given for each table and figure. The objective of this chapter is to explain the data rather than draw conclusion and interpretations. The data analysed and presented, is based on the response to the items in the questionnaires.

4.2: Response Rate

In order to achieve the main purpose of this study, the researcher found it paramount to find out the demographic information of the respondents under which interpretation would be justifiably made.

The respondents comprised Teachers, Students, Heads of Departments and Head Teachers/ Deputy Head Teachers within Kajiado North Sub-County. A total of 184 respondents were targeted. This comprised 1 principals/deputy principals, 5 HODs, 10 teachers and 30 students. The response rate achieved was 4 Principals/ deputy principals, 12 HoDs, 25 Teachers, and 87 Students. This gave a response rate of 69.73%. This response rate was affected by the fact that the study was conducted in the month of October-November when form four candidates were sitting for their National examination.

This is further tabulated in Table 4. 1 :

Table 4.1: Response Rate

Category	Target	Achieved
Principals/ Deputy Principals	8	5
HODs	15	12
Teachers	30	25
Students	131	87
Total	184	129

4.3: Background Information

The researcher sought to establish background information as pertains the respondents, the following information was found:

4.3.1: Students Information

The researcher sought to find out how the students had performed in their previous national examinations (Kenya Certificate of Primary Education) the findings were as posted on Table 4.2:

Table 4.2 K. C. P. E Performance

K.C.P.E marks	%
180-200	11.49
200-249	13.79
250-299	28.74
300-349	25.29
350 and above	20.69
Total	100.00

The study established that majority of the students had a score of between 250-299 Marks representing 28.75% of the respondents; the difference however was not that wide when

compared to other marks scored at class eight. Those who scored between 300 and 349 marks were 25.29%, those that had 350 marks and above were 20.69%, 200 – 249 were 13.79% and 180- 200 marks were the least comprising of 11.49%

The Students were asked what the class population was in terms of student’s numbers the results are as given on Table 4.3:

Table 4.3 Class population

Population of your class	%
< 40 Students	24.14
40-45 Students	32.18
45-50 Students	19.54
50- 55 Students	13.79
> 55 Students	10.34
Standard Deviation (S.D)	8.63

Majority of the respondents indicated that average class population was between 40- 45 students at 32.18%, another 24.14% indicated that their class population was less than 40 students. The standard deviation obtained was 8.63. Standard deviation is a measure of dispersion from the mean value. Therefore a smaller value indicates that the results are more homogenous. In this case data was sought from four schools and analysed to give the mean number of students per class. Therefore it can be said that a standard deviation obtained (8.63) means that there was no big variance between the means obtained i.e. between the highest class population and the lowest class population was not very huge. Further the students were asked whether this class population affected their academic performance in any way, 81% indicated in the affirmative that indeed it does/ did affect their performance while 19% indicated in the negative, when probed further to indicate how 32.18% of those that said it did remained indifferent, 50.57% indicated that a larger class population led to poor results and 17.24% said it led to high grades.

4.3.2: Teachers/ HODs/ Principal’s Information

The researcher also sought background information on the teachers/ HoDs and Principal/ Deputy Principal. The following information was also found;

Table 4.4 Ages of Teacher/ HoD/ Principal

Age	Teachers	HoDs	Principal/ D/Principal
21 – 25 years	7.8	0	0
26 – 30 years	19.3	0	0
31 – 35 years	32.2	0	0
36 – 40 years	27.1	16.67	32.8
41 – 45 years	3.9	58.33	45.9
46 – 50 years	5.2	0	11.5
51 – 55 years	2.7	25.00	9.8
56- 60 years	1.8	0	0

The study revealed that majority of teachers were aged between 31- 35 years at 32.2%, while majority of the HoDs were aged between 42-45years at 58.33% and the same age bracket was applicable to principals/ deputy principal at 45.9%. The above implies that for one to be appointed to a slightly senior position they need to have attained a certain age bracket and therefore could be having knowledge that will help them handle challenge that comes with the job position.

Table 4.5: Highest Academic Qualification

Highest professional qualification	Teachers	HoDs	Principal
Doctorate	0	0	0
Masters	11.2	35.1	36.2
Bachelors	84.7	64.9	63.8
Diploma	4.1	0	0

The study established that Majority of teachers (84.7%) were bachelor's degree holder even though there were some who had diploma education; the same also applied to HoDs and Principals/ deputy principals at 64.9% and 63.8% respectively. The results indicated that none of the respondents had pursued their studies up-to doctorate level. The studies indicated that teachers qualified to impart knowledge to students.

The researcher also sought to find out for how long they have either been teachers, HoDs or principals. The findings are as depicted on Table 4.6:

Table 4.6: Duration Served as a Teacher

How long have you been a teacher?	Principal/	
	Teachers	D/Principal
1–5 years	19.5	11.3
6 – 10 years	38.1	35.9
11 – 15 years	31.4	52.8
16 – 20 years	6.3	0
21 - 25 years	4.7	0

The study established that majority of teachers had been serving as teachers for a period of between 6-10 years at 38.1% while in the case of principals they had served as principals for a longer duration of 11- 15 years at 52.8%.

Further the study also sought to find out for how long they had served in the respective schools the findings indicate that Majority of teachers had served between 1-5 years in their current school while principals/ deputy principals had served for a slightly longer as 60% of them indicated they had stayed for a period of between 6-10 years. This is as summarized in Table 4.7:

Table 4.7: Duration spent as teacher in their school

How long have you been a teacher in this particular school	Principal/	
	Teachers	Deputy Principal
1–5 years	67.8	20.00
6 – 10 years	32.2	60.00
11 – 15 years	0	20.00
16 – 20 years	0	0.00
21 - 25 years	0	0.00

4.4: Influence of leadership on academic performance

The role of leadership within the TQM context can be summarized as follows: There is a common understanding of quality and the need to change; Management then develops operating principles and values which create an environment for continuous improvement; leadership creates the organization and provides the systems and resources to support the process, and everyone is contributing to services given to the user (Horwitz, 1990). This study therefore sought to find out how each player in the secondary education sector within Kajiado North Sub- County played their role. The findings are as discussed on Table 4.8:

Table 4.8: Principal ensure that teachers teach on daily basis

Does the principal ensure that teachers teach on daily basis	%
Yes	55.17
No	44.83

The students were asked to indicate whether the principal ensured that teachers delivered their mandate (teaching) on a daily basis 55.17% of the respondents indicated that indeed the principals ensured they were taught, 44.83% indicated that their principals did not ensure they were taught daily.

Further the researcher sought to know whether the principals checked their exercise books 74.02% indicated in the negative that their exercise books were not checked and 25.98% indicated in the affirmative that their books were checked, however from the data analysis the frequency of checking was noted to be done mostly once a year. 52.7% indicated so, 33.6% were not sure on the frequency of checking, while 11.6% said it was done once a term and 2.1% said twice a term.

