FACTORS INFLUENCING THE IMPLEMENTATION OF TOTAL QUALITY MANAGEMENT IN PUBLIC SCHOOLS IN ZAMBIA. A CASE STUDY OF SIAVONGA SECONDARY SCHOOL IN SIAVONGA DISTRICT

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Submitted as a Partial Fulfillment for the award of a Masters of Education in Educational Management Degree

JULY 2016
DECLARATION

I Oggar Mazuba do hereby declare that this is my original work and that it has not been presented in any university or institution to the best of my knowledge

Mazuba Oggar

SIGN: .................................................. Date: 29-09-16
DEDICATION

This study is dedicated to my beloved sons Chabota, Mweetwa and Nchimunya and my most loving wife Basila.
ACKNOWLEDGEMENT

The greatest lesson I have learnt in the process of this study is how much we need others in doing anything substantial in academics. Many people were helpful in one way or the other, indirectly or directly. I wish to take the first opportunity to thank God for His endless mercy and abundance provision. I also thank my supervisors Dr. P.C. Machinshi and Mr. C Kukano for their tireless support and guidance. I am also indebted to my colleagues from UNZA campus. more so Mr. Vincent Chungu for his support and encouragement throughout the study period.

I must also acknowledge the immeasurable support of my family and relatives. God bless you for your prayers and consistent support in the phases of my academic endeavours. Special thanks to my Wife and children for their endless support, understanding and encouragement. My loving Father has offered endless prayers to this effect.

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ABSTRACT

While education is considered to be a basic right and need, the management of secondary education in Zambia has been faced with setbacks due to several bottlenecks. This calls for deliberate action that will bring about the necessary changes in management. Use of Total quality management is the first step in realizing these changes. Several school managers are already using this management method. Such schools have faced several challenges in the use of TQM to improve management. The general objective of this study was to establish Factors influencing the implementation of total quality management in public schools in Zambia: A case study of Siavonga secondary school in Siavonga District. The specific objectives included, to establish the effect of culture on the implementation of TQM practices in public secondary schools, to determine the extent to which management commitment influence the implementation of TQM practices in public secondary schools, to examine the relationship between organizational change and implementation of TQM practice in public secondary schools and to establish the role of resource on the implementation of TQM practice in public secondary schools. The study employed a descriptive survey study. The target population included the public secondary school Headteacher, deputy head teacher, teachers and heads of departments Siavonga secondary schools. It also included the three Education Standards officers. The total sample size of 56 respondents was drawn using purposive random sampling. Data collected was both qualitative and quantitative. Qualitative data was analyzed using Thematic analysis while quantitative data was analyzed using descriptive statistics. It was found that organizational culture, management commitment, resources and organization played a role in TQM implementation. The researcher found that it was very essential for some areas to change in order for TQM to be implemented. Based on the findings, the researcher recommends that for TQM to be implemented organizational culture should be taken into consideration and where necessary changed to give way for the
implementation of TQM practices. The management too should be committed while engaging all stakeholders in implementation of TQM practices.
CHAPTER

INTRODUCTION

1.1 Overview

The chapter gives an introduction to the study, statement of the problem and purpose of the study. This chapter also states the general and specific objectives of the study; it presented the study questions, the significance of the study, limitations of the study and finally the definition of the terms and ethical consideration.

Waithaje et al (2006) highlighted that, 'Total Quality Management (TQM) is an organisational process that actively involves every function and every employee in satisfying customers’ needs, both internal and external. In line with the above, Bennell (2004) mentioned that TQM works by continuously improving all aspect of work through structured control, improvement and planning activities that are carried out in concern with guiding ideology. These activities focus on Quality and Customer Satisfaction as the top priorities.

