BENCHMARKING AND PERFORMANCE IN PUBLIC SECONDARY SCHOOLS IN NAIROBI PROVINCE

LITUNYA ROSE AMBULA

A Management Research Project submitted in partial fulfillment of the requirements for the degree of Master of Business Administration (MBA), School of Business, University of Nairobi.

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DECLARATION

This management project is my original work and has not been presented for a degree in any other University.

Signed: ----RMbula--------------------- Date: ---2/11/2006--------

Litunya Rose Ambula

D61/P/7002/03

This management project has been submitted with my approval as University supervisor.

Signed:------------------------------- Date:------------------------------

Dr. Martin Ogutu
Department of Business Administration,
University of Nairobi.

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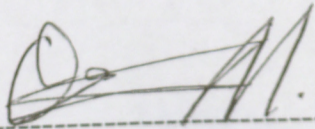
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Department of Business Administration,
University of Nairobi.

i

DEDICATION

To my late parents
Elijah O. Ambula and
Ruth K. Ambula
Whose love for education and wholehearted
Support encouraged me to pursue higher education

To my sister
Joy K. Attogo
Who underwent pains to ensure I got
the best in education

To my husband
Billy L. Aseka
Without whose support I would not have made it

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF ABBREVIATIONS

KCSE	:	Kenya Certificate of Secondary Education.
KNEC	:	Kenya National Examination council.
MOEST	:	Ministry of Education Science and Technology.
KIE	:	Kenya Institute of Education.
KNUT	:	Kenya National Union of Teachers.
KESI	:	Kenya Education Staff Institute.
TSC	:	Teachers Service Commission.
KCPE	:	Kenya Certificate of Primary Education.
PTA	:	Parents Teachers Association.
HOD	:	Head Of Department.
UON	:	University Of Nairobi.

ABSTRACT

The major purpose of this study was to document the extent to which secondary schools use benchmarking and establish whether those that use benchmarking have realized improved performance in KCSE. To achieve this purpose, a survey was done to collect both primary and secondary data. A sample of thirty five (35) secondary schools was randomly selected. Thirty one (31) secondary schools responded, a very high response rate of 86 percent. The study was carried out in Nairobi Province. The data was collected using questionnaires administered to deputy head teachers and deans of studies of the participating schools. Analysis was done using statistical package for social sciences (SPSS) and presented in the form of percentages, means and frequencies.

The study revealed that most secondary schools practice benchmarking to a very large extent in areas such as discipline, parental involvement, motivation, leadership, teaching and learning resources. The major drive of adopting best practices from high performing schools is to: improve performance, create a culture based on improved performance outcomes, inject best practices into the operations of a school, get the best out of staff, processes and programmes and lastly provide quality education. The three most critical factors influencing the choice of benchmarking tools are: the objectives to be achieved, time and resources available and compatibility with local conditions and the school's processes.

The research further established that schools that use benchmarking have realized improved performance. The performance has been improving from 0.1 points to one point over the last six years (from 5.633 to 6.379). The correlation coefficient between the extent of benchmarking and improved performance in KCSE is -.647. There is a strong positive correlation of approximately 0.96. The significance is under 0.05 (.003). This indicates that benchmarking is an important tool in realizing improved performance.

The researcher recommends that school managers should consider the objectives to be achieved, time and resources available and compatibility of best practices to a school's processes before embarking on a benchmarking exercise. Parents should also cooperate and support school programmes. The Ministry of Education should come up with a formal structure, which could assist school managers to systematically and continuously adopt best practices from high performing schools. This will eventually lead to improved performance of students in national examinations.

For further research, the researcher recommends a similar study should be conducted in other companies outside the education sector to determine the extent of using benchmarking as a performance improvement tool. This study was done in one province. There is need to replicate the study in other provinces in Kenya. Future studies could include other factors that affect performance other than benchmarking.

CHAPTER ONE: INTRODUCTION

1.1 Background

There are various definitions of benchmarking. Thompson and Strickland (2003) define benchmarking as a tool that allows a company to determine the manner in which it performs particular functions and activities which represent industry 'best practices' when both cost and effectiveness are taken into account. Benchmarking is therefore a systematic search for best practices. School benchmarking refers to a search for best practices through the systematic and continuous study of the best available teaching and learning processes from other better performing schools and using them as a standard for improving the school's own processes (School Management Consultants, 2004).

In this regard, benchmarking is a technique of injecting best practices into the operations of a school, which will lead to superior performance through emulating the performance of other leading schools and continuously implementing appropriate changes. The objective is to create and sustain excellence (School Management Consultants). In the global market for education, there are competitive advantages in establishing and maintaining a reputation for providing good quality education and high academic standards (Jackson, 2001).

For schools to be able to provide quality education, they need to benchmark their educational processes and practices against other better performing ones countrywide. Since public schools are under pressure to become competitive, benchmarking is increasingly becoming an acceptable management tool among school principals who wish to improve their performance. Benchmarking denotes an attitude of mind that is intellectually curious, penetrating, objective and impatient for improvement (Brennan, 1995). It represents an opportunity for schools, to freely and genuinely share values, ideas and practices.

Benchmarking is therefore a strategic approach to getting the best out of people, processes and programmes in a school. Its basic purpose is to expose the school principal and staff members to different ways of doing things so as to encourage creativity and innovation in all educational functions (School Management Consultants, 2004).

Every year after KCSE results are released, many schools which perform poorly begin to ask themselves where they went wrong and how they can improve in the current year. Self-improvement in itself is not sufficient. Instead of concentrating on self-improvement, they can study best performing schools and adopt best practices (Kotler, 2003). The goal is to study how best performing schools carry out specific educational functions and use the information gathered to effect internal changes to improve performance to the same level or if possible exceed high performing schools.

Thus, the power of benchmarking lies in the impetus it might give to 'breaking the frame' and conceiving new ways of meeting and beating the performance of the best (Johnson and Scholes, 2003). Benchmarking enables the school principal to create targets that are high enough and those that can help create a culture based on improved performance outcomes (School Management Consultants, 2004). Targets give meaning to performance measures and assist in driving the organization towards continuous improvement. Targets should be challenging, attainable, geared towards the customer (student) and consistent with the mission and objectives of the school (Kyungu, 2002).

Effective benchmarking should focus on new ways and means of providing educational services that conform to the requirements and expectations of the school's customers (students) in a never-ending performance improvement cycle in all the school's departments. The dynamism of benchmarking indicates that students are committed to the process of learning more about themselves through learning about others (Jackson, 2001).

1.2 The link between Benchmarking and Performance

A school which intends to improve its academic performance should focus on improving specific education functions. This means that school principals need to understand performance standards; what constitutes good and poor performance and benchmarking is widely used in this understanding. Similarly, performance measures, such as efficiency and effectiveness of a school, can be compared against similar measures from other schools. This analysis uncovers best practices that can be adopted for improved performance (School Management Consultants, 2004).

According to Johnson and Scholes (2002), the power of benchmarking lies in shaking school principals out of the common belief that improvements in performance arise from gradual incremental changes in resources or competences. This is far from truth in regard to challenges faced by organizations in the twenty first century. Public schools face threats from private schools that achieve dramatic performance by ensuring performance standards are not compromised.

For service organizations like high schools, the issue of improved performance for all its educational functions shifts the general level of expectations of students from other schools. Benchmarking can be used to sport opportunities that dramatically outperform high performing schools that are particularly competent at certain activities (Johnson and Scholes, 2003).

Benchmarking can therefore be used to measure, evaluate and subsequently improve on a variety of educational processes in the school. These include: mode of service delivery, curriculum implementation, discipline, parental involvement, leadership, motivation, teaching and learning resources among others.

1.3 Secondary Schools in Nairobi

Provincial and district schools in Kenya enroll the majority of students who qualify for secondary school education. This is because there are only ten national schools in Kenya. Most provincial secondary schools have great disparities in performance despite availability of similar resources and admitting students of equal entry scores. The current system of education in Kenya popularly known as the 8-4-4 system consists of eight years of primary education, four years of secondary education and four years of university education.

According to the Ministry of Education Master plan on Education and Training (1997 - 2010), secondary education is the most critical since at the end of their four years in school, students sit for KCSE examinations. Performance in this exam is used for selection into university and institutions of higher learning. Students who successfully complete higher education join the job market where they can utilize their skills, knowledge and competence. Kenya's education system is so much examination-oriented that right from primary school, the pupil is made to understand that success only comes when one is able to competitively pass well in all national examinations (Bett, 1986).

The demand for quality education in Kenya is therefore crucial and has led to stiff competition among secondary schools both public and private. This is because quality and affordable education form the window of hope for poverty eradication and combating other evils in society. It also contributes to equity, economic growth and expansion of employment opportunities (MOEST, 1997).

The Ministry of Education plays an important role in the provision of this quality education. The Ministry gives maximum support to education by providing financial and material resources for teacher training programmes, teachers' salaries, supervision and inspection of schools among other activities. It also organizes curriculum review to ensure that education is focused towards dynamic, social and economic needs of the country

(Njuguna, 2004). Kenya Institute of Education (K.I.E.) is charged with the responsibility of curriculum review and development.

The Teachers Service Commission (T.S.C.) is charged with the responsibility of hiring, posting, transferring, retiring, firing and remunerating teachers in both primary and post primary institutions. Olembo (1992) observes that where an individual or group of teachers is dissatisfied with the action taken against them by the Commission, they can appeal through the Kenya National Union of Teachers (KNUT).The Kenya Education Staff Institute (KESI) was established through the assistance of World Bank to facilitate professional growth of education personnel. Its major objective is to provide in-service education to teachers and education administrators (Olembo, 1992).

1.4 Performance in Secondary Schools

For many years, examinations have been accepted as an important aspect of our educational system. They are used as the main basis for judging students ability and as a means of selecting students for higher education and employment (Muola, 1990). At the end of 8 years in primary schools, the pupils are meant to sit for KCPE examination, which will enable them join secondary school. Those who attend secondary school sit for KCSE at the end of four years. KCSE is a very important component of our education system and can be used to raise as well as answer many questions of professional nature (Education Insight, 2006).

Poor performance in KCSE therefore undermines students' chances of joining institutions of higher learning and minimizes opportunities for job placement, hence limiting their contribution to national development (Kivuva, 2004). Alternatively, students are left with the option of joining parallel degree programmes, which charge exorbitant fees; while others rush to undertake university education across the boarder.

It has already been observed that there is a lot of variation in the performance of students in KCSE. Many students do poorly despite the fact that they follow a common syllabus, are exposed to similar facilities and are taught by qualified teachers who have the required

experience. Selection criterion of candidates joining form one has been cited as one of the reasons behind performance disparity in secondary schools. Poor performance in most schools could also be attributed to poor time management and lack of a developed result oriented culture (Education Insight, 2006)

The poor performance of students in KCSE has drawn the attention of the government, educationists, teachers, administrators, researchers, parents and even students. According to Eshiwani (1983), poor performance leads to undesirable wastage through dropouts and repeaters. It also denies pupils the continuation of schooling through the formal system of education. Several factors have been cited as crucial in determining the performance of students in KCSE exams. Some of these factors arise from the process of teaching and learning, others from the home environment while others from candidates taking the examination. This study focuses on the teaching and learning process and other related factors such as discipline, leadership, motivation and parental involvement.