When asked whether their schools had a vision 68.97% indicated that their school had a vision while 31.03% said they did not have a vision. The researcher also wanted to know whether the school's leadership had organized their student's body so as to be able to

assist in executing duties, 100% of the principals said that they had student leaders who were democratically elected by fellow students only 20% said they were appointed.

The teachers were asked to rate the application of TQM in their schools and demonstrate the extent to which it has assisted to improve performance; the findings were as shown on Table 4.9:

Table 4.9: Application of TQM

Application of Total Quality Management in your school	%
Below 50%	61.4
50%	26.5
51% - 70 %	12.1
Over 80%	0

Application and implementation of TQM within schools in Kajiado North Sub-County was found to be low as 61.4% of the respondents indicated the implementation to be below 50% a further 26.5% said it was at 50 %, more needs to be done in this area. When asked what challenges were encountered the responses were;

Table 4.10 Challenges facing implementation

Outline the challenges that face quality performance in your school	%
Lack of team work	19.23
Leadership	30.77
Inadequate resources	46.15
Other	3.85

Inadequate resources was cited as the most evident reason at 46.15% as to why implementation of TQM was facing challenges, it was closely followed by Leadership and least was lack of team work. They were asked how they dealt with the challenges mentioned especially when it emanated from the management 65.38% said they could not discuss it openly with the school leadership.

Leadership was summarized and measured on a five-point Likert scale, the findings indicate that setting quality policy was moderate at 48.3%, provision of resources was also perceived to be moderate as 52% of the respondents indicated so, factual decision making was low as this was indicated by 54.1% and Empowering and Motivating personnel was between low and moderate. The findings are further elaborated in Table 4.11.

Table 4.11: Leadership

Leadership and performance	Very low	low	moderate	high	Very high
Setting Quality policies	4.2	7.2	48.3	29.9	10.4
Provision of resources and infrastructure	28.7	13.9	52.8	4.6	0
Factual Decision making	0	54.1	23.8	22.1	0
Empowering and motivating personnel	19.9	28.2	41.9	5.5	4.5

The role of quality assurance was also looked into and the study did reveal that Quality Assurance Officers visited the schools at least once a year as this was indicated by 79.2%, twice per year 20.85, however implementation was still low as 66.4% indicated that implementation of suggestion given by Quality Assurance Officers was at 0%, 18.9% said implementation was between 51-70% 9.1% said it was below 50% and only 5.1% had implemented over 80%.

4.4.1 Correlation between Leadership Commitment and Academic Performance

Crossman (2013) notes that correlation analysis results, gives a correlation coefficient which measures the linear association between two variables. Mugenda and Mugenda (2003) explain that correlation analysis tests the strength of association/relationship between the research variables.

Table 4.12 shows the correlation between Leadership Commitment and Academic Performance.

Table 4.12 Correlation between Leadership Commitment (LC) and Academic Performance (AP)

Correlations		Leadership Commitment	Academic Performance
LC	Pearson Correlation	1	.557**
	Sig. (2-tailed)		.000
	N	89	85
AP	Pearson Correlation	.557**	1
	Sig. (2-tailed)	.000	
	N	85	85

** . Correlation is significant at the 0.01 level (2-tailed).

According to Table 4.12, the study found that there was significant relationship between Leadership Commitment and Academic Performance which have correlation index of ($r=0.557$). Therefore, the study found that Leadership Commitment has significant relationship with Academic Performance in public secondary schools in Kajiado North Sub-County. This is informed by principals ensuring that teachers teach on a daily basis, application of TQM. However, if a better correlation coefficient is to be achieved it is necessary to increase on resources and to implement suggestions as put forward by Quality Assurance Officers.

4.5: Employee involvement on school academic performance

TQM requires from senior management that they utilize the talents, expertise and skills of every member of the staff. Every employee is encouraged to act on the initiative and be creative so as to bring improvement to the work. It is essential that they (stakeholders) are empowered to solve problems, propose improvements and satisfy customers (Kachar, 1996). Therefore simplification of the school structure is done in order to focus upon the person closest to the learner (home room or classroom teacher) is necessary (Murgatroyd, 1991; Van Kradenburg, 1995). It is for this end that the researcher sought to find out how

employee involvement is viewed, seen and practiced within School in Kajiado North Sub-County.

When asked to state how they as teachers as part of the school leadership were involved in day to day running of the school, they said part of their activities included supervision, tender committee among other the results are as posted on Table 4.13:

Table 4.13: Employee Involvement

Employee involvement	%
Tendering process	15.38
Discipline	30.77
Academic planning	42.31
Guidance and counselling	11.54

42.31% of those that responded said that they were involved in academic planning, 30.77% said that they were involved in handling discipline cases, 15.38% were involved in tendering process and 11.54% were involved in guidance and counseling. Further the study sought to know how the mentioned activities help in performance of the school. The results are as shown on Table 4.14.

Table 4.14: How do activities help in performance of the school?

How do the activities help in performance of the school	%
Motivation	23.08
Improved grades	30.77
Less time wastage in punishment	46.15
Other	0.00

The respondents indicated that it reduced time wastage by 46.15% of the respondents, 30.77% indicated it led to improved grades and 23.08% said it led to motivation. They were further asked to rate how their schools performed in regards to employee involvement, their responses are as shown on Table 4.15:

Table 4.15: School performance on employee involvement

School performance on employee involvement	Low	Very Low	Low	Moderate	High	High	Very High
Employees regularly undergo training as part of TQM efforts	38.0	24.8	19.4	17.8	0.0		
Employees have the necessary capacity to participate in decision making in school management	0.0	6.3	54.7	29.9	9.1		
Employees are reasonably involved in decision making process.	3.1	17.9	57.8	21.2	0.0		

The teachers rated as very low that they go regularly for training as part of TQM at 38.0%, 24.8% indicated as low, 19.4% rated as moderate and 17.8% rated it as high, when asked whether the employees have the necessary capacity to participate in decision making, majority (54.7%) indicated moderate, 29.9% indicated as high and 9.1% indicated as very high, further employees were asked whether they were reasonably involved in decision making 57.8% indicated it was moderate, 21.2% were said their involvement were high, 17.9% said their involvement was low and 3.1% said their involvement is very low.

The HoDs were asked whether all departmental staff members were competent in their subjects 66.7% of the HoDs responded in the affirmative while 33.3% responded in the negative. The HoDs further said that they would like their departmental members to be trained in management courses at 50%, 25% indicated training in guidance and counseling, 16.67% indicated training in ST & I would be appropriate and 8.33% indicated any other proficiency course.