According to MOE (2006), the issue of Management specifically in the public service, is quite critical, because management is not only directly linked to Total Quality Management delivery by personnel and/or in this case teachers and their immediate supervisors (managers) at school level, but also by district, provincial and national supervisors and non-teaching personnel in the education system. Bennell (2004) observes that, an inappropriately managed teacher contributes to deteriorating standards of professional conduct, including poor performance, absenteeism, lateness, low time on task and general misbehaviour. Teachers show up drunk, physically abusive or simply idling around school doing nothing.

MOE (2006) puts clearly that, quality of education leads to a prospective future and quality improvement is a never ending process. Hence, a prime focus needs to be given to quality of education. MOE (2006) adds that, a due attention should be paid to the different educational strata such as schools, colleges and universities. To solve the problem of quality management different quality management strategies were adopted by different institution and total quality management (TQM) is one of these strategies. Sallis (2002) noted that, TQM is seen as having enormous potential to respond to the challenges. It can be applied as a means for improving student / staff morale, increasing productivity and delivering higher quality services to both internal and external customers.
Sallis (2002) added that, Secondary education lays significant emphasis on human capital formation. It produces intellectual leaders and path makers. No nation can go high without quality secondary education. Basically, primary education is concerned with transfer of knowledge from the teacher to the taught. But secondary education involves analysis, synthesis and the transformation of information into knowledge. Above arguments clearly indicate that secondary education is becoming an issue for research and discussion. Parallel to this TQM is becoming popular among developed and developing countries in the world today. Proper management of secondary education in universities can put much better result than we expect.

According to Srikanthan, and Dalrymple (2003), leaders in a TQM system view the school as a system. Leaders in TQM need to support employee development, establish a multipoint communication among the employees, managers, and customers, in this case pupils and the parents, and use information efficiently and effectively. In addition, Srikanthan and Dalrymple (2003) also said that leaders encourage employee participation in decision-making and empower the employees. Top management commitment and participation in TQM practices are the most important factors for the success of TQM practices. They also encouraged Managers to demonstrate more leadership than traditional management behaviours to increase employees’ awareness of quality activities in TQM adoption and practices. This entails that for a school to implement TQM, employee development is a cardinal point to note. Schools should improve employee involvement/skill and school structure and allocate sufficient resources to implement TQM successfully. TQM practices improve different aspects of pupil’s performance. There are a lot of factors influencing implementation of TQM and this may have a lot of effects on a school.

In addition Mehrotra (2010), noted that, as far as the role of Total Quality Management is concerned in a school, every Head of Department is responsible for quality; especially the Headteacher, however, only latter can provide the leadership system to achieve results. Head teachers have numerous responsibilities. They must practice the philosophy of management by wondering around. Wali and Boujelbene (2011) alluded to the fact that, management should get out of the office and visit the classrooms so that managers can find out what is happening with a particular class. The idea is to let employees think for themselves. Head teacher’s role is no longer to make the final decision, but to make sure the team’s decision is aligned with the quality statements of the organization. Wali and Boujelbene further stated that, Push problem solving and decision making to the lowest appropriate level by delegating
authority and responsibility. The meaning here is that, the needed resources must be provided to train employees in the quality management tools and techniques.

As cited by Zakuan et al (2012), Deming (1986) argued that, role of top management commitment in quality management implementation in any organization main focus is on employee empowerment. The objective of quality can be better achieved by the top management commitment. Top management commitment empowers their employees to achieve quality. The advantages of TQM have been widely discussed, but the factors influencing its implementation have received little attention.

1.2 Statement of the Problem

Anindya (2009) in his study identified reasons for failure in TQM programmes in manufacturing firms as management lack of knowledge about what TQM is, ineffective communication between management and employee and low involvement of other levels of management within the organization. However little is mentioned on reasons for failures for the failures in implementing TQM in education in particular public secondary schools. We do not know factors influencing the implementation of TQM in public schools in Zambia.

Although a number of studies have been carried out on the concept and context of TQM practice, the researcher did not come across a study done on factors influencing the implementation of TQM practice in public secondary schools. It is in this view that this study sought to investigate the factors influencing the implementation of total quality management practice in public schools as these factors are not known.