Eshiwani (1993) argues that school resources such as school administration and management, text books, physical facilities, teacher characteristics and student traits are major factors contributing to poor performance. Olembo (1977) noted that the quality of a head teacher in a school matters in students' performance. He argues that the way the head teacher structures and administers the school his relationship with teachers and students has a strong effect on students' performance. Hence; the importance of the head teacher being actively involved in the teaching and learning process by comparing educational functions in his school to those of high performing schools cannot be underestimated. While these factors have been recognized as possible contributors to variation in academic performance, little research has been done to show the role played by any one of them in the Kenyan context.

The current research attempts to find out whether benchmarking can make a positive change to educational functions; hence contribute to better academic performance. In this regard, a school must seek leading schools in specific educational processes, study them thoroughly and borrow ideas that will improve its operations.

The table below indicates a sample of schools that have consistently done well in KCSE in the last five years and could be used as a basis of comparison.

Table 1:1 Nairobi Province KCSE Results for Selected Schools 2001- 2005

	Name of School	MEAN SCORE				
		2005	2004	2003	2002	2001
1.	Starehe Boys Centre	10.441	10.574	10.549	9.859	10.233
2	Precious Blood -Riruta	10.241	9.966	10.764	10.663	10.205
3	Kenya High School	9.929	9.515	9.242	8.990	9.234
4	Pangani Gils School	9.735	9.299	9.540	9.381	9.360
5	Lenana Boys School	9.218	8.525	8.386	8.684	8.320
6	Moi Forces Academy	9.054	8.747	8.404	8.696	8.527
7	Nairobi School	8.514	8.878	8.825	8.934	8.301
8	Moi Girls School	8.444	8.749	8.367	8.393	8.17
9	St.George's Sec. School	8.333	8.335	8.550	7.758	8.33
10	Buru Buru Girls School	7.993	8.386	8.165	8.088	7.94

Source: Kenya Secondary Schools Heads Association; 2005 KCSE Results Analysis.

Many a times we decry these tables in public but privately we look at them keenly and are curious about what they might tell us. What exactly do these schools do to maintain top position? We are tempted to study their programmes and attend their school functions in order to learn something from them. However, we need a more positive strategy to ensure survival based on the quality of both our processes and products.

1.1 Statement of the Problem

For several decades now, the best performance in the national examinations has remained a preserve of some schools. Every year when the Kenya Certificate of Secondary Education results are released it is not surprising to find 'traditional academic giants' taking a leading position. Most of these schools are mainly national schools, leading private schools and selected provincial schools. The disparity in performance has always elicited sharp reactions from parents and educationists seeking to understand the reasons behind the trend and what should be done to improve performance in all schools. Similarly, schools that perform poorly are concerned about the position they take and many desire to work hard and appear among the top ten nationally. This has led to a number of schools resorting to benchmarking to identify what the high performing schools do in order to improve their own performance.

Although some scholars (School Management Consultants, 2004) have argued that benchmarking must be de-linked from student's level of achievement, evidence on the ground indicates a possible link between benchmarking and academic performance in KCSE. It is not uncommon to find principals of various schools visiting high performing schools to borrow best practices in the hope that this may help improve their own performance. Indeed several schools have testified that benchmarking has helped them improve educational functions hence realized excellent results. Unfortunately no empirical work has been done focusing on the relationship between benchmarking and performance.

However; benchmarking has been widely studied across European, Japanese and American industries. Main (1992) observes that General Motors, a highly profitable European Corporation, always benchmarked before making an investment. In a survey of 580 organizations worldwide from four industries: computers, autos, hospitals and banks, the American Quality Foundation and Ernst and Young found that 31% of US firms regularly benchmarked their products and services, only 7% did not. By 1979, the Japanese are known to have been copying by traveling around and watching what others did and

checking with related companies. The Toyota production system is seen as a precursor of benchmarking.

Various studies, reviews and reports by the Ministry of Education in collaboration with development partners have been undertaken. However, most of them are of a general nature and lacking in analysis. They do not provide clear and specific intervention measures to address the concerns of the education sector. Others have come up reports on changes that need to be implemented without involving those who are to implement. Findings from other reports (Kamunge Report, 1980) have not been accepted. Since benchmarking is done by teachers and students who practically study best practices and are involved in implementation, it is an effective way of securing commitment to effecting changes in the school.

Viewed in this light, benchmarking is one of the ways secondary schools can realize improved performance yet most schools are not aware of the technique and few are using it informally. For many reasons, teachers in secondary schools tend to spend longer in the same institution and they need opportunities to compare and contrast teaching methods which would lead to the development of quality education (Brennan, 1995). For instance; the introduction of entry exams at the beginning of every term is an idea copied from various schools to enable students revise over the holidays and also settle down fast once schools open.

Recent studies done by the other scholars concentrate on performance (Kivuva, 2004), discipline (Muchiri, 1998), motivation (Muola, 1983), school drop out (Michieka, 1983), leadership (Birundu, 2003) and other related factors but none so far has been done on benchmarking. In this regard, the researcher decided to carry out a study on benchmarking and performance in public secondary schools to determine the link between the two variables with a view to recommending a formal system being introduced. The questions which will be addressed in this study are: To what extent do secondary schools use benchmarking? Have secondary schools that use benchmarking realized improved performance in KCSE?

1.2 Objectives of the Study

1. To determine the extent to which secondary schools use benchmarking.
2. To establish whether secondary schools that use benchmarking have realized improved performance in KCSE.

1.7 Importance of the Study

1. This study will provide insight into the benefits of using benchmarking as a tool for improved performance in secondary schools
2. Research findings will also stimulate further research into various strategies that can be used for continuous improvement in schools.
3. Educators, school principals, teachers and students will benefit from the findings and recommendations of this study in selecting best practices that can be adopted in secondary schools.

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction

This chapter is organized into the following sub-sections: the concept of benchmarking, the benchmarking process, benchmarking practices, benefits of benchmarking, constraints of benchmarking, performance in high schools, factors that affect performance and the link between benchmarking and performance.

2.1 The Concept of Benchmarking

The term benchmark was originally used in surveying to denote a mark on survey peg or stone that acted as a permanent reference point against which the levels of various topographic features could be measured. Its purpose was to denote excellence or a mark of distinction in a product or service (Jackson, 2001). Benchmarking came into fashionable use in the 1990's to describe performance assessment and improvement. It has since spread from its North American origin to many countries of the world. In education, benchmarking was first noted in United Kingdom higher education with reference to standards of students (Jackson, 2001) It has been recognized by competitive organizations as a process of maintaining continuous improvement through examination, measurement and adoption of internal and external practices (School Management Consultants, 2004).

A benchmark is a standard by which to measure performance that clearly stipulates the conditions, which must exist for a task to be regarded as well done. According to R.K Melton in Jackson (2001), standards represent benchmarks with which students compare their ability and performance. There is need for teaching and learning processes to be based on a common purpose and philosophy, designed to achieve good practice and to ensure continuous quality improvement (Henderson-Smart, 2006).

Benchmarking singles out those practices that have proved to be superior in a given area. By finding examples of superior performance in other organizations and understanding the best processes and practices driving that performance, organizations can improve their own performance and tailor these examples to their own situation (Belle, 2000). According to

Summers (2000), benchmarking can be done at several layers of complexity. A company that hopes to learn how they are currently performing does a perception benchmarking assessment. This type of benchmarking focuses on internal issues, seeking to answer questions related to the management and quality improvement process.

Companies seeking ISO 9000 award or national quality award may choose to perform a compliance benchmark assessment. This in-depth benchmarking process verifies a company's compliance with stated requirements and standards. An effectiveness benchmark assessment, investigates the effectiveness of the quality system a company has designed and implemented. The fourth type of benchmarking assessment deals with continuous improvement; it puts into place systems that support continual improvement on a daily basis. Comparing one's performance against those companies judged best in their field could be a powerful tool of improvement. This is the kind of benchmarking that this study wishes to undertake.

The practice of benchmarking is widely used by major service organizations such as: hotels, banks, transport companies, hospitals, airlines and many others. It is legal and enables an organization to establish operating goals and performance objectives based on the best practices in the industry (School Management Consultants, 2004).School benchmarking enables school managers adopt best practices and subsequently establish performance standards and work processes in their own schools to match or where possible exceed external best practices. It is a strategy that enables people to think outside the boxes they inhabit such as departments, service or functional units or institutions. Failure to learn about the strengths of best performing schools leads to complacency and hence performance decline. The table below indicates the difference in performance between schools that benchmark and those that do not.

Table 2.2   Difference in Performance between Schools that Benchmark and those that Do Not

Performance	Without benchmarking	With benchmarking
Becoming competitive	The school is internally focused. Any change occurring is evolutionally in nature	The school has a better understanding competitiveness; Acquisition of new ideas is from proven practices
Education best practices	Availability of few solutions; Frantic catch-up activity	Availability of more options; Superior performance of many Activities and processes.
Defining customer (student) requirements	Based on the school's history; Based on perceptions, which may be biased.	Based on existing educational reality; Based on objective evaluation
Establishing effective goals and objectives	Lacking external focus; Reactive to situations	Originating from credible and unarguable sources; Proactive in nature
Developing true measures of performance outcomes	Pursuance of pet projects; strengths and weaknesses therein not understood; High probability of taking the route of least resistance	Solving real problems; Undertaking outputs and outcomes; Decisions are based on best educational practices

Source: School Management Consultants: Benchmarking, 2004

2.2   The Benchmarking Process

During a benchmarking process, a company compares its performance against a set of standards or against the performance of the best-in-its-class companies. Information gathered from the comparison can be used to improve its own performance. Benchmarks serve as reference points (Summers, 2000). The first step in benchmarking is to understand the firm's processes in detail (Main, 1992). This should lead to identifying specific areas that should be improved and selecting a project team among staff members who can carry out this task. The information gathered during the benchmarking experience should

support the organization's overall mission, goals and objectives (Summers, 2000). Camp in Main (1992), recommends that the benchmarking team should be made of three people, while one asks a question, another takes notes and the third thinks of the next question.

Once areas that need improvement are established, the organization can determine performance measures; factors for the company to remain competitive. These factors will be supported by standards, procedures, processes and behaviours (School Management Consultants, 2004). Effective benchmarking is done with the customer in mind, both present and future. It is therefore important to collect data regarding the customer's needs and determine areas of priority. Summers (2000) suggests, information concerning internal and external customers and their inputs is vital to achieve an understanding of a system under study.

The next step in the benchmarking process is to determine who the organization wishes to compare itself with. The choice can be made by considering the activities and operations under investigation, the size of the company, the types of customers, types of transactions and other factors. Methods used for collecting data may include discussions and brainstorming to uncover related best practices. Once the data is collected, it should be analyzed for consistency, relevancy, organization and completeness. The benchmarking team should be able to generate a clear picture of where the company stands, identifying gaps and priority areas that need improvement.

The next step is to develop goals and plans to implement desired improvements on the areas that require urgent attention. It is important to have a team leader who can oversee the benchmarking initiative and provide critical input for implementation (School Management Consultants, 2004). The areas that have been chosen for the benchmarking assessment should be notified prior to start of the process. The authorization to proceed with the process should be obtained from the highest level of the company to ensure cooperation (Summers, 2000). The benchmarking team can then collect and analyze data pertaining to performance measures initially established. A report summarizing the significant strengths and weaknesses of the area under study is created. The gap between

14

the existing and desired levels of performance is then documented. The final report, which includes recommendations for improving the process, becomes a working document to aid the continuous improvement process.

The best way to benchmark is to make continuous improvement in small steps. This ensures that the competition does not overtake the organization adopting this strategy (Arendt, 2006). Leandri (2005) makes a similar observation. To have an impact, best practices must be regularly disseminated and applied when an organization is faced with a business challenge to avoid reinventing the wheel.