As part of challenges outlined by HoDs the following came up:

Table 4.16: Problems faced by HoDs

Problems faced by HoDs	%
Lack of team work	33.33
Poor grades	50.00
Lack of support by leadership	16.67
Other	0.00

Poor grades by students topped the list at 50.00%, Lack of team work comprised 33.33% and lack of support by leadership comprised 16.67%, they were further asked to outline how they solved these challenges. 41.67% indicated they openly discussed the issues, disciplinary action and target grades per teacher each had 25% and 8.33% said they benchmarked with other schools. Further the HoDs indicated that as part of improvement teachers sought in-service training at 66.67%, 33.33% sought training in proficiency courses.

Further after training the teachers were required to state how they disseminated information 58.33% indicated that they did this through co-operative teaching, briefing after training comprised 33.33% and 8.33% said they held workshops.

The principals and deputy principals were asked to outline how they had implemented employee involvement in their respective schools; the responses are as shown on Table 4.16.

Table 4.17: Employee Involvement

Employee Involvement	Yes	No
	%	%
Well defined responsibilities and authority	100	0
Competent personnel assignments	65.7	34.3
Appropriate tools, methods and techniques to monitor processes	45.8	54.2
Openly sharing issues and problems	58.1	41.9

The results indicate that there was well defined responsibility and authority at 100%, competent personnel 65.7% said yes and 34.3% selected no, 54.2% said there were no appropriate tools and techniques, and 58.1% said they shared openly issues and problems affecting them.

4.5.1: Correlation between Employee Involvement and Academic Performance

Table 4.18 shows the correlation between Employee Involvement and Academic Performance.

Table 4.18: Correlation between Employee Involvement (EI) and Academic Performance (AP)

Correlations		Employee Involvement	Academic Performance
EI	Pearson Correlation	1	.611**
	Sig. (2-tailed)		.000
	N	85	85
AP	Pearson Correlation	.611**	1
	Sig. (2-tailed)	.000	
	N	85	85

** . Correlation is significant at the 0.01 level (2-tailed).

According to Table 4.18, the study found that there is significant relationship between Employee Involvement and Academic Performance which have correlation index of ($r=0.611$) therefore, the study found that Employee Involvement has significant relationship to Academic Performance in public secondary schools in Kajiado North Sub-County. The correlation coefficient was as a result of academic planning, less wastage of time, having competent staff members as well as having well defined responsibilities and authority. This correlation coefficient would have been higher if guidance and counseling was enforced, employees underwent regular training especially in proficiency and ST&I

training as well as ensuring that there are appropriate tools, methods and techniques to monitor processes.

4.6 Influence of continuous improvement on academic performance

Quang and Walker (1996) regard continuous improvement as "perhaps the most influential of TQM beliefs". The philosophy underlying TQM is that the production system is the means by which quality is constantly improved. TQM seeks to provide the means to monitor, control, and improve production systems. According to Rau (1996), TQM is a way of managing an organization to achieve continuous improvement. This study sought to establish how continuous improvement is being implemented across schools in Kajiado North Sub County.

The students were given a set of questions by the researcher who sought their inputs in various areas, the responses are as indicated that teachers gave students assignments at least once a week as this was confirmed by 60% of the students, 20.3% indicated that they are not given assignments while 18.1% confirmed that they are given daily, the researcher also sought to know from those that confirmed they were given assignments how often the assignments were marked 54.5% confirmed that this was marked once a week, 42.8% confirmed that this was marked daily and 2.7% confirmed that the assignments were never marked.

It was also critical to know whether the assignments were marked and feedback given 64.9% confirmed that they get their feedback, further 62.5% confirmed that they get time to revise with their teachers the assignments given. The study also sought to establish what roles the prefect/ student body had been given 26.47% indicated that the roles included collecting assignments, 26.22% indicated conducting assembly, 22.47% indicated taking roll calls, 20.60% indicated solving class disputes and 3.75% indicated maintaining discipline.

As part of continuous improvement the teachers were asked whether they had ever attended in service course 78.3% indicated they had never attended any in-service course and only 21.7% indicated they had attended in-service course. The researcher also sought to know the size of the school; the findings are as shown in Table 4.15.

Table 4.19: Size of School

Size of your school	Teachers	HoD	Mean
Single Stream	48.5	66.67	57.59
Double stream	32.7	25.00	28.85
Triple stream	17.9	8.33	13.12

The size of school was measured in terms of number of streams per class in order to establish the workload of teacher, it was found out that majority of the schools were single streams but with large student numbers at 57.59%, two stream schools comprised of 28.85% and 13.13% comprised of Triple stream schools. The HoDs were requested to provide information on class population the findings are posted on Table 4.20:

Table 4.20: Class Population

Size of your classes	%
< 40 Students	25.00
40-45 Students	58.33
45-50 Students	16.67
50- 55 Students	0.00
> 55 Students	0.00

From the data analyzed it was established that 58.33% of the respondents indicated their class population was between 40-45 students, 25% indicated a class population of less than 40 students and 16.67% indicated a population of between 45- 50 students, further the respondents were asked what was the teacher student ratio in their schools and how it affected performance; the findings are posted on Table 4.21:

Table 4.21: Average Teacher Student Ratio

What is the average teacher student ratio in your school	%
1: 45	25.00
1: 50	33.33
1: 55	8.33
1: 60	16.67
Other	16.67

The average teacher student ratio was found to be 1:45 at 25% followed by 1:50 at 33.33%, 1:55 and 1:60 comprised of 16.67% and 1:55 had 8.33%. This shows that a bigger percentage of class population is 1:50 which is above the expected level of student's population 1:40 in secondary schools as per the ministry's recommendation. The Table also shows some classes have large population of 1:60 and above.

Table 4.22: Effect of teacher student ratio

How does the teacher student ratio affect student's subject performance	%
poor grades	58.33
Medium grades	33.33
high grades	8.33

The teacher student ratio was found to affect performance in a negative way as huge teacher student ratio led to poor results as indicated by 58.33%, medium grades at 33.33% and 8.33%. indicated it led high grades. This was done in an effort to ascertain whether teachers could effectively manage their classes. The study sought to find out whether the teachers corrected all their assignments 67.8% indicated that teachers corrected all assignments on time and only 32.2% indicated that teachers did not correct assignments. Further the study probed whether students completed assignments as required 58 %.(indicated that indeed students completed assignments, and 41.1% did not among the reasons given were lack of time 41.67%, Lack of text books at 33.33% and 25% indicated lack of understanding of the work. However on a positive note students' attitude towards learning was positive at 56.8%, neutral at 32.1% and negative at 11.1%.

As part of continuous improvement the HoDs were asked what roles they played 78.4% indicated that they had other roles to play which included 41.67% holding academic clinics, 33.33% holding educational trips 16.67% during prize giving days and others had 8.33%. Further as part of their duties the HoDs are required to check syllabus coverage 66.67% indicated that they check syllabus coverage per term, 25.0% indicated monthly and 8.33% indicated they don't check while none of the respondents indicated they check syllabus coverage on a weekly basis.