The study brought out factors influencing the implementation of TQM practices at a public school of Siavonga District of Zambia by surveying Siavonga secondary school which is a public school. This study focused on TQM at Siavonga secondary school because it is a public school. Public schools face some unique conditions and constraints not found in private sector environments where TQM principles have evolved and been validated. The context for public schooling reflects a diversity of social values, and competing interests, seldom found among the customers of private schools. Public schools are not only accountable to the direct recipients of services but to all the taxpayers who support their operation and to political structures that control their fiscal resources and the standards by which their results were judged. Hence Siavonga being a public School offered necessary data vital to the research.
1.3 **Purpose of the Study**

The purpose of this study was to establish factors influencing the implementation of TQM in public schools in Siavonga District: A case of Siavonga Secondary School.

1.4 **Objectives of the Study**

The specific objectives were:

(i) To establish factors affecting implementation of TQM practice in public schools

(ii) To ascertain the extent to which management commitment influences the implementation of TQM practice in public secondary schools.

(iii) To establish the role of resources on the implementation of TQM practice at Siavonga secondary schools.

1.5 **Research Questions**

The research questions were:

(i) What are the factors affecting the implementation of TQM practice in public schools?

(ii) To what extent does management commitment influence the implementation of TQM practice in public secondary schools?

(iii) What role does resources have on the implementation of TQM practice in secondary schools of Siavonga?

1.6 **Significance of the Study**

This study was significant to the field of Educational management. The study was intended to contribute to the growing body of literature on quality management in the public School in general, and at the same time contribute to the principle works in practice. Therefore, there is a potential for other public agencies to benefit from this study.

The objective was to create awareness to all stakeholders in the Ministry of Education of the importance of Total Quality Management and provide quality management results in an ongoing manner. This study will be of benefit to the following stakeholders: The ministry of education will gain more insight from the findings of this study into the factor influencing the implementation of Total Quality Management in secondary schools. This may help inform
the standards and quality assurance department in the management planning and policy making.

Head teachers as the managers of schools may gain insight into management challenges facing their institutions and probably get insight into their own challenges finding possible solutions to them.

The board of secondary schools may better understand the essence of leadership and use of resources in managing an institution. This may go a long way in improving the management quality which will result in better customer satisfaction.

Secondary school teachers may gain insight into the impact of their involvement in school management and help improve quality of their output and their personal fulfilment.

1.7. Delimitation of Study

Simon (2011) points out that, delimitations include the population of the study, variables, statistical analysis and focus of the research. Delimitation in research refers to choices that the researcher makes for the study that is under his/her control. Delimitations are used to address how the study is narrowed in scope (Creswell, 1994). This study was restricted to one government secondary school in Siavonga district.

1.7 Limitation of the Study

According to Meredith et al (2003), limitations refer to factors which the researcher foresees as restrictions, problems and such other elements which might affect the objectivity and validity of the research findings. Simon (2011) argues that limitations are shortcomings, conditions or influences that cannot be controlled by the researcher. In this instance, the researcher had difficulties with some respondents who returned unanswered questionnaires. Some teachers could not return the questionnaires given to them as they had misplaced them. The counter reactions to these limitations were that the researcher worked with the immediate supervisors such as the Deputy Head teacher and Head of department of the affected teachers (respondents) who helped to administer and collect well answered questionnaires. For those participants who had misplaced questionnaires, replacements were made. Moreover, the scope of the investigation was limited with time and finances. The time to collect information from school was not enough. Shortage of financial resources that would aid the researcher
gather information affected the study. Despite these limitations, the results were valid and reliable as the purpose of carrying out this study was brought out.