2.3 Benchmarking Practices

Benchmarking is based on adopting best practices. These are means by which leading companies have achieved top performance and serve as goals for companies striving for excellence. Leandri (2005) argues that adopting best practices to your specific needs can dramatically affect performance leading to breakthroughs that save time, improve quality, lower cost and increase revenue.

Andersen, Kearney and Perrin (2005) have set up groups of companies that benchmark each other regularly. Members can share information about best practices without sources being identified. For instance, many companies are said to have visited Ford to determine how benchmarking improved the handling of accounts payable (Powers, 2004).

In order to understand what practices are necessary to reach world class standards, many organizations have begun to use benchmarking as a way of acquiring knowledge. This is achieved through a regular and documented worldwide scan for organizations that are skilled at what they do, regardless of industry (Garvin, 1991). These kinds of association promote the exchange of in-depth and highly specific ideas and practices that have been successfully used by other organizations. These best practices include: speed of delivery, research and development, technology, the process of production, marketing, cost of training among others. In a school setting best practices can be identified in core

educational functions such as school administration, mode of service delivery, parental involvement, motivation, discipline, teaching and learning resources.

2.4 Benefits of Benchmarking

The primary benefit of benchmarking is the knowledge gained as to where a company stands when compared against standards set by its customers, itself or national certification requirements (Summers, 2000). Robert Camp who pioneered benchmarking at Rank Xerox combined the process of "finding and implementing best practice" with the reason for doing it to improve work processes that would satisfy customers. One of the benefits of benchmarking is that it enables a firm to cut costs of production. Kugler (2006) observes that organizations which evaluate and measure program costs, attachment points, market capacity and retentions; ensure cost reduction and minimum losses.

Benchmarking offers a way of identifying "better and smarter" ways of doing things and understanding why they are better or smarter. On its first attempt at benchmarking, Xerox discovered that the best way to cut down on costs was to study competitions' costs and processes. Xerox successfully adopted Japanese manufacturer's best practices with considerable success. A similar study was carried out on Bean's firm that outfits the outdoor set. It was revealed that the secret behind bean's success was based on intelligent planning and using the right kind of computer software to fulfill orders quickly and accurately (Main, 1992). St. Johns hospital is a good example of how benchmarking and related practices have saved the hospital millions of dollars and improved its financial performance.

Benchmarking can be used to identify both strengths and weaknesses within a firm and has been a core part of improvement for many years. Summers (2000) argues that benchmarking as a strategy can identify strong assets within the company as well as opportunities for improvement. Most quality assurance certifications involve discovering how the company is currently performing strengthening weaknesses and then verifying compliance with certification. Companies can use the report findings to conduct cost benefit analysis to determine possible solutions.

One of the key indications of successful organizations is financial performance. Financial performance defines how well a company is performing but does not explain why it is performing that way. Benchmarking can answer this kind of question as organizations compare processes and identify performance gaps and areas for improvement. Benchmarking can also be used as a goal setting process to achieve improved performance and learning (Venetucci, 1992). It is an effective tool for planning and implementing change processes that lead to organization improvement when knowledge gained is converted into a detailed action plan to achieve competitive advantage (Pryor and Katz, 1993). Benchmarking speeds up an organization's ability to make improvements. Managers can eliminate trial and error process improvements.

Practising benchmarking focuses on tailoring existing processes to fit within the organization (Boxwell in Lankford 1997). Leandri (2005) makes a similar observation. The idea of looking outside one's industry for creative inspiration and breakthrough ideas is one of the most intriguing benefits of best practices and a key reason why the study of the best practices remains a vital strategy for business improvement. Belle (2000) makes a similar observation by finding examples of superior performance in other organizations and understanding the best processes and practices driving that performance, organizations can improve their own performance and tailor these examples to their own situation.

In a school setting, benchmarking leads to enhanced performance in educational processes. It enables a school to be efficient and cost effective in order to optimize the resources available to support learning. It also facilitates the setting of higher standards by ensuring improvement targets are set high enough. Benchmarking can help a school define objectives more clearly, manage resources with greater focus and monitor performance more objectively (Brennan, 1995). It provides an opportunity for everyone in the school to think competitively with regard to the education enterprise. A competitive advantage is achieved and maintained in the school within a framework of efficiency and effectiveness. It also helps identify improvement opportunities, which may be otherwise unknown to the school (School Management Consultants, 2004).

2.5 Constraints to Benchmarking

Benchmarking can only be effective if a firm chooses meaningful comparisons and the measures to apply. If this is not carefully done, the results could be more damaging than helpful to one's business (Dairy Farmer, 2004). Benchmarking is not easy. It required making breakthroughs and half-hearted managers may not succeed in using this strategy.

Benchmarking can only be effective if organizations are willing to share information on best practices. Some organizations prefer to hoard information so that others do not outperform them (Leandri, 2005). Similarly, it is not easy to identify a willing partner to participate in the benchmarking exercise. Most companies fear they could lose their competitive advantage if they shared information. Another difficulty experienced is that benchmarking often ends at the analysis stage with no steps being taken to implement the best practices identified. This may occur for a number of reasons such as: short term cost, staff morale, perceived difficulty and these often relate to organizations' size and complexity.

In school setting, some of the constraints of benchmarking include the following: Mechanisms of the process may overshadow the benchmarking function and may result in changes in education outcomes that are unintended and consequently dysfunctional. Similarly, if the general purpose of benchmarking is flawed, it can set off a re-orientation of strategies that are flawed and will not generally lead to better educational outcomes. Benchmarking does not identify reasons for good performance in the target school since it does not compare competencies directly. In this case, the benchmarking team will need to take time to observe and understand how the target school undertakes its education processes and assess if this could be adopted or improved upon. Benchmarking may also become flawed if the school principal authoritatively decides on education processes to be benchmarked without allowing staff on the ground to decide on what they feel is deficient and require that benchmarks be borrowed externally (School Management Consultants, 2004).

2.6   Factors that Affect Performance in Schools

2.6.1 Parental Involvement

Parental involvement in the students work has been identified as a factor that affects students' performance. In a study done by Kapila (1976), a positive association between parent's participation in the child's study conducted on 571 standard seven pupils from four different regions (Nairobi/Kiambu, Mombasa/Kwale, Kisumu and Meru) found low and negative relationships between parent's support and pupil's performance in CPE and KCE examinations.

A study by Comer and Haynes in Ndiritu (1991) report parental participation in a child's education as essential for effective learning and teaching. A school provides learners with opportunities for positive interactions with adults (teachers) and other school children, which can be transferred to the learner's home environment. Parental participation has also been stressed by Griffin (1996). He pointed out that parental involvement is an important element in learner academic achievement and this is consistently correlated with high academic achievement. The amount of work a teacher is supposed to do while in school hinders meaningful relationships with children as the teacher focuses more on the pupil than on the child (Brennan, 1995). Constant parental involvement is therefore necessary.

Studies by Kapila (1976) in Nairobi revealed that children whose parents made solicited visits to the school do better academically than those whose parents did not pay such visits. A similar observation was made by Okwir-Akana in Muola (1983). He suggested a positive relationship existed between students' performance and parental encouragement. In his study, Okwir-Akana found out parents' socio-economic status, the child's education aspirations and attitudes of parents towards education are significantly related to the child's academic performance.

A study by Michieka (1983) on causes of school drop out in Kisii, identified parental involvement in the student's work as a factor that affects performance. A positive association between a parent's participation in the child's schoolwork and academic

performance exists. Parents' level of education has also been cited as being related to students need to achieve. In a study by Kitivo in Ndiritu (1999) the relationship between secondary school students need to achieve and the educational level of their parents was analyzed. Results from the study indicated a significant and positive correlation between parents' level of education and students' desire to excel.

One of the ways in which parents can get involved in school activities is through Parents and Teachers Association (PTA). The increasing need for PTAs has been brought about by reduced government funding of schools and the introduction of cost sharing in financing secondary education. Effective parent involvement can be enhanced through closer cooperation between parents and school management. The school must convince parents that they are meeting their objectives by maintaining good discipline and high academic standards in order to enjoy more support from them (Okumbe, 2001). Maintaining a close relationship with parents and taking time to explain different aspects of the school will result in a cordial and trusting relationship (Bakhda, 2004). Parents want to be assured that their children are in the hands of people who are committed to their academic, physical and spiritual growth.

2.6.2 Discipline

One of the goals of education is to transmit skills, knowledge, norms and values from generation to generation and to enable students form social personalities. Thus Eshiwani (1993) notes "education aims at socializing individuals to fit into their society, to function adequately within it when they become adults". In this regard, education must be used as an instrument for conscious change of attitudes and relationships, preparing children for changes required by modern methods of productive organization. Discipline cannot therefore be divorced from education. Discipline enables students to concentrate on their studies and nurture certain values demanded by the society in which they live. Charles in Muchiri (1988) observes that discipline helps students do those activities for enhancing their education while limiting those behaviours that are self-defeating. The Principal of Precious Blood Riruta attributes continued success to staunch adherence to basic principles, hard work and dedication which both teachers and students have developed and

maintained over the years (Education Insight, 2006). During orientation, new students are given some critical lessons on the importance of proper attitude in life. Students require discipline for positive social development and for adequate educational progress. If a school has disciplinary problems, it is likely that its academic results will be affected negatively. It also affects the morale of the teaching personnel (Yator, 2003).

In the absence of discipline most secondary schools are bound to experience problems such as: drug abuse, disobedience, defiance, truancy, absenteeism, failure to complete homework, theft, fighting, bullying and eventually mass failure in national exams. This will serve as a big obstacle to improved performance (Muchiri, 1998). Wangai in Yator (2003) suggests that cases of student unrest could be reduced if head teachers were to hold consultations with students. She adds that proper and effective communication between teachers and students is the only strategy for attaining set education goals. Kyungu in Birundu (2003) argues that schools are expected to be places where growth and development of an individual occurs. School going children should learn how to live in unity and harmony. It is the responsibility of the school to provide an enabling environment where such virtues can be nurtured. When indiscipline occurs, it causes disruption to the learning process.

School prefects play an important role in enhancing discipline in the school. According to Kyungu (1999) a prefect is a student with leadership qualities, selected by the school or by other pupils and given powers to control and guide others students. The role of prefects should be one of promoting understanding between teachers and students. Prefects should be a means of preparing young people into responsible adults in future. They should not be given special privileges that cause conflicts with other students. According to the Daily Nation (August, 24, 2001) excessive powers of prefects and privileges were condemned in Coast Province.

Similarly, the role of the head teacher in enhancing discipline cannot be underestimated. Leadership is necessary in assisting individuals or groups move towards attainment of set goals. Tosi et al in (Birundu, 2003) notes that leadership occurs when an individual is able

to influence another person to go beyond the boundaries of psychological requirement. Students should be able to exercise self-discipline without necessarily being conscious of punishment that comes because of breaking rules. Teachers also have a role to play in enhancing discipline. They should support administrative measures put in place to enforce discipline. This includes upholding school rules and regulations. Teachers should be committed, conversant with students' behavior, consistent and communicating (Birundu, 2003).

2.6.3 Leadership

A number of management practices are essential in the smooth running of a school. These include: supervision, staff empowerment, communication, leadership, resource allocation and utilization among others. Supervision enhances group efficiency and effectiveness, empowerment leads to increased productivity and creates positive work attitude, communication ensures employees are conversant with their job requirements, resource allocation ensures that work patterns are not interrupted and leadership provides direction others need to follow (Mwihaki, 2005).