They were also required to hold departmental meetings 50% indicated they hold departmental meetings per term, 25% indicated monthly 8.67% said weekly and 16.33% indicated they don't hold any departmental meetings.

As part of their overall mandate to ensure that schools are run and managed on a daily basis the principals were asked how often they conducted staff meetings 50% indicated they conducted it twice a month, 16.67% were held monthly and 33.33% indicated that the meetings were held once a term. As part of agreed outputs from the meeting the researcher sought to find out whether the action points are carried out on time 88.2% and 60% indicated that they are required to give reports and 40% indicated they are not required to give reports. The reports are usually in form of written reports, staff brief during meetings, memos and other agreed channels i.e. verbal.

4.6.1 Correlation between Continuous Improvement(CI) and Academic Performance(AP)

Table 4.23 shows the correlation between Continuous Improvement and Academic Performance

Table 4.23: Correlation between Continuous Improvement and Academic Performance

Correlations		Continuous Improvement	Academic Performance
C I	Pearson Correlation	1	.561**
	Sig. (2-tailed)		.000
	N	85	85
A P	Pearson Correlation	.561**	1
	Sig. (2-tailed)	.000	
	N	85	85

** . Correlation is significant at the 0.01 level (2-tailed).

According to table 4.23 , the study found that there is significant relationship between Continuous Improvement and Academic Performance which have correlation index of ($r= 0.561$) therefore, the study found that Continuous Improvement has significant relationship to Academic Performance in public secondary schools in Kajiado North Sub-County. From the data analyzed it was established that the students were given assignments at least once a week on the same note feedback was given on the assignments. However the large teacher -student ratio was found to reduce the correlation coefficient, this together with maintaining discipline seemed to act on this in the opposite direction.

4.7: Customer focus on academic performance

TQM refers to the systematic management of an organization’s customer supplier relationships in such a way as to ensure sustainable steep-slope improvements in quality performance (Murgatroyd& Morgan, 1993). TQM calls for excellence in people management since the human behavior elicited is a direct effect of management style. The human element is crucial in implementing TQM because it is through people that excellence comes to pass. The selection, training and development of staff are critical to

the success of any organization and warrants considerable investment (Beard, 1989; Dahlgaard & Dahlgaard, 2002).

The students being the first customers to the schools were asked whether there were occasions they are left without teachers 52.8% confirmed that there are times they are left without teachers and 47.2% indicated that they are never left without a teacher. As an effect of the this, the researcher sought to find out if being left without teachers was caused by teachers' transfer 76.7% indicated that teachers are transferred from their schools at least once a term at 21.84%, 18.39% indicated at-least twice per term and 19.54% indicated once per year. When transferred they are replaced once a year at 43.68% according to the respondents, 28.74% indicated once a term and 18.39% said twice per term.

Further the study to found out more about physical facilities/ resources, the findings are as depicted in Table 4.24.

Table 4.24 Physical facilities

Physical facilities/Resources	Not adequate	Adequate	Moderate	High	Very adequate
Classrooms	50.0	37.5	12.5	0.0	0.0
Desks	25.0	62.5	12.5		0.0
Games facilities	0.0	62.5	12.5	25.0	0.0
Library /laboratories	28.6	28.6	28.6	14.3	0.0
Dining hall	14.6	54.8	17.3	12.1	1.2
School transport	100.0	0.0	0.0	0.0	0.0
Students text books	24.8	52.5	12.5	10.2	0.0

The respondents indicated that classrooms were not adequate at 50%, desks and games facilities were adequate at 62.5%, games, laboratories was spread equally, school transport all respondents indicated was not adequate and student text book was also spread across the board.

Table 4.25 Customer Focus- Teachers

	Very Low	Low	Moderate	High	Very High
Customer care and public relations	12	44	32	8	4
The staff is reasonably motivated	24	52	20	4	0
Students are involved in decision making concerning their affairs	48	28	16	8	0

44% of the respondents indicated that customer care and public relations was low, 52% indicated the same for staff being reasonably motivated and 48% indicated that students were hardly involved in decision making concerning their affairs. Further they were asked to rate how their schools deal with students 47% indicated it was at 50%, 28.6% indicates it was below 50% and 22.5% indicated it was between 51% - 70%.

The HoDs were tasked to outline as part of their mandate how much effort and energy they spend in delivering to their subject 38.3% of the HoDs indicated they check syllabus coverage monthly, 44.6% indicated they check per term, 12.3% don't check and 4.8% indicated they check weekly.

As part of their overall mandate in formulating policies and driving performance principals and deputy principals all (100%) agreed that their schools had a vision that they intended to achieve, and part of the vision entail syllabus coverage, maintaining discipline, extra- curricular activity and resource provision.

4.7.1 Correlation between Customer Focus and Academic Performance

Table 4.26 shows the correlation between Customer Focus and Academic Performance.

Table 4.26 Correlation between Customer Focus and Academic Performance

Correlations		Customer Focus	Academic Performance
C F	Pearson Correlation	1	.323**
	Sig. (2-tailed)		.003
	N	85	85
A P	Pearson Correlation	.323**	1
	Sig. (2-tailed)	.003	
	N	85	85

** . Correlation is significant at the 0.01 level (2-tailed).

According to table 4.26, the study found that there is significant relationship between Customer Focus and Academic Performance which have correlation index of ($r= 0.323$) therefore, the study found that Customer Focus has significant relationship to the Academic Performance in public secondary school in Kajiado North Sub-County. The poor correlation coefficient was as a result of inadequate classrooms and school transport, involving students in decision making and checking of syllabus coverage which had a poor index thereby contributing to the weak correlation coefficient.

4.8: Performance

The study sought to find out what was the general behavior of students and how it affected students' performance ; 42% of the students respondents indicated that there was average student behavior, 24.6% indicated it was good and 14.9% indicated that it was very good and 18.6% indicted it was fair. Further it was established that the current student behavior contributed to average scores at 47.13%, 24.14% indicated that it led to poor performance and 28.74% indicated it led to high performance. Further student indiscipline was seen to be the major contributor of poor grades at 44.83%, teacher student ratio at 24.14%, 19.54% was student entry marks and teachers' qualification had 11.49%.

When asked some of the remedies that can be undertaken to improve performance, 37.93% indicated remedial classes' will help, 32.18% indicated group discussion and 29.89% said teacher student ratio needed to be looked into. It was also noted that exams were done at least three times a term as 42.53% confirmed this, 24.14% indicted that they had exams only once a term and 33.33% indicated they had their exams at least twice. The students also indicated that they had prize giving days at-least annually at 47.13% and 22.99% said it was every term 29.89% indicated never, further 66.7% indicated that there were no academic clinics in their school and those that indicated they had said it was held per term.