1.8 Operational Definitions

- Anindya (2009) defined **Quality** as being measured against criteria. It is not an end in itself, but a means by which the end product is judged as being up to standard.
- Baidoun (2003) defines **Total Quality Management** as creating a quality culture where the goal of the staff of the institution is to delight their customer, and where the structure of the institution allows them to do so.
- Mehrotra (2010) defined **Management commitment to quality** as referring to making it clear where management stand on quality.
- **Public Secondary school** - These are schools that are run and funded by government. (Sallis, 2002)
- **Quality implementation** - Process that occurs over a period of time and involves introducing new quality system elements within an organization (Oluwatoyin, 2008).
- **Quality management** - Aspect of the overall management functions that determines and implement the quality policy (Oluwatoyin, 2008).
- **Total quality management** - application of quantitative methods and human resources to improve all the processes within an organization and exceed customer needs now and in the future (Baidoun, 2003)
- **Implementation**: is the carrying out, execution, or practice of a plan, a method, or any design, idea, model, specification, standard or policy for doing something. As such, implementation is the action that must follow any preliminary thinking in order for something to actually happen. (Microsoft Encarta, 2009)
- **Factors** according to Microsoft Encarta (2009) it defines a factor as a circumstance, fact, or influence that contributes to a result.

1.10 Ethical Considerations

The researcher sought authorization from the District management and clearance from the University of Zambia management before carrying out the research. All information obtained in this research was strictly used for academic purposes and respondents were assured of the confidentiality of information given where necessary.
1.11 Summary

The chapter gave an introduction to the study, statement of the problem and purpose of the study. This chapter also states the general and specific objectives of the study: it presented the study questions, the significance of the study, limitations of the study and finally the definition of the terms and ethical consideration. In this chapter, the context and the rationale for the study were introduced and discussed. The potential applicability of this study to other public school is also discussed. The next chapter reviews literature regarding the study area in order to give in-depth understanding of the problem.
CHAPTER 2

2.0. LITERATURE REVIEW

2.1. Overview

The purpose of this chapter is to review literature relevant to the study. Mc Burn (2010) pointed out that, a literature review shows your readers that you have an in-depth grasp of your subject; and that you understand where your own research fits into and adds to an existing body of agreed knowledge. According to Kothari (2008) literature review has the following, main tasks namely to demonstrates a familiarity with a body of knowledge and establishes the credibility of your work, summarises prior research and says how your project is linked to it. It surveys the literature in your chosen area of study, Kothari (2008). further explained that, literature review synthesises the information in that literature into a summary, it critically analyses the information gathered by identifying gaps in current knowledge; by showing limitations of theories and points of view; and by formulating areas for further research and reviewing areas of controversy. It presents the literature in an organised way and integrates and summarises what is known about a subject and demonstrates that you have learnt from others and that your research is a starting point for new ideas. Predominantly, the review will concentrate on effect of Organisation Culture in implementation of TQM, management Commitment and roles of resource in implementation of TQM practice.

2.2. Effect of Organisation Culture in implementation of TQM

Waithaje, et al (2006) stated that TQM depends on and creates a culture in an organisation which involves everybody in quality improvement. This means that everyone in the company can affect quality but must first realise this factor and have the techniques and tools which are appropriate for improving quality. Waithaje, et al (2006) further ascertained that, TQM system considers the rewards and recognition to be critical to a company's programme, particularly when greater involvement of staff is required. Positive reinforcement through recognition and rewards is essential to maintain achievement and continuous improvement through participative problem-solving projects (Wali and Boujelbenc, 2011).

According to Black (2003) Organizational culture is a wider and deeper concept, something that an organization 'is' rather than what it has. It comprises the attitudes, experiences, beliefs and values of an organization. Black (2003) defined it as the specific collection of values and norms that are shared by people and groups in an organization and that control the way they interact with each other and with stakeholders outside the organization. In line with the above
Arshida and Agil. (2012) urged that, organizational values are beliefs and ideas about what kinds of goals members of an organization should pursue and ideas about the appropriate kinds of behaviour organizational members should use to achieve these goals. From organizational values develop organizational norms, guidelines