School administration plays a crucial role in academic performance in schools. Griffin (1996) argues that school administrators have a direct bearing on the achievement of the learners because they have a key role of coordinating, directing and facilitating the learning process. Griffin's assertion is that poor management has brought down many schools in Kenya. In a workshop organized by the Ministry of Education (1995), it was observed that schools where a high degree of professional commitment was evident, the results were good. The management of such schools was organized, while schools that lacked good management performed poorly.

Griffin (1994) also suggests, for the smooth running of a school, students must be effectively involved in the administrative system of the school. A good administrator delegates responsibilities and duties to teachers, supporting staff and the students. The spirit of teamwork should be encouraged. Coombs (1998) makes a similar observation. The head teacher's behavior sets the standard for the school. If the school does well, credit

goes to the head teacher who interprets national policies, executes curriculum programmes, ensures students' welfare is maintained, provides resources and maintains effective community coordination.

Somerset and Makau (1980) carried out a study on some schools in rural areas and in Nairobi. In their study, they found a strong correlation between the quality of administration and student's performance in CPE. This is because the quality of leadership determines the output of these institutions. Good leadership involves motivating all individuals in the work place; both students and teachers, team building, promoting staff development, confidence and communication (Birundu, 2003).

According to Yator (2003), each school manager should have clearly defined philosophy and mission on which to build organizational goals to be achieved. Krug in Yator (2003) observes that good schools are distinguished from others by their clear understanding of their goals. School principals ought to ensure that the curriculum, all school projects, funding, co-curricular activities and all related factors are geared towards fulfilling the mission of the school.

2.6.4 Motivation

Motivation can be defined as the process of satisfying the needs and motives of an individual in order to inspire him to work efficiently, willingly and enthusiastically towards the achievement of desired goals. Motivation leads to job satisfaction, which focuses on employees' attitudes towards their job.

Locke in Lukuyani (2002) argues that people join and stay in an organization for various reasons and varying levels of expectation. The outcome and rewards they receive at work can either be intrinsic or extrinsic. Intrinsic rewards include factors such as satisfying relationship with other fellow workers, considerate supervision and work that is both meaningful and challenging. Extrinsic factors refer to pay, promotion and fringe benefits. The employee will weigh both intrinsic and extrinsic rewards carefully, if they meet or exceed expectations, the employee will be satisfied with the job and remain in the organization and give optimum service.

The Master Plan of Education and Training (1997 – 2010) focuses on teacher's morale and motivation. Among its recommendations are: improvement of teaching materials, teachers' remuneration and special allowance be given to teachers working in hardship areas. Teacher satisfaction is a source of motivation that sustains effort in performing the many routing and necessary tasks required of good teachers (Watson et al, 1991). According to Herzberg, employee satisfaction is influenced by a set of two factors, hygiene and maintenance. Good salary, better working conditions, good supervision, adequate teaching materials and other hygiene factors must be provided to guarantee teacher satisfaction. Maintenance factors include: feeling of achievement, recognition, challenging work, responsibility, growth and advancement, which refer to prospects of promotion (Mwangi, 202).

Satisfaction and dissatisfaction of teachers also determines the quality of teaching. Sergiovanni in Lukuyani (2002) pointed out the major factors that motivated teachers as dynamic and stimulating leadership of the head teacher. The teachers' satisfaction depends on their expectation of how administrators should behave and the extent to which this

expectation is met. It also depends on better promotion methods, recognition, chances of advancement, house allowance for married women and loan privileges.

2.6.5 Teaching and Learning Resources

Benchmarking is a goal setting process. As goals are set, the resources needed to achieve them should be determined. The availability and prudent allocation of adequate resources determines whether organizations will achieve their goals. Similarly, availability of education materials has a major bearing on education outcomes. These materials should be up to date, staff development should be enhanced, time management and a conducive learning environment needs to be created.

Provision of new methods of teaching and learning technology is also necessary. In his study on factors that affect performance in western province of Kenya, Eshiwani (1983) found out that inadequate school resources such as class size, textbooks, school administration and management, library and laboratory are some of the major factors contributing to poor performance. However, a number of well equipped schools still find themselves trailing contrary to popular belief. Some of the highly performing schools do not necessarily have sufficient essential learning facilities. A survey conducted by Education Insight revealed Precious Blood - Riruta has got only two multipurpose science laboratories serving its student population of more than 360 yet it has maintained sterling performance for decades. The school administration admits even with abundant facilities without determination and a positive attitude to work a school may deliver any impressive results (Education Insight, 2006).

However, some concerns merit critical evaluation. Heymann and Loxely (1983) showed that a school library has a significant effect on learner academic performance. Posteithwaite in Eshiwani (1983) also points to the great importance of school facilities. These facilities include libraries, textbooks, dormitories, visual aids, electricity, water and playgrounds. While discussing Education and Development in Kenya, Court in Kitaka (2003) identified the distribution of resources such as books and equipment as a major factor, which accounts for students' differences in performance among schools.

25

Mukoya (1997) observes that although the teacher plays a great role as a resource in the teaching and learning process, evidence shows that for effective learning, the teacher has to make use of resources other than himself. Gecaga in Mukoya (1997) notes, "facilities seemed to influence performance. A school with good facilities seems to produce better results than one with inadequate facilities". This shows there is a relationship between school facilities and performance. Participants in the workshop organized by the Ministry of Education (1995) agreed that lack of adequate and appropriate facilities is a factor that greatly influences performance in our schools. The use of teaching and learning resources serves as a way of involving the learner in the learning process; he or she becomes a participant. Students learn better when exposed to real objects they can identify with. Teaching and learning resources also make a lesson interesting.

2.7 School Performance

Performance can be defined as the record of outcomes achieved (Armstrong, 1999). Oxford English dictionary defines performance as the accomplishment, execution, carrying out anything ordered or undertaken. For the purpose of the current study, performance can be defined as the outcomes of work because they provide the strongest linkage to the strategic goals of the organization, customer satisfaction and economic contribution (Armstrong, 1999).

Performance targets can be an important process through which successful strategies are fostered. These targets relate to the output of an organization such as product quality or profit. The performance of an organization is judged either internally or externally on its ability to meet these targets (Johnson and Scholes, 2002)

Many performance indicators developed traditionally are qualitative in nature while the quantitative aspect of assessing performance has been dominated by financial analysis. Financial measures are inadequate, however for guiding and evaluating the journey that information age companies must take to create future value through investment in customers, suppliers, employees, processes, technology and innovation. The introduction of the balanced scorecard is a useful way of dealing with this situation. The balanced

scorecard combines both qualitative and quantitative measures, acknowledges the expectations of different stakeholders and relates an assessment of performance to choice of strategy (Johnson and Scholes, 2002).

The balanced scorecard allows managers to view performance in several areas simultaneously, while forcing them to focus on those measures, which are most critical to the organization's competitive agenda. Kaplan and Norton (1996) who originally developed the balanced score card, suggested four performance measures each taking a different perspective: financial, customer, business process, learning and growth. Firms can put additional perspectives to meet their requirements, ensuring that they do not lose the clarity and conciseness of presentation, which is one of the major benefits of the balanced scorecard.According to the Koech report (1999) the search for quality in education involves the process of continuous improvement towards levels of excellence. In this connection, education improves an individual's access to self and paid employment promotes political awareness and participation, facilitates the achievement of gender equity.

A number of indicators for quality assurance in education include attainment of proficiency levels, accreditation and certification, assessments and examinations. The government under section 3 of the Education Act has a legal obligation to facilitate these indicators; hence provide quality education. Proficiency levels are regulated through inspection of schools and recruitment and discipline of the teaching service. Accreditation and certification of secondary schools is not catered for under the Education Act. However, the power to regulate the management and conduct of schools and to certify that school premises and accommodation are suitable does exist. On examinations, the Education Act empowers the Minister of Education to provide for the conduct of all public examinations.

The maintenance of standards and assurance of quality is the key to the maintenance of a sustainable and competitive education system both nationally and globally. It is important that learning institutions exist for the establishment of comparable standards across cycles

and their enforcement internally and externally.According to the Ministry of Education Report of the Sector Review and Development (2003), performance measures of quality schooling are: literacy, greater cognitive abilities and better student performance. The Kenya system of education is too dominated by examination; qualities such as diligence, confidence and promptness are not emphasized. The examinations are used for selection and certification purposes, the result being schools tend to ignore other aspects that are not tested but are stipulated in the curriculum.

A number of researches have revealed various factors that contribute to poor performance in secondary schools. According to the Ministry of Education Report on Sector Review and Development (2003), inadequate preparation of candidates is perhaps the main cause of poor performance in examinations in Kenya. This arises from insufficient teaching and learning materials especially textbooks. Poor performance is also affected by poor coverage of the syllabus, candidates not having enough time for revision and their inability to interpret examination questions correctly.

Similarly, the scope of the curriculum has been cited as a major factor in examination performance since the inception of the 8-4-4 system.McDonnell in Kariuki (2005) indicates that performance must be measured accurately and systematically so that rewards can be distributed equitably. Armstrong and Baron (1998) have set a criterion for performance measurement. Performance measures should provide a sound basis for feedback and action, be precise and comprehensive, focused on measurable outputs, be relevant to the strategic goals and objectives that are organizationally significant and drive business performance.

Studies undertaken by various scholars indicate that there is a significant relationship between the environment and students performance in national examinations. There are evident disparities in performance between schools patronized by the rich as compared to those patronized by the poor (Ministry of Education, 2003). Ezewu in Kariuki (2005) points out that people of high socio-economic background earn a high income and value education more than those of low economic status. Parental involvement has also been

identified as a factor that affects students' performance (Kapila, 1976). Students require discipline for positive social development and adequate education progress (Muchiri, 1998). The quality of leadership determines the output of a school. Similarly, availability of educational materials has a major bearing on educational outcomes.

2.8   Benchmarking and School Performance

Research done across various industries indicates that many organizations have used benchmarking in order to comprehend what practices are needed to meet international operational standards. A research conducted among 600 European manufacturing sites indicates a link between benchmarking and operational performance (Voss et al, 1997). Xerox, which pioneered benchmarking, improved its cost of its production and system of processing orders after it benchmarked various industries (Main, 1992).

St. John Hospital a Springfield III-based regional health care centre turned to benchmarking and business management performance after experiencing five years of flat financial performance. The result after two years indicated that benchmarking and other related practices have saved the hospital millions of dollars and improved its financial performance (Powers, 2004).

Studies through which benchmarking leads to increased performance indicates that schools that use benchmarking have realized improved performance in their educational functions and processes. Benchmarking thus promotes performance directly through identification of best practices and performance goals. Benchmarking increases a school understanding of its position relative to competitors. This is beneficial to performance. Similarly, benchmarking is a part of learning organization linked to increased performance (Voss et al, 1997).

Ndiritu (1999) observes that there is a lot of variation in performance in schools that select students with similar scores in KCPE. Causes of variation in performance can be attributed to factors that enable some schools to maintain a dominant position. These factors can be studied and adopted by poor performing schools in order to improve their performance. As School Management Consultants (2004) rightly observe, effective benchmarking involves identifying the best available performance processes on key education functions from better performing schools.

This chapter deals with the research methodology which was used in the study. It is divided into the following sub-headings: research design, target population, sample size and sampling procedure, data collection methods, data analysis and presentation.

3.1 Research Design

This study was a survey. A survey was considered suitable so that data could be collected from a cross section of study units. From the findings, the researcher was able to determine whether secondary schools that use benchmarking have realized improved performance in KCSE compared to those that do not.

3.2 Target Population

The target population was all the public secondary schools in Nairobi province. According to the Kenya Secondary Schools Heads Association (2003) results analysis, Nairobi province has 49 public secondary schools.