As part of performance improvement there were interclass competition which accounted for 59.77% of performance and science congress and exhibition accounted for 40.23% and the rest indicated others.

Teachers indicated that there has been remarkable improvement as shown in Table 4.27:

Table 4.27 Performance

Performance	Very Low	Low	Moderate	High	Very High
There has been remarkable improvement in academic performance	0.0	15.9	72.8	11.3	0.0
There has been a decrease in number of complaints from stakeholders	8.3	17.7	48.1	23.9	2.0
The students discipline has been improving steadily	9.9	18.8	38.5	21.2	11.6
I am comfortable with the continued performance of the school	14.30	11.20	66.40	8.10	0.00
I believe the strategies in place will ensure continued improvement	0.0	9.5	61.9	23.8	4.8

The respondents who comprised of teachers indicated that there has been remarkable improvement as 72.8% indicate the improvement as moderate, 48.1% indicated that there has been a decrease in complaints from stakeholders and more that 50% agreeing that student discipline has been steadily improving, 66.40% indicated that they are comfortable with the continued improvement and 61.9% were moderate in their belief that strategies put in place will ensure continued improvement.

As part of their mandate principals are required to solve conflict that might affect performance, 60% of the respondents indicated that they take disciplinary action, while those who ignored and those who reconcile account for 20% each, 60% of the interviewed principals do acknowledge that entry marks for form one candidates does affect performance this is evident from the Table 4.28.

Table 4.28: KCPE/ KCSE Comparison

KCPE		KCSE	
Marks	%	Grade	%
180-200	11.49	E	12.90
200-249	13.79	D	53.76
250-299	28.74	C	21.50
300-349	25.29	B	10.75
350 and above	20.69	A	1.08

The above table shows the comparison between what students scored in the 2014 KCSE examination and the entry grades. It was established that majority of the students scored between 250-299 and 300-349 in their KCPE examination collectively this comprised about 54.03% of the entry grades, the same is evident as majority of the grades obtained at KCSE reflect their entry grades. 75.27% of the KCSE was between Grade D and Grade C. This could imply that there was no much improvement and that schools might need to look into their entry grades.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1: Introduction

This chapter presents the summary and conclusions derived from the findings in the previous chapter. The purpose of these conclusions is to answer the research questions. Finally, recommendations for improvement, and suggestions for future study are presented. The main purpose of this study was to study influence of Total Quality Management principles on performance of public secondary schools in Kajiado North Sub County, Kenya.

5.1.1: Summary of the Major Findings

The study established that:

5.1.1.1: Influence of leadership on academic performance

The principal ensures that teachers deliver their mandate (teaching) and also established that the head teacher checked their exercise books however the frequency of checking was noted to be done mostly once a year. When asked whether their school had a vision 68.97% indicated that their schools had a vision. Principals said that they had student leaders who were democratically elected by fellow students and only 20% said they were appointed. When asked to rate the application of TQM in their school and demonstrate the extent to which it has assisted to improve performance; it was established that application and implementation of TQM within schools in Kajiado North Sub-County was found to be low. The implementation was said to be below average so more needs to be done in this area.

The respondents were further asked to elaborate more on the challenges faced; they cited inadequate resources as the most evident reason as to why implementation of TQM was facing challenges, it was closely followed by leadership and least was lack of team work. In the above case they said it was difficult to deal with the challenges mentioned when it

emanated from the management because they could not discuss it openly with the school leadership.

The role of Quality Assurance was also looked into and the study did reveal that Quality Assurance Officers visited the schools at least once a year. Others said twice per year. However, implementation of suggestions made was still low.

The study found that there is significant relationship between Leadership Commitment and Academic Performance which has correlation index of ($r= 0.557$). Therefore, the study found that Leadership Commitment has significant relationship to Academic Performance in public secondary schools in Kajiado North Sub-County. This is informed by principals ensuring that teachers teach on a daily basis. However, if a better correlation coefficient is to be achieved it is necessary to increase on resources and to implement suggestions as put forward by Quality Assurance Officers.

5.1.1.2 Employee involvement on school academic performance

When asked to state how they teachers as part of the school leadership and how they were involved in day to day running of the school, they said part of their activities included supervision and tender committee. Further the study sought to know how the above mentioned activities help in performance of the school. The respondents indicated that it reduced time wastage .Others said it led to improved grades and motivation.

They were further asked to rate how their schools performed in regards to employee involvement; the teachers rated as very low that they go regularly for training as part of TQM .When asked whether the employees have the necessary capacity to participate in decision making, majority indicated as moderate, while a small percentage indicated as very high. Further employees were asked whether they were reasonably involved in decision making where more than half indicated it was moderate, and only a small percentage said their involvement was very low.

The HoDs were asked whether all departmental staff members were competent in their subjects 66.7% of the HoD's responded in the affirmative. They further said that they would like their departmental members to be trained in management courses, others indicated training in guidance and counseling, training in ST & I would be appropriate and any other proficiency courses.

Further after training the teachers were required to state how they disseminated information, 58.33% indicated that they did this through co-operative teaching, briefing after training and others said they held workshops. The principals and deputy principals were asked to outline how they had implemented employee involvement in their respective schools; the results indicated that there was well defined responsibility and authority at 100%.

The study found that there was significant relationship between Employee Involvement and Academic Performance which has a correlation index of ($r= 0.611$). This correlation coefficient would have been higher if guidance and counseling was enforced, employees underwent regular training especially in proficiency and ST&I training as well as ensuring that there are appropriate tools, methods and techniques to monitor processes.

5.1.1.3: Influence of continuous improvement on academic performance

Responses received indicated that teachers gave students assignments at least once a week. The researcher also sought to know from those that confirmed they were given assignments how often the assignments were marked 54.5% confirmed that this was marked once a week. It was also critical to know whether the assignments were marked and feedback given 64.9% confirmed that they get their feedback.

The study also sought to establish what roles the prefect/ student body had been given which indicated that the roles included collecting assignments, conducting assembly, taking roll calls, solving class disputes and maintaining discipline respectively. As part of continuous improvement the teachers were asked whether they had ever attended in-service courses 78.3% indicated they had never attended any in-service course. The

researcher also sought to know the size of the school; the size of school was measured in terms of number of streams per class in order to establish the teacher's workload. It was found out that majority of the schools were single streams but with large student numbers.

Further from the data analyzed it was established that majority of the respondents indicated their class population was between 40-45 students. Further the respondents were asked what the teacher-student ratio in their school was and how it affected performance; the average teacher-student ratio was found to be 1:50 at 33.33%. The teacher-student ratio was found to affect performance in a negative way as huge teacher-student ratio led to poor results which was articulated to contact rate with teachers.