3.3 Sampling Size and Sampling Procedure

The sample of the study comprised 35 schools out of a total number of 49 schools. The accepted sample size is 30. However, a sample of 35 was used because of the possibility of non-response by some schools. This sample was considered large enough to provide a general view of the entire population and served as a good basis for valid and reliable conclusions. Simple random sampling was used to select the schools to participate in the study.

CHAPTER THREE: RESEARCH METHODOLOGY

3.0   Introduction

This chapter describes the research methodology, which was used in the study. It is divided into five sections as follows: research design, target population, sample size and sampling procedure, data collection method, data analysis and presentation.

3.1   Research Design

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3.4 Data Collection Method

This study relied on both primary and secondary data. Primary data focused on benchmarking practices and school performance. Secondary data consisted of exam results the school has attained for the last five years. Data was collected using questionnaires, which had both closed and open-ended questions (see appendix 11).

The questionnaire was divided into the following sections:

Section A: Institutional profile/personal details

Section B: Benchmarking practices

Section C: School performance

The respondents were deputy head teachers and deans of studies. The questionnaire was administered on a drop and pick later basis.

3.5   Data Analysis and Presentation

The data from respondents was analyzed using descriptive statistics such as means, percentages and frequencies. The Statistical Package for Social Sciences (SPSS) was used for data processing and analysis. Pearson's product moment correlation was used to test the relationship between benchmarking and school performance.

CHAPTER FOUR: DATA ANALYSIS AND FINDINGS

4.0 Introduction

This chapter covers data analysis and findings of the research. The data is summarized and presented in the form of proportions and frequency tables. It documents the extent to which secondary schools use benchmarking and establishes whether secondary schools that use benchmarking have realized improved performance in KCSE.

4.1 Institutional Profile and Personal Details

This section presents a general overview of all the public secondary schools and the respondents' profiles in the population of interest.

4.1.1 Position Held

Table 4.1 Position Held

Position	Frequency	Percentage
Deputy Head Teachers	11	35
Deans of Studies	20	65
Total	31	100

Source: Research Data

The respondents of the study were deputy head teachers and deans of studies. The respondents were asked to indicate their positions and the responses are shown in table 4.1. Out of the 31 who were sampled, 65% were deans of studies and 35% were deputy head teachers. This difference indicates the busy schedules and duties assigned to deputy head teacher as compared to those of deans of studies.

4.1.2 Number of Years in Current Position

Table 4.2 Number of Years in Current Position

Number of Years	Frequency	Percentage
1-5 Years	5	16
6-10 Years	21	68
11 and Above	6	19
Total	31	100

Source: Research Data

Table 4.2 shows the number of years one has stayed in a position. Out of the 31 respondents who were sampled, 68% had 6-10 years of experience, 19% had 11 and above years and 16% had less than five years experience in their current jobs. This is an indication that the respondents had a rich experience of the issues under consideration.

4.1.3 Date of Establishment

Table 4.3 Date of Establishment

Date of Establishment	Frequency	Percentage
Before 1963	7	23
Before 1970	19	61
Before 1980	5	16
Total	26	100

Source: Research Data

Table 4.3 indicates the schools' date of establishment and the first enrolment for KCSE exam. 23% of schools were established before independence, 61% more than ten years after independence and 16% were established before 1980. This implies that all the schools that visited had a sound idea of the patterns associated with performance in KCSE for more than 3 years, although the official launch of KCSE was 1984.

4.1.4 Category of School

Table 4.4 Category of School

Category	Frequency	Percentage
National	0	0
Provincial	26	84
District	5	16
Total	31	100

Source: Research Data

Table 4.4 shows the distribution of schools in three categories namely: national, provincial and district schools. Out of the 31 schools sampled, 26% were provincial schools, while 5% were district schools. National schools did not participate in the study.

4.1.5 Number of Streams

Table 4.5 Number of Streams

Number of Streams	Frequency	Percentage
Two	5	26
Three	11	58
Four	2	11
More than four	3	15
Total	31	100

Source: Research Data

The number of students in a learning institution determines the number of streams and institution's classification. Usually, a school is allowed to enroll students in not more four streams as the TSC allocates teachers to a school depending on the student population. From the results in table 4.5 above, 58% of the schools had three streams, 26% had two streams, 15% had more than four and 11% had four streams. This is a common feature in public schools in Kenya especially in Nairobi province.

4.1.6 Number of Years in the Current School

Table 4.6 Number of Years in the Current School

Number of Years	Frequency	Percentage
Below 3 years	6	20
Between 3-10 years	22	70
Above 10 years	3	10
Total	31	100

Source: Research Data

Organizations have a way of doing things depending on what they value and do frequently. Some individuals are honoured for facilitating the achievement of milestones in their schools' performance in KCSE. The longer one has stayed in an institution gives him/her an upper hand on what students, parents, colleagues and the government expect of him/her. From the results in table 4.6, 70% of the respondents have stayed in their current institutions for 5-10 years, 20% have been in the schools for less than three years and 10% have stayed for more than 10 years.

4.2 Benchmarking Practices

4.2.1 How schools Learnt about Adopting Best Practices

Table 4.7 How schools Learnt about Adopting Best Practices

Source	Frequency	Percentage
Through workshops	27	87
Associating with best performing public schools	24	77
Associating with schools in the same category	18	58
Advice from quality assurance personnel	16	52
Publications	10	32
Correspondence and direct contacts with best performing private schools	6	19
Libraries	3	10
Internet	1	3

Source: Research Data

There are very many sources of information and learning about best practices. The respondents were asked to cite how they learnt about adopting best practices from other schools. From the results given in table 4.10, 87% of the respondents learn about best practices through workshops, 77% through associating with best performing public schools, 58% by associating with schools in the same category. Similarly; 52% learn through advice they get from quality assurance personnel, 32% learn from publications, 19% learn through correspondence and direct contact with best performing private schools, 10% through libraries and 3% through the internet. This concurs with Voss et al's (1997) position that benchmarking increases a school's understanding of its position relative to others.

4.2.2 Names of Schools Benchmarked

Table 4.8 Names of Schools Benchmarked

Name of School	Frequency	Rank
Starehe Boys Centre	19	1
Kianda School	17	2
Strathmore	16	3
Precious Blood-Riruta	13	4
Nairobi School	10	5
Kenya High	10	6
Highway	8	7
Buru Buru	6	8
Pangani Girls	6	9
Jamhuri	5	10

Source: Research Data

Benchmarking singles out those practices that have proved to be superior in a given area. In the process of benchmarking, there are institutions where best practices can be copied from. From the results in table 4.8, the schools that act as centers of reference for performance related practices are Starehe Boys Centre, Kianda, Strathmore, Precious Blood - Riruta, Nairobi School, Kenya High, Highway, Buru Buru, Pangani and Jamhuri.

The above concurs with (Belle, 2000) who argues that by finding examples of superior performance and understanding the best processes and practices driving that performance,

organizations can improve their own performance and tailor these examples to their own situation.

4.2.3 How Inter-School Benchmarking is Done

The respondents were asked to indicate how the benchmarking exercise was done. From the results given, information was obtained from cross-institutional visits, the Ministry of Education, the Kenya National Examination Council and consultations by school management. Similarly, prefects gather information from best performing schools, heads of department visit heads of department from best performing schools and exchange ideas on procedures and rules.

4.2.4 Search for Best Practices

Table 4.9 Search for Best Practices

Search	Frequency	Percentage
Yes	16	52
No	15	48
Total	31	100

Source: Research Data

Benchmarking is a systematic and continuous process which enables school managers to adopt best practices and subsequently establish performance standards in their own schools to match or where possible exceed high performing schools. The respondents were asked to indicate whether they actually perform a systematic search for these best practices and from the results presented in table 4.9, 52% of the respondents indicated that they actually do while 48% indicated that they do not.

4.2.5 Use of Best Practices for Improving Performance

After the systematic search for best practices, the next challenge is to develop a strategy to implement the best practice. The respondents were asked to indicate whether they make use of the information they gather from the benchmarking exercise. The results shown in table 4.10 indicate that they make use of this information.

Table 4.10 Use of Best Practices for Improving Performance

Use	Frequency	Percentage
Yes	14	45
No	4	13
Missing	13	42
Total	31	100

Source: Research Data

4.2.6 The Major Drive of Adopting Best Practices

Table 4.11 The Major Drive of Adopting Best Practices

Name of School	Frequency	Percentage
To improve school performance	27	87
To create a culture based on improved performance outcomes	23	74
To inject best practices into the operations of a school	20	65
To get the best out of staff, processes and programmes	19	61
To provide quality education	19	61
To create and sustain excellence	16	52
To expose staff members to different ways of doing things	15	48
To meet the requirements and expectations of the students	15	48
To implement appropriate changes	15	48
Due to increased pressure to become competitive	14	45
To encourage creativity and innovation in education functions	13	42
To establish operating goals and performance objectives	11	36
To achieve superior performance	8	26
To meet and beat the performance of the best performing schools	2	7

Source: Research Data

There are many objectives of benchmarking. The respondents were asked indicate the motive behind benchmarking and the responses are indicated in table 4.11. 87% of those sampled indicated that the major drive is to improve school performance, 74% indicated the drive is to create a culture based on improved performance outcomes, 65% wanted to inject best practices into the operations of a school. In addition; 61% benchmark in order to get the best out of staff, processes and programmes, 61% wanted to provide quality education, 52% wished to create and sustain excellence, 48% wanted to expose staff members to different ways of doing things. Similarly; 45% indicated it was due to increased pressure to become competitive, 42% wanted to encourage creativity and innovation in education functions, 36% wanted to establish operating goals and performance objectives, 26% wanted to achieve superior performance, as 7% wanted to meet and beat the performance of the best performing schools. The practice of benchmarking is perfectly legal and enables an organization to establish operating goals and performance objectives based on the best practices in the industry. This perspective is widely emphasized by (School Management Consultants, 2004).

4.2.7 Performance factors to be Benchmarked

Table 4.12 Performance Factors to be Benchmarked

Factors	Frequency	Percentage
Resources and competences	15	48
The performance standards	22	71
Mode of service delivery	15	48
Curriculum implementation	20	64
Discipline	26	84
Parental involvement	19	61
Leadership	20	65
Motivation of staff	19	68
Teaching and learning resources	25	81

Source: Research Data

There are many performance factors that need to be benchmarked fully in order to achieve the objectives of benchmarking. The respondents were asked to indicate factors to be benchmarked and the results are indicated in table 4.12, 48% indicated the major factor as

resources and competences, 71% indicated performance standards, 48% indicated mode of service delivery, 64% indicated curriculum implementation, 84% gave discipline, 61% gave parental involvement, 65% gave leadership and motivation of staff, as 81% gave teaching and learning resources. Discipline is highly rated as an important factor in education. This concurs with Charles in Muchiri (1988) who observes that discipline helps students do those activities that enhance their education while limiting those behaviours that are self- defeating.

4.2.8 The Extent of using Benchmarking in Public Secondary Schools

There are many factors that are benchmarked in order to improve performance. The extent to which these aspects are benchmarked and the resulting effect on performance differ (See appendix iii). The respondents were asked to indicate the extent to which their respective schools benchmark with other schools with respect to aspects that influence students' performance either directly or indirectly. On a five likert-scale, the variables that have been benchmarked to a very large extent with a mean of 1 (with insignificant standard deviation) were found to be: discipline, effective parental involvement through closer cooperation between parents and school management, availability and prudent allocation of teaching and learning resources.

Table 4.13   The Extent of Using Benchmarking in Public Schools

Mean Score Range	Number of Schools	Percentage
1-2	15	79
2.1-3	4	21
3.1-4	0	0
4.1-5	0	0
Total	**19**	**100**

Source: Research Data

From table 4.13, 79% secondary schools have used benchmarking to a very large extent (1=to a Very Large Extent), while 21% have used it to a large extent (2=Large Extent). This concurs with (Education Insight, 2006) which observes that many schools have resorted to benchmarking to identify what high performing schools do in order to improve their own performance.

41

4.2.9 Activities Performed Before Adopting Best Practices

Table 4.14 Activities Performed Before Adopting Best Practices

Activity	Frequency	percent
Understanding the school's processes in detail	28	90
Identifying specific areas that should be improved	27	87
Determining whom the school wishes to compare itself with.	24	77
Selecting a project team among staff members who can carry out this task	22	71
Collecting and analyzing data on best practices from the school identified	22	71
Developing goals and plans to implement desired improvements in the areas that require urgent attention	22	71
Determining performance measures; factors for the school to remain competitive	21	68
Collecting data regarding the students' needs and determining areas of priority	19	63

Source: Research Data

Before adopting any best practices, there are many activities that need to be performed to give ground for achieving set objectives. The respondents were asked to indicate the activities that are emphasized most before adopting best practices, and the responses are indicated in table 4.14. 90% of the respondents emphasized understanding the school's processes in detail, 87% emphasized identifying specific areas that should be improved, 77% emphasized determining whom the school wishes to compare themselves with. 71% emphasized selecting a project team among staff members who can carry out this task, collecting and analyzing data on best practices from the school identified, and developing goals and plans to implement desired improvements in the areas that require urgent attention, 68% emphasized determining performance measures for the school to remain competitive, as 63% emphasized collecting data regarding the students' needs and determining areas of priority.

These activities make the definition of benchmarking complete. During a benchmarking process, the first step in benchmarking is to understand the firm's processes in detail

(Main, 1992). The information gathered during the benchmarking experience should support the organization's overall mission, goals and objectives (Summers, 2000).

4.2.10 Areas that Need to be Addressed Fully Through Benchmarking

There are several areas in public schools regarding practices, processes, procedures and activities aimed at providing quality education that need to be addressed fully through benchmarking. The respondents were asked to indicate some of the most critical areas and from the research data, 90% of the respondents gave formal mechanisms for reviewing the quality of education and standards attained by students as the major factors. 81% cited how programmes and subjects are selected and approved. 77% gave admissions and entry standards, 74% gave the arrangement for reporting and dealing with problems. Other schools gave strategies for guiding and supporting students, 71% gave arrangements for managing actual teaching and arrangements for supervising students (preps, extra curricula activities, use of free time), 61% gave rules for dealing with failure, 55% gave rules for using credit (Grading systems), class pass marks, as 45% gave progression to the next class.

4.2.11 Critical Factors Influencing the Choice of Benchmarking Tools

Table 4.15 Critical Factors Influencing the Choice of Benchmarking Tools

Factors	Frequency	Percent
Objectives to be achieved and aspects to be reviewed	26	84
Time and resource available	24	77
Compatibility with local conditions	20	65
Comparability of schools and processes	16	52
Level of experience in benchmarking	6	19

Source: Research Data

There are many critical factors influencing the choice of the various benchmarking tools. Respondents were asked to give the three most critical factors and the results are indicated in table 4.15. 84% of the respondents gave the objectives to be achieved and aspects to be reviewed, 77% gave time and resources available, 65% gave compatibility with local conditions, 52% gave comparability of schools and processes.

4.2.12 Difficulties of Adopting Best Practices

There are difficulties involved in adopting best practices. From the research data, 90% of the respondents indicated that there are various difficulties in adopting best practices aimed at improving students' performance. Some of the difficulties they listed include: parents not being cooperative, resistance to change from teachers and students, lack of improvement on the part of the students. It is also difficult to involve parents who experience economic difficulties. Disciplining students whose parents are indiscipline is equally a big challenge. Some respondents cited lack of resources, absenteeism on the part of students, the size of the school and lastly acceptance to best performing schools.

4.3 School Performance
4.3.1 Reasons for Variation in KCSE Performance

Ndiritu (1999) observed that there is a lot of variation in performance of KCSE despite the fact that secondary schools select students with similar scores in KCPE. The causes of variation are attributed to certain factors that enable certain schools maintain a dominant position. The respondents were asked to list some of these reasons. From the research data, the respondents gave the following reasons: Poor entry points, negative attitude of students, lack of fees, absenteeism and indiscipline from the students' side, lack of facilities, poor management of time. Others mentioned: students family background, lack of motivation, lack of role models, school administration style, staff turnover, inadequate coverage of the syllabus, poor teaching methods, rate of transfer to other schools, changes in the curriculum, location of the school, teachers' commitment, local politics and parental involvement. These reasons actually work hand in hand and confirm an observation by the School Management Consultants (2004) that although performance measures, such as efficiency and effectiveness of a school, can be compared against similar measures from other schools, there are very many interrelated factors contributing to varied performance in KCSE.

4.3.2 Effects of Poor Performance in KCSE

Table 4.16 Effects of Poor Performance in KCSE

Effect	Frequency	Percentage
It undermines students' chances of joining institutions of higher learning	25	81
It limits the students' contribution to national development	21	68
Leads to undesirable wastage through dropouts and repeaters	21	68
It minimizes opportunities for job placement	18	58
Total		

Source: Research Data

The respondents were asked to give some of the effects of poor performance in KCSE and the results are indicated in table 4.16. Out of those sampled, 81% of respondents indicated that it undermines students' chances of joining institutions of higher learning, 68% indicated that it limits the students' contribution to national development, 68% indicated that it leads to undesirable wastage through dropouts and repeaters, as 58% indicated that it minimizes opportunities for job placement. The other effects given by the respondents included: low self-esteem, criminal activities, vicious cycle of poverty, teachers wrongly discredited, no role models for those still in school. It also kills the morale of those in lower classes, leads to disillusionment and eventually decline in the economic development of a country.

4.3.3 What is emphasized in the Teaching and Learning Process?

Table 4.17 What is emphasized in the Teaching and Learning Process

Factor	Frequency	Percentage
Coverage of syllabus in time	29	94
Discipline of students and staff	27	87
Teaching and learning resources	27	87
Marketability/reputation of your school	12	39
Cost of training/value for the fees paid by student	7	23
Research and development	3	10
The process of training (vocational and cognitive)	2	7
Technology	1	3

Source: Research Data

For an institution to perform well, there are some aspects that are emphasized in the teaching and learning process, such as lesson plans, lesson notes, schemes of work and actual teaching in class. The respondents were asked to give those aspects that are emphasized in teaching and learning in order to enhance the students' performance and the results are indicated in table 4.17. 94% of the respondents indicated that they emphasize the coverage of syllabus in time, 87% emphasize discipline of students and staff, while 39% emphasize the reputation of their school. 23% emphasize the cost of training/value for the fees paid by students, 10% emphasize research and development, 7% emphasize the process of training (vocational and cognitive), as 3% emphasize the use and application of technology.

This is actually true according to the Ministry of Education Report on Sector Review and Development (2003) which points out performance measures of quality schooling as: syllabus coverage, discipline, literacy, greater cognitive ability and better student performance. The system of education in Kenya is so dominated by examinations that qualities such as diligence, confidence and promptness are not emphasized. The examinations are used for selection and certification purposes, the result being schools tend to ignore other aspects that are not tested but are stipulated in the curriculum.

4.3.4 How Benchmarking affects KCSE Performance in Public Schools

It is assumed that that benchmarking is an important tool in improving students' performance. The respondents were asked to give the school mean grades in KCSE for the last six years. This was intended to test whether schools that use benchmarking have realized improved performance in KCSE. The results are shown in table 4.18a (See individual results in appendix IV).

Table 4.18a *How Benchmarking affects KCSE Performance*

SCHOOL	Benchmarking Extent	Average Score
School 1	1.0323	4.583
School 2	1.3667	9.341
School 3	1.3871	6.000
School 4	1.4194	7.966
School 5	2.3333	3.850
School 6	1.6000	5.646
School 7	1.7419	6.034
School 8	1.8065	5.352
School 9	1.9032	4.017
School 10	1.9032	3.941
School 11	1.6000	5.580
School 12	1.7419	6.125
School 13	2.5161	4.599
School 14	1.3871	8.671
School 15	1.4839	7.293
School 16	1.4839	6.557
School 17	1.4839	7.135
School 18	2.3333	4.318
School 19	2.5161	3.956
Mean	1.739	5.840

Source: Research data

From table 4.18a, it is evident that schools that use benchmarking have realized improved performance. The performance has been improving from 0.1 points up to one point (From 5.633 to 6.379) this is from 2000 to 2005.

4.18b Pearson Correlation Between Benchmarking and KCSE Performance

		Extent of Benchmarking	Mean Score
Extent of Benchmarking	Pearson Correlation	1	-.647(**)
	Sig. (2-tailed)	.	.003
	N	19	19
Mean Score	Pearson Correlation	-.647(**)	1
	Sig. (2-tailed)	.003	.
	N	19	19

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

To determine whether secondary schools that use benchmarking have realized improved performance in KCSE, the Pearson correlation between the extent of benchmarking and performance in KCSE was done.

The Pearson's correlation is normally used to determine correlation between two continuous variables. The value of a Pearson's can fall between 0.00 (no correlation) and 1.00 (perfect correlation). From the analysis in table 4.18b, there is a significant relationship between benchmarking and improved performance in KCSE; this is because 0.96 lies between 0.00 (no correlation) and 1.00 (perfect correlation).

The correlation coefficient to determine the strength of the association between "the extent of benchmarking and improved performance in KCSE" is based on the Pearson -.647(**), which reflects the degree of linear relationship between two variables. The correlation coefficient is always between -1 and +1. The closer the correlation is to +1, the closer to a perfect linear relationship. The -.647 has asterisks by it. This is how SPSS indicates significant interactions. The significance is under 0.05 that is (.003). Thus; there is a perfect positive association between the extent of benchmarking and improved performance in KCSE in public secondary schools.

CHAPTER FIVE: SUMMARY AND CONCLUSIONS

5.0 Introduction

The major purpose of this study was to document the extent to which secondary schools use benchmarking and establish whether secondary schools that use benchmarking have realized improved performance in KCSE. This chapter presents the summary and conclusions of results obtained from the study in line with the above objectives.

5.1 Summary

Results obtained from the institutional profile and respondents' personal details indicated that most respondents were deans of studies and deputy head teachers who had had 6-10 years of experience, therefore had a good understanding of issues being discussed. Most schools were established ten years after independence. Majority of the schools which too part in the study were provincial schools with three streams.

Research findings on benchmarking practices, indicated that schools learn about adopting best practices from other schools through workshops, associating with best performing public schools, associating with schools in the same category and advice they get from quality assurance personnel. The schools that act as centers of reference for performance related practices are Starehe Boys Centre, Kianda School, Strathmore, Precious Blood-Riruta, Nairobi school, Kenya High, Highway, Buru Buru, Pangani and Jamhuri. Information on superior performance from other schools was obtained from cross-institutional visits, data from MOEST, data from KNEC, consultations by school management, heads of department visiting heads of department from best performing schools and exchanging ideas on procedures and rules.