Further the study probed whether students completed assignments as required and a majority indicated that indeed students completed assignments and others did not. Among the reasons given were lack of time, lack of text books and lack of understanding of the work. However on a positive note students' attitude towards learning was positive. As part of their overall mandate to ensure that schools are run and managed on a daily basis the principals were asked how often they conducted staff meetings 50% indicated they conducted it twice a month.

The study found that there is significant relationship between Continuous Improvement and Academic Performance which has correlation index of ($r= 0.561$). Therefore, the study found that Continuous Improvement has significant relationship to Academic Performance in public secondary schools in Kajiado North Sub-County. From the data analyzed it was established that the students were given assignments at least once a week on the same no feedback was given on the assignments. However, the large teacher student ratio was found to reduce the correlation coefficient, this together with maintaining discipline seemed to act on this in the opposite direction.

5.1.1.4: Customer focus on academic performance

The students being the first customers to the schools were asked whether there were occasions they were left without teachers. They also confirmed that teachers are transferred from their schools at least once a term and when transferred they are replaced once a year.

Further the study found out more about physical facilities/ resources, the respondents indicated that classrooms were not adequate, desks and games facilities, games, laboratories were spread equally. As for school transport all respondents indicated it was not adequate and student text books were also spread across the board between being sufficient and insufficient.

The HoDs outlined as part of their mandate that much effort and energy was spent in delivering their subjects and check syllabus coverage monthly. Principals and deputy principals all agreed that their schools had a vision that they intended to achieve, and part of the vision entails syllabus coverage, maintaining discipline, extra- curricular activity and resource provision.

The study found that there is significant relationship between Customer Focus and Academic Performance which has a correlation index of ($r= 0.323$).The study found that Customer Focus has significant relationship to the Academic Performance in public secondary school in Kajiado North Sub-County. The poor correlation coefficient was as a result of inadequate classrooms and school transport, involving students in decision making and checking of syllabus coverage which had a poor index thereby contributing to the weak correlation coefficient.

5.1.1.5. Performance

The study sought to find out what the general behavior of students was and how it affected students' performance; the students' respondents indicated that there was average student behavior. Further it was established that the current student behavior contributed to average scores; of importance to note was student indiscipline was seen to

be the major contributor of poor grades, teacher- student ratio, student entry marks, teachers qualification and remedial classes would help improve student performance respectively. Group discussion and teacher- student ratio needed to be looked into. It was also noted that exams were done at least three times a term. The students also indicated that they had prize giving day at-least once a term.

Teachers indicated that there has been remarkable improvement and more than 50% agreeing that student discipline had been steadily improving; majority indicated that they are comfortable with the continued improvement and others were moderate in their belief that strategies put in place would ensure continued improvement.

Interviewed principals did acknowledge that entry marks for form one candidates does affect performance .It was established that the higher the entry mark in their KCPE examination the higher the grades are reflected in KCSE.

5.2: Conclusion

This section presents the conclusion from the study in comparison to what other scholars say as noted under literature review. Therefore this study, conclusion and lessons learnt will enable stakeholders as well as teachers / HoDs and Principals and Deputy Principals enhance performance in their respective schools. It can be concluded that indeed all the above objectives have been satisfactorily explored.

The study revealed that leadership has an influence on academic performance of public secondary schools in Kajiado North Sub-County. Leadership commitment ($r = .557$). This study has established that Principals and HoDs have not done much in deputy terms of monitoring what happens in their respective docket i.e. both principals/ principals and heads of department do not monitor syllabus coverage on a regular basis, they also do not conduct frequent meetings with their staff members to track progress which has led to laxity in terms of performance.

The study revealed that employee involvement has an influence on academic performance of public secondary schools in Kajiado North Sub-county. It was established that employee involvement had the strongest correlation to academic performance at a correlation coefficient ($r = .611$).

Participation of staff members in the management of the organization is required. Simplification of the school structure in order to focus upon the person closest to the learner (home room or classroom teacher) is necessary (Murgatroyd, 1991; Van Kradenburg, 1995). From the foregoing study it can be concluded that in as much as principal indicated they shared opinions openly the same was not evident in teachers giving suggestions freely this might lead to leaving out important suggestion that might lead to improved performance.

However in this case it can be seen that there some instances whereby teachers are involved in non-core duties such as being in tender committees which might eat into time that is crucial for service delivery. It was also established that parents were not so much involved since they are not direct implementers of TQM and lack of prize giving days denies them an opportunity to know some of the areas they can assist especially when students are not in school.

The study has revealed that continuous improvement has an influence on academic performance of public secondary schools in Kajiado North Sub-County. Continuous improvement ($r = .561$).Quang and Walker (1996) regards continuous improvement as "perhaps the most influential of TQM beliefs".

TQM seeks to provide the means to monitor, control, and improve production systems. Schools within Kajiado North Sub-County seem to be effectively implementing this as teachers give feedback to students once they have corrected their assignments, it was also established that they hold meetings to discuss action points that had been agreed before and teachers are expected to give feedback to school heads when given assignments. It

was also established that schools have taken initiative to implement suggestions as given by Quality Assurance Officers.

The study has revealed that customer focus has an influence on academic performance of public secondary schools in Kajiado North Sub-county. Customer focus ($r = .323$).

The selection, training and development of staff are critical to the success of any organization and warrants considerable investment (Beard, 1989; Dahlgaard & Dahlgaard, 2002). It was established that even though majority of teachers had not attended any in-service course they were willing to take up offers whenever this arose. Further whenever one had attended such training they shared what they had learnt in order to be able to share best practices with their colleagues.

5.3: Recommendation

The study would therefore make the following recommendations.

1. Principals to be more pro-active in checking students' progress, require accountability from teachers whenever they have been assigned duties and implement suggestions made by Quality Assurance Officer.
2. Principals and Heads of Departments to hold more frequent staff meeting/ departmental meetings in order to bring everyone up to speed and be involved in decision making in schools.
3. Teachers should learn to share best practices with others after training and the same to be documented for the purpose of knowledge institutionalization.
4. Schools are encouraged to have more academic days and prize giving days in order to track performance.
5. The Ministry of Education should make follow up on recommendations made by Quality Assurance Officers for implementation, improve on Teacher- student ratio among other necessary resources.

5.4: Areas for further Studies

The researcher recommends to those researchers who have an interest in Total Quality Management to conduct a detailed study isolating the individual independent variables in order to exhaustively establish how and to what extent each variable affects performance of Public Secondary Schools in Kajiado North Sub County.

Further the researcher suggests that a detailed study be conducted to establish the effect that principals have on performance either towards teachers or students academic performance.