Most school managers perform a systematic search for these best practices before adopting them and they make use of the information. Few schools copy best practices but do not implement because there are no systems in place to support implementation. To begin with

the drive of adopting best practices is: to improve the school performance, to create a culture based on improved performance outcomes, to inject best practices into the operations of a school, to get the best out of staff, processes and programmes. Secondly, best practices can also be adopted to provide quality education, to create and sustain excellence, to expose staff members to different ways of doing things, to meet the requirements and expectations of the students and to implement appropriate changes. Increased pressure on schools to become competitive, encourages creativity and innovation in education functions, thus establishing operating goals and performance objectives to achieve superior performance.

There are many factors that are be benchmarked to a given extent in order to improve performance. The extent to which these factors are benchmarked and the resulting effect on performance differ. The variables that have been benchmarked to a very large extent and have influence on students' performance either directly or indirectly were found to be: discipline, effective parental involvement, availability and prudent allocation of teaching and learning resources and the administrative style of the school principal. It is also necessary to use teaching and learning resources to involve the learner in the learning process, teachers to ensure school rules and regulations are adhered to and give incentives to teachers for job satisfaction.

There are various advantages of benchmarking. A school that practices benchmarking has a better understanding of competitiveness, the acquisition of new ideas is from proven practices, and there is superior performance of many activities and processes. Benchmarking also enables a school to establish effective goals and objectives. The development of true measures of performance outcomes is based on solving real problems. Without benchmarking establishing effective goals and objectives lacks external focus, the school becomes reactive to situations and defining students requirements is based on the school's history. Benchmarking also defines students' requirements based on existing educational reality, which originates from credible and unarguable sources.

The activities that are emphasized most before adopting the best practices include: understanding the school's processes in detail, identifying specific areas that should be improved, determining whom the school wishes to compare themselves with, selecting a project team among staff members who can carry out this task, collecting and analyzing data on best practices from the school identified, and developing goals and plans to implement desired improvements in the areas that require urgent attention and collecting data regarding students' needs and determining areas of priority.

The most critical areas that need to be benchmarked fully were: formal mechanisms for reviewing the quality of education and the standards attained by students, how programmes and subjects are selected and approved, the formal mechanism to facilitate staff-student communication, arrangements for actual teaching, management of school programmes and the policies for assessing students. It is necessary to determine academic standards, entry points, the arrangements for reporting and dealing with problems, and the strategies for guiding and supporting students, arrangements for supervising students (preps, extra curricula activities, use of free time) and rules for dealing with failure.

There most critical factors influencing the choice of the various benchmarking tools adopted by the public schools were found to be: the objectives to be achieved and aspects to be reviewed, time and resource available and compatibility with local conditions and processes. Some of the difficulties involved in adopting best practices include: parents not being cooperative, resistance to change from some teachers and students, lack of improvement on the part of the students.

Some of the reasons for variations in the performance of students and schools in KCSE include low entry points, negative attitude of students, lack of fees, absenteeism and indiscipline on the part of students, lack of facilities, time wastage and family background. Other factors include lack of motivation, lack of role models, school administration style, staff turnover, coverage of the syllabus, teaching methods, rate of transfer to other schools, curriculum changes, location of the school, teacher commitment, local politics and parental involvement.

Some of the effects of poor performance in KCSE include: undermining students' chances of joining institutions of higher learning, limiting the students' contribution to national development, leads to undesirable wastage through dropouts and repeaters. Failure in KCSE also minimizes opportunities for job placement, leads to low self-esteem and criminal activities. Students cannot escape the vicious cycle of poverty, teachers are wrongly discredited, there are no role models for those still in school. Poor performance tends to kill the morale of those in lower classes, it leads to disillusionment and decline in the economic development of the country.

Lastly, it was also established that schools that use benchmarking have realized improved performance. The performance has been improving from 0.1 points up to one point over six years (From 5.633 to 6.379); this is from 2000 to 2005. There is a very strong correlation in the performance between these yearly performances and benchmarking of approximately 0.96, which is almost 1, an indication of a strong correlation. The correlation coefficient between "the extent of benchmarking and improved performance in KCSE is -.647. The significance is under 0.05 that is (.003). Thus; there is a perfect positive association between benchmarking and improved performance in KCSE in public secondary schools.

52

5.2 Conclusions

The following conclusions can be made from data analysis and findings of the research from chapter four. First, public schools learn about best practices through workshops, associating with best performing public schools and associating with schools in the same category. The schools that act as centers of reference for performance related practices are Starehe Boys centre, Kianda School, Strathmore and Precious Blood-Riruta. The information on superior performances is obtained from cross institution visits, data from MOEST, data from KNEC, consultations by school management, heads of departments visiting other heads from best performing schools and exchanging ideas on procedures and rules.

Secondly, on the extent of benchmarking among secondary schools, the variables that have been benchmarked to a very large extent are factors that influence students' performance either directly or indirectly. These include: discipline, parental involvement, availability and prudent allocation of teaching and learning resources. Similarly; the school principal coordinates, directs and facilitates the learning process. Teaching and learning resources are used to involve the learner in the learning process. Teachers also ensure school rules and regulations are adhered to. Furthermore; incentives given to teachers lead to job satisfaction, which determines the quality of teaching. Performance factors to be benchmarked fully are resources and competences, performance standards, mode of service delivery, curriculum implementation, discipline, parental involvement, leadership and motivation of staff.

Some of the advantages of benchmarking in public schools are: a better understanding of competitiveness, the acquisition of new ideas is from proven practices, and there is superior performance of many activities and processes. Benchmarking enables a school to establish effective goals and objectives; the development of true measures of performance outcomes is based on solving real problems. What is emphasized before adopting best practices includes: understanding the school's processes in detail, identifying specific areas that need to be improved, determining whom the school wishes to compare themselves with, selecting a project team among staff members who can carry out this task, collecting

and analyzing data on best practices from the school identified and developing goals and plans to implement desired improvements.

The three most critical factors influencing the choice of the various benchmarking tools adopted by public schools are: the objectives to be achieved and aspects to be reviewed, time and resource available, and compatibility with local conditions and the school's processes. Factors that influence the adoption of best practices include: discipline, parental involvement, motivation, leadership, teaching and learning resources. There are various difficulties experienced such as: parents not being cooperative, resistance to change from some teachers and students, lack of improvement on the part of students, involving parents who experience economic difficulties and the size of the school.

Lastly; secondary schools that use benchmarking have realized improved performance in KCSE. There is a very significant relationship between benchmarking and improved performance. This shows that benchmarking is an important tool in realizing improved performance.

5.3 Recommendations

The following recommendations are worth making in regard to public secondary schools in Nairobi Province. School management should emphasize students' discipline, parental involvement, motivation, leadership, and availability and prudent allocation of teaching and learning resources while benchmarking from the best performing schools. The parents should be encouraged to cooperate and support the school programme. Teachers and students need to accept change and work towards continuous improvement. All parents who experience economic difficulties should also be involved decision making. Before implementing best practices, the administrators should consider the objectives to be achieved and factors to be reviewed especially time and resources available. Similarly; it is important to consider compatibility with local conditions and the school's processes.

5.4   Limitations of the Study

1. Time and financial constraints were limiting factors in carrying out the research. The deans of studies and deputy headteacherswho were the main participants in the study were very busy most of the time and kept turning   down the appointments.

2. Most of the informants were reluctant to participate in the research and had to be convinced that it was only an academic exercise. Some schools thought the information would be used for other purposes and decline to participate in the study.

3. Most schools declined to give results analysis for the past six years. They regarded it as classified information. Only 19 schools out of 35 sampled gave their results.

5.5 Suggestion for Further Research

The major purposes of this study were to document the extent to which secondary schools use benchmarking and establish whether secondary schools that use benchmarking have realized improved performance in KCSE. Benchmarking as a continuous improvement tool is applicable to most service industries. The researcher recommends a study be conducted to determine the extent to which other companies outside the education sector use benchmarking as a performance improvement tool. Such studies will highlight the challenges facing Kenyan organizations in the implementation of sound continuous improvement to enhance their performance.

This study was conducted in one province. There is therefore need to replicate the study in other provinces in Kenya. Future studies could include other factors that affect performance other than benchmarking. A similar study could be carried out in all secondary schools in Kenya to determine the best practice in each school. This can serve as a guide to other schools that wish practice benchmarking.

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Re: Benchmarking and Performance in Public Secondary Schools in Nairobi

I am an MBA Student in the Department of Business Administration, School of Business, at the University of Nairobi. I am doing my research focusing on "Benchmarking and performance in public secondary schools in Nairobi Province."

The purpose of my research is to determine the extent to which secondary schools use benchmarking and whether secondary schools that use benchmarking have realized improved performance in KCSE. My expectation is that there will be some interesting insights emerging from this study which will enrich our understanding of educational functions.

If you are interested in the results of this study you are welcome to request a copy of the final report by providing your name and e-mail address. Any queries regarding the questionnaire or the overall study can be directed to the undersigned. Please be assured that this information is sought for research purposes only and your responses will be strictly confidential. No individual's responses will be identified as such and the identity of persons responding will not be published or released to anyone.

Please assist me in gathering enough information to present a representative finding on the current status of benchmarking and performance in public secondary schools by completing the attached questionnaire. Your participation is entirely voluntary and the questionnaire is completely anonymous. Thank you for helping in this important study.

Sincerely,

Bivin Aseboh Litenya: Mobile +254-722-838236   E-mail: litenya@yahoo.com

APPENDIX 1: LETTER OF INTRODUCTION

Dear Sir/Madam,

<u>Re: Benchmarking and Performance in Public Secondary Schools in Nairobi</u>

I am an MBA Student in the Department of Business Administration, School of Business, at the University of Nairobi. I am doing my research focusing on "Benchmarking and performance in public secondary schools in Nairobi Province."

The purpose of my research is to determine the extent to which secondary schools use benchmarking and whether secondary schools that use benchmarking have realized improved performance in KCSE. My expectation is that there will be some interesting insights emerging from this study which will enrich our understanding of educational functions.

If you are interested in the results of this study you are welcome to request a copy of the final report by providing your name and e-mail address. Any queries regarding the questionnaire or the overall study can be directed to the undersigned. Please be assured that this information is sought for research purposes only and your responses will be strictly confidential. No individual's responses will be identified as such and the identity of persons responding will not be published or released to anyone.

Please assist me in gathering enough information to present a representative finding on the current status of benchmarking and performance in public secondary schools by completing the attached questionnaire. Your participation is entirely voluntary and the questionnaire is completely anonymous. Thank you for helping in this important study. Sincerely,

Rose Ambula Litunya, Mobile: +254-722-828226 E-mail: rosevike@yahoo.com

APPENDIX II: QUESTIONNAIRE

PART A: INSTITUTIONAL PROFILE/PERSONAL DETAILS

Questionnaire Number............................ Date................................

1. Name of the School (Optional):.................. Your Position..................
    Number of years in this position..................

2. Date of establishment.......... When did the school first enroll for K.C.S.E?.......

3. Category of School: National (   );   Provincial (   ); District (   )

    Number of Streams...........................Number of Students.........................

4. How long have you been in this school?
    a) Below 3 years   [   ]
    b) Between 3-4 years   [   ]
    c) Between 5-10 years   [   ]
    d) Above 10 years   [   ]

PART B: BENCHMARKING PRACTICES

5. How did you learn about adopting best practices from other schools?
    a) Through workshops   [   ]
    b) Associating with schools in the same category   [   ]
    c) Associating with best performing public schools   [   ]
    d) Advice from quality assurance personnel   [   ]
    e) Publications   [   ]
    f) Internet   [   ]
    g) Libraries   [   ]

h) Correspondence and direct contacts with best performing private schools [   ]

i) Others_____

6. Please give the name of the school (s)

_____

7. Explain how the exercise was done.

_____

_____

_____

_____

8. Do you search for best practices through a systematic and continuous study of the best

available teaching and learning processes from better performing schools?

a)   Yes   [   ]   b)   No   [   ]

9. If yes from (13) above, do you use them as a standard for improving the school's own

processes?

a)   Yes   [   ]   b)   No   [   ]

10. When did your school first implement best practices from better performing

schools? ----------

11. What is the major drive of adopting best practices from any other school(s)?

a) To inject best practices into the operations of a school   [   ]

b) To improve school performance   [   ]

c) To encourage creativity and innovation in education functions [   ]

d) To get the best out of staff, processes and programmes   [   ]

e) To expose staff members to different ways of doing things   [   ]

f) To achieve superior performance   [   ]

g) To implement appropriate changes   [   ]

h) To create and sustain excellence   [   ]

i) To provide quality education [ ]

j) Due to increased pressure to become competitive [ ]

k) To meet & beat the performance of the best performing schools [ ]

l) To create a culture based on improved performance outcomes [ ]

m) To establish operating goals and performance objectives [ ]

n) To meet the requirements and expectations of the students [ ]

o) Others

12. Which performance factors need to be benchmarked and how?

Performance factor	Tick	How
Resources and competences		
The performance standards		
Mode of service delivery		
Curriculum implementation		
Discipline		
Parental involvement		
Leadership		
Motivation of staff		
Teaching and learning resources		

i) To provide quality education [ ]

j) Due to increased pressure to become competitive [ ]

k) To meet & beat the performance of the best performing schools [ ]

l) To create a culture based on improved performance outcomes [ ]

m) To establish operating goals and performance objectives [ ]

n) To meet the requirements and expectations of the students [ ]

o) Others

12. Which performance factors need to be benchmarked and how?

Performance factor	Tick	How
Resources and competences		
The performance standards		
Mode of service delivery		
Curriculum implementation		
Discipline		
Parental involvement		
Leadership		
Motivation of staff		
Teaching and learning resources		

13. To what extent does your school benchmark with other schools in each of the following aspects?

KEY

1= Very large extent

2= Large extent

3= Some extent

4= Little extent

5= Not at all

Aspect	1	2	3	4	5
Parents discussions with teachers on students academic performance improvement					
Effective parental involvement through closer cooperation between parents and school management					
Discipline which enables students to concentrate on their studies and nurture certain values demanded by society					
School prefects' promoting understanding between teachers and students					
The head teacher's influence on students to go beyond boundaries of psychological requirement					
Teachers ensure school rules and regulations are adhered to					
The school principal coordinates, directs and facilitates the Learning process.					
The school principal motivates teachers and students					
Incentives given to teachers lead to job satisfaction					
Job satisfaction determines the quality of teaching					
Availability and prudent allocation of teaching and learning resources					
Using teaching and learning resources to involve the learner in learning process					

14. Indicate how each of the following factors influence the success of emulating the best practices

Factor	Affects	No effect
Cost -benefit analysis		
Objective identification of opportunities and bottlenecks		
Assessment of school's former performance		
The support of the method to internal quality management		
Its contribution to greater accountability to the outside world		

15. Do you perform the following before adopting best practices from any other school(s)?

Activity	Tick
Understanding the school's processes in detail	
Identifying specific areas that should be improved	
Selecting a project team among staff members who can carry out this task	
Determining performance measures; factors for the school to remain competitive	
Collecting data regarding the students' needs and determining areas of priority	
Determining whom the school wishes to compare itself with.	
Collecting and analyzing data on best practices from the school identified	
Developing goals and plans to implement desired improvements in the areas that require urgent attention	

16. Which of the following areas in public schools regarding practices, processes, procedures and activities to maintain the quality of education they provide need to be addressed fully through benchmarking?

Practices/Statement	Critical	Not critical	Don't know
How programmes and subjects are selected and approved			
Admissions and entry standards			
Arrangements for the delivery and management of school programmes			
Strategies for guiding and supporting students			
Arrangements for managing actual teaching			
Formal mechanism to facilitate staff-student communication			
Arrangement for reporting and dealing with problems			
Policies for assessing students and for determination of academic standards			
Arrangements for supervising students (preps, extracurricular activities, use of free time).			
Formal mechanisms for reviewing the quality of education and teaching			
The standards attained by students			
Number of normal learning hours			
Rules for using credit (Grading systems)			
Class pass marks			
Rules for dealing with failure			
Progression to the next class			

17. Please tick the **THREE** most critical factors influencing the choice of the various benchmarking tools in your school?

    a) Compatibility with local conditions   [   ]

    b) Comparability of schools and processes   [   ]

    c) Time and resource available.   [   ]

    d) Level of experience in benchmarking   [   ]

    e) Objectives to be achieved and aspects to be reviewed   [   ]

18. Have students' performance improved by adopting best practices in the following areas.

Areas/Aspects	Very significantly	Significantly	Less significantly	Not at all
Parental involvement				
Discipline				
Motivation				
Leadership				
Teaching and learning resources				

19. Have you experienced any difficulties in your effort to adopt best practices?Yes/No.

20. If yes, please explain these difficulties_____

_____

PART C: SCHOOL PERFORMANCE

21. What are some of the reasons for variation in performance of students in KCSE?

    i)   _____

    ii) _____

    iii) _____

25. Kindly provide the mean score in KCSE in each of the following years:

Year	School Mean Score
2005	-------------
2004	-------------
2003	-------------
2002	-------------
2001	-------------
2000	-------------

Thank you for taking your time off your busy schedule to complete the above questionnaire.

25. Kindly provide the mean score in KCSE in each of the following years:

Year	School Mean Score
2005	-----------------
2004	-----------------
2003	-----------------
2002	-----------------
2001	-----------------
2000	-----------------

Thank you for taking your time off your busy schedule to complete the above questionnaire.

APPENDIX III: THE EXTENT OF USING BENCHMARKING IN PUBLIC SECONDARY SCHOOLS

Aspect	MEAN	STD
Discipline to enable students to concentrate on their studies and nurture certain values demanded by society	1.0323	.17961
Effective parental involvement through closer cooperation between parents and school management	1.3667	.49013
Availability and prudent allocation of teaching and learning resources	1.3871	.55842
The school principal to coordinates, directs and facilitates the learning process.	1.4194	.56416
Using teaching and learning resources to involve the learner in the learning process	1.4839	.72438
Teachers ensure school rules and regulations are adhered to	1.6000	.72397
Parents discussions with teachers on students academic performance improvement	1.7419	1.8251
Job satisfaction to determine the quality of teaching	1.8065	.87252
The school principal's motivation to teachers and students	1.9032	.90755
Incentives given to teachers for job satisfaction	1.9032	.94357
School prefects' promoting understanding between teachers and students	2.3333	1.0613
The head teacher's influences on students to go beyond boundaries of psychological requirement	2.5161	.96163

Source: Research Data

APPENDIX IV: KCSE RESULTS FROM SAMPLED SCHOOLS

Mean Score

SCHOOL	2005	2004	2003	2002	2001	2000
School 1	4.966	4.221	4.617	4.784	4.687	4.224
School 2	9.736	9.299	9.540	9.381	9.360	8.730
School 3	6.318	6.633	5.506	5.857	5.902	5.785
School 4	7.993	8.386	8.165	8.088	7.944	7.217
School 5	4.500	4.424	4.277	3.131	3.423	3.347
School 6	5.672	5.333	5.285	5.559	6.449	5.576
School 7	6.159	6.322	6.115	5.657	6.115	5.836
School 8	5.423	5.549	5.339	5.250	5.568	4.983
School 9	4.838	4.667	4.457	3.960	2.253	3.929
School 10	4.440	4.291	3.863	3.587	3.566	3.899
School 11	5.828	5.600	5.500	5.602	5.580	5.368
School 12	6.169	6.088	6.149	5.642	6.641	6.061
School 13	4.729	4.416	4.756	4.679	4.458	4.557
School 14	9.054	8.747	8.404	8.696	8.527	8.599
School 15	7.285	7.563	7.500	7.416	6.784	7.208
School 16	6.713	6.897	5.977	6.347	7.085	6.325
School 17	7.845	7.774	6.964	7.399	6.027	6.802
School 18	4.575	4.034	4.065	4.219	3.772	5.240
School 19	4.624	4.455	3.674	3.934	3.714	3.340
Mean	**6.379**	**6.037**	**5.798**	**5.747**	**5.677**	**5.633**

Source: Research data

APPENDIX V: A GUIDE TO BENCHMARKING OPPORTUNITIES

The following are some schools with best practices in specific areas that can be benchmarked.

Best practice	School
Games Management	Kapsabet Boys
Effective Integration of Games with other academic activities	Kapkenda Girls
School's Daily Routine	Chebisaas Girls
Effective Utilization of the lunch break	St. Teresa's of Avilla-Ndalat
Effective Utilization of the last two weeks of the term	Moi Girls- Eldoret
Work Improvement Team	U.G High school- Eldoret
Effective Departmental Management	Kapsabet Boys
Positive Students Dynamics	Hill School- Eldoret
Effective Teacher Motivation Structures	Loreto Matunda-Uasin Gishu
Focused Spiritual Support to Students	Sironga Girls- Nyamira District
Effective Guidance and Counseling Structures	Kericho High School
An Effective Performance Management System	U.G High School and Chebisaas Girls
Effective Noise Management	Kericho High and Hill School
Effective Examination Administration	Sunshine Secondary school- Nairobi
Effective Time Management	Sunshine Secondary School and Mangu High School
Team Teaching and Effective Teaching Structures	Kapsabet Boys
Effectiveness of Heads of Department	Kapsabet Boys
Effective Performance Improvement Initiatives	Hill School, Chebisaas Girls and U.G High School
An Effective Strategy for Teaching Maths	Mangu High School
Effective Library Services	AIC Girls – Kessup
Student participation in Broad- Based Co-curricular Activities	Mary Hill- Thika
Effective Strategy for teaching Biology	Hill School - Eldoret

Source: The East African Teacher March-April 2005

APPENDIX VI

NAIROBI PROVINCE PUBLIC SECONDARY SCHOOLS

1. Aquinas High
2. Buru Buru Girls
3. Dagoretti H. School
4. Dagoretti Mixed School
5. Dandora Sec.
6. Eastleigh High School
7. Embakasi Girls
8. Highway Sec.
9. Hospital Hill
10. Huruma Girls
11. Jamhuri High School
12. Kahawa Garisson
13. Kayole Sec.
14. Kamiti Sec.
15. Kamukunji Sec.
16. Kangemi High School
17. Kenya High
18. Langata High School
19. Lenana High School
20. Maina Wanjigi
21. Moi Forces Academy
22. Moi Girls
23. Muhuri Muchiri
24. Muslim Girls
25. Mutuini High School
26. Nairobi Milimani
27. Nairobi School
28. Nembu Girls
29. Ngara Girls
30. Nile Road School
31. Ofafa Jericho
32. Our Lady of Fatima
33. Our Lady of Mercy
34. Parklands Boys
35. Parklands Arya Girls
36. Pangani Girls
37. Precious Blood-Riruta
38. Pumwani Secondary
39. Ruaraka High School
40. Ruthimitu Girls
41. Ruthimitu High School

42. St. George's Girls
43. St. Teresa's Boys
44. St. Teresa's Girls
45. State House Girls
46. Starehe Boys Centre
47. Starehe Girls Centre
48. Uhuru Secondary
49. Upper Hill School

Source: Kenya Secondary Schools Heads Association (Nairobi) 2005 KCSE Results Analysis