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APPENDICES

Appendix I: Letter of Transmittal

University of Nairobi
P.O Box 30197-00100
NAIROBI

Dear Sir/ Madam,

**RE: QUESTIONNAIRE ON THE INFLUENCE OF SOME SELECTED TOTAL
QUALITY MANAGEMENT PRINCIPLES ON PERFORMANCE
OF PUBLIC SECONDARY SCHOOLS IN KAJIADO NORTH SUB
COUNTY.**

I am a postgraduate student at University of Nairobi undertaking Master of Project Planning and Management. I intend to carry out a research study on the above named topic.

Your assistance in responding honestly to all the items in the questionnaire is likely to generate data that will help in improving performance of schools Kajiado North Sub County.

Thank you for your co-operation.

Yours Faithfully,

Rose Karimi.

Appendix II: Questionnaire for Students

Kindly tick (✓) the appropriate response or respond as indicated.

Section A: Back ground Information

1. What were your K.C.P.E marks.... 200 – 250, 251 – 300, 301 – 350, 351 – 400, 401 – 450, 451 - 500
2. (a) What is the population of your class? 40- 45 45 -50 50-55 55-above

Section B: Leadership commitment

3. Does the principal ensure that teachers teach on daily basis? yes no
4. Does the principal check your exercise books? Yes no

If yes, how often is it done?

Twice a term Once a term Once a year Not at all

5. What is your school's vision (state).....
6. What is your class mean score target for end term exams? A A- B+
 B- C+

Section C: Employee Involvement

7. What is the general behaviour of students in your school?

Very good Good Average Poor very poor

8. How does students' behaviour affect academic performance?

Poor grades High grades

9. In your opinion, what three factors lower students' performance in your school?

Indiscipline Teacher –student ratio teachers qualification student entry behaviour

10. What do you think could be done to improve students' performance in your school?

conducting Remedial classes Group discussions

increase of teacher –student ratio

11. How many exams do you have per term/month one two none

12. Do you have prize giving days? If yes, please state how regular.

Once per term annually Never

13. (a) Do you have remedial classes? Yes No

(b) If yes, how often do you conduct remedial classes? Once per week

twice per week thrice per week every day of the week.

14. Do you have academic clinics? Yes No

(a) If yes, what is their frequency? Once a month twice per month

once per year

15. (a) Apart from academic clinics, are there other occasions when you deal with academics?

Yes No

(b) Please tick (√) the occasions when you deal with academics

Interclass competition Science congress exhibition

16. Do you hold discussion group/debates in school with other departments/schools?

yes No

(a) If yes, how often do you hold the group discussions in your class?

Once a month twice per month once per year

Section D: Continuous improvement

17. How often do teachers give you assignments and homework Daily once a week

18. (a). How often do teachers mark your assignment? Daily once a week Never

- (b) Do your teachers mark and give you feed back in good time? Yes No
- (c) Do you get time with your teachers to revise the assignments given? Yes No

19. When do you have games/sports? Daily weekly Never

20. The following are some roles given to your prefects/students body .Tick the appropriate.

Maintaining discipline Taking role calls Collecting assignments Solving classroom disputes conducting assembly)

Any Other (Please specify).....

Section E: Customer Focus

21. Are there times you are left without teachers in your classrooms? Yes No

22. (a) Are there cases of teachers transferred from your school? Yes No

(b)If yes, (i) how often are they transferred? once per term twice per term
 once per year never

(c) When transferred, how often are they replaced? once per term twice per term
 once per year never

23. (a) Do you have prize giving days? Yes No

(b)If yes, how often are they held? Termly Annually

24. Indicate the extent to which your school has the following physical facilities. The alternative choices are as follows:

	Physical facilities/Resources	Highly inadequate 1	inadequate 2	Moderate 3	Adequate 4	Highly adequate 5
A	Classrooms					
B	Desks					
C	Games facilities					
D	Library /laboratories					
E	Dining hall					
F	School transport					
G	Students text books					

Section F: Performance

Indicate the extent to which the following has affected performance in your school. The alternative choices are as follows:

		Very High 1	High 2	moderate 3	Low 4	Very Low 5
A	Student entry grade					
B	Discipline					
C	Teacher-Student ratio					
D	Teacher qualification					
E	Remedial classes					
F	Group discussion					
G	Number of exams done					
H	Prize giving days					

Thank you for your cooperation.

Questionnaire for HoDs

Section A: Demographic Information

1. What is your highest professional qualification?

PhD M.Ed B.Ed Diploma

Any other specify

2. Please give your age bracket 20-30 31-40 40-50 50 and above

3. What is the size of your classes? (State) 30-40 41-50 50 and above

4. What is the size of your school? Single stream Double stream Three streams

Section A: Leadership and performance

13. How would you rate your school’s leadership performance in the following areas?

		Very Low 1	Low 2	moderate 3	high 4	Very high 5
a	Setting Quality Policies					
b	Provision of Resources and Infrastructure					
c	Factual Decision making					
d	Empowering and Motivating Personnel					

Section B: Employee involvement

18. (a) Are all your departmental members competent in their subjects? Yes No

(b) If No, what areas of competence do you think they could be trained in?

ST&I Management courses Guidance & counseling

Any other.....

19. (a) Listed below are some of the problems faced by HoDs?

Please tick those applicable to you

Lack of teamwork poor grades Lack of support by leadership

Any other.....

b) How do you solve the problems you face? openly discussing issues disciplinary action Target grades per teacher please specify other.....

20. (a) Do your members actively seek opportunities to enhance their competence, knowledge and experience? yes No

(b) If yes, what opportunities do they ask for?

in service-training proficiency courses

Please specify any other.....

21. How do staff members share the knowledge acquired from the same with other departmental members?

Briefing after training Hold workshops Cooperative teaching

Please specify other.....

Section D: Continuous improvement

14. Do you play any part in planning school occasions? Yes. No.

If yes please tick against those you are involved in Prize giving days Academic clinics Educational trips any other.....

15. How regularly do you check syllabus coverage in your department?

weekly monthly termly never

16. How regularly do you hold departmental meetings?

weekly monthly termly never

17. Do you as the HoD compare your performance with other departments/schools?

Yes No

Section E: Customer focus and performance

5. Have you ever attended any in-service course? No Yes

If yes, please State.....

6. (a) Do you sign in and out in your school ? yes No

(b) In case you don't, are there any steps taken (please explain)

Disciplinary letter Report to principal

7. (a) What is the average teacher student ratio in your school?

1: 45 1:50 1:55 1:60 Any other.....

(b) How does the teacher student ratio affect student's subject performance?

poor grades high grades

8. How often do teachers give students assignments/homework?

Daily Once a week Once a fortnight Once a month

9. (a) Do teachers correct all the assignments at the intended time? Yes No

10. (a) What is the attitude of students towards learning in your school ?

Positive Neutral Negative

Section F: Performance

22. Indicate the number of students who scored the following grades in KCSE in the year 2014.

A.....

B.....

C.....

D.....

E.....

Thank you for cooperation.

Questionnaire for Principal/ Deputy Principal

Section A: Demographic information

1. Your age 21 – 25 years 26 – 30 years 31 – 35 years 36 – 40 years
 41 – 45 years 46 – 50 years 51 – 55 years 56- 60 years
2. What is your highest professional qualification? PhD M.Ed B.Ed
 Diploma.
Any other (Please specify).....
3. For how long have you been a Principal /deputy principal in your teaching career?
 1–5 years 6 – 10 years 11 – 15 years 16 – 20 years 21 - 25 years
4. For how long have you been a Principal /deputy principal in this particular school?
 1 – 5 years 6 – 10 years 11 – 15 years 16 – 20 years 21 - 25 years

Section B: Leadership and performance

5. As a Principal /deputy principal, how have you contributed to performance of this school? State how.....
6. Do you have quality policies in your school? yes No
7. (a) Do you have an organized students' body in the school? yes No
If you have a student's body, how did it come into existence? Give the choices
 election appointment
8. Whom do you involve in decisions making in school?
 students parents teachers sub ordinates

Section C: Employee involvement

13. For each of the statements provided covering employee involvement, please indicate Yes/No where applicable

		Yes	No
A	Staff have well defined responsibilities and authority		
B	Staff have competent personnel assignments		
C	Appropriate tools, methods and techniques to monitor processes are used		
D	Staff openly share issues and problems		

Section D: Continuous improvements

14. How regularly do you have staff meetings? Monthly once per term
 twice per term.

15. Do you ensure activities agreed upon are carried out and by designated individual?
 Yes No

16. a) Do they report progress? Yes No.

(b) If yes, what ways do they use to report their progress?

report writing staff meetings memos.

Any other (please specify).....

Section E: Customer focus and performance

9. (a) Do you have a vision for your school? Yes No

(b) Give ways which you apply the vision:

Syllabus coverage Maintaining discipline Extracurricular activities

Resource provision

10. How do you deal with conflicts among teachers?

reconciliation disciplinary action Ignoring

Any other.....

11. Do you have written rules and regulations? Yes No

12.(a) What is the minimum entry point that you use to select your form one students?

250-300 300-350 350-400 400-above

(b) Do you think it has any effect on K.C.S.E results? Yes No

If yes, how has it affected performance at KCSE ?

Negative neutral positive

Section F: Performance

12. Explain how teachers qualifications affects performance

.....

13. Does remedial classes help in improving students' performances?

If yes, please explain.....

14. a) How many exams do your students sit for?

2 3 other state.....

b) Do you think they affect performance?

If yes, please explain.....

Thank for your cooperation

Questionnaire for Teachers

Section A: Demographic Information

1. What is your age? 21 – 25 years 26 – 30 years 31 – 35 years 36 – 40 years
 41 – 45 years 46 – 50 years 51 – 55 years 56- 60 years.
2. What is your highest professional qualification? PhD MEd. B.Ed Diploma
3. For how long have you been a teacher in your teaching career? 1–5 years 6 – 10 years 11 – 15 years 16 – 20 years 21 - 25 years.
4. For how long have you been a teacher in this particular school? 1 – 5 years
 6 – 10 years 11 – 15 years 16 – 20 years 21 - 25 years .

Section B: Leadership

13. Outlined are some of the challenges that face academic performance in your school.
Tick where appropriate lack of team work Leadership inadequate resources
 Any other.....
14. How would you rate the application of Total Quality Management in your school?
Below 50% 50%-60% 70% - 80 % Over 80%
15. Do you freely discuss school issues and progress with the top leadership? Yes
 No
16. How often is your school inspected by Quality Assurance Officer from the Ministry of Education? Once per term Twice per term once per year Never
17. How would you rate implementation of recommendations from Quality Assurance Officers?
Below 50% 50%-60% 70% - 80 % Over 80%

Section C: Employee involvement

8 The following are some of the activities that teachers may be assigned by the leadership to perform. Indicate by a tick (√) the ones that you do

Tendering process Discipline Academic planning Guidance and counseling

9. Using Likert scale given, Place a tick (√) against the statement that best describes how you rate your school performance on employee involvement. The scoring is as follows:

Very Low [1], low [2] , Moderate [3], High [4], Very high [5]

A	Employees regularly undergo training as part of TQM efforts	
B	Employee have the necessary capacity to participate in decision making in school management	
C	Employees are reasonably involved in decision making process.	

Section D: Continuous improvement

5. Have you ever attended an in-service course? Yes No.

6. What is the size of your school? Single stream Double stream three streams
 four streams.

7. To what extent do you think the school has been able to achieve Continuous improvement? The scoring is as follows:

Very Low [1], low [2], Moderate[3], High [4], Very high[5]

a	There has been remarkable improvement in Academic performance	
b	There has been a decrease in number of complaints from stakeholders	
c	The students discipline has been improving steadily	
d	I am comfortable with the continued performance of the school	
e	I believe the strategies in place will ensure continued improvement	

Section E: Customer Focus

11. Using Likert scale given, please tick (√) a number (from 1-5) that indicates how you rate your school on academic performance.

Customer Focus		Very low	Low	Moderate	High	Very high
		1	2	3	4	5
A	Customer care and public relations					
B	The staff is reasonably motivated					

C	Students are involved in decision making concerning their affairs					
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12. How would you rate your school in terms of handling students' issues?

Below 50% [] 50%-60% [] 70% - 80 % [] Over 80% []

Section F: Performance

13. Does Teacher- student ratio affects performance?

If yes, please explain.....

14. Do group discussions improve performance?

If yes, please explain.....

15. Explain how prize giving days help in improving performance

a).....

b).....

c).....

Thank you for your response.

Appendix III: Table for determining sample size

Table 3.2 Sample size for $\pm 3\%$, $\pm 5\%$, $\pm 7\%$ and $\pm 10\%$ Precise level is 95% and P = 5

Size of population	Sample Size (n) for Precision 9(e) of :			
	+ or - 3%	+ or - 5%	+ or - 7%	+ or - 10%
500	A	222	145	83
600	A	240	152	86
700	A	255	158	88
800	A	267	163	89
900	A	277	166	90
1,000	A	286	169	91
2,000	714	333	185	95
3,000	811	353	191	97
4,000	817	364	194	98
5,000	909	370	196	98
6,000	938	375	197	98
7,000	959	378	198	99
8,000	976	381	199	99
9,000	989	383	200	99
10,000	1,000	385	200	99
15,000	1,034	390	201	99
20,000	1,053	392	204	100
25,000	1,064	394	204	100
50,000	1,087	397	204	100
100,000	1,099	393	204	100
>100,000	1,111	400	204	100
a = Assumption of normal population is poor(Yamane,1967).The entire population should be sampled				

Source: Krejcie and Morgan (2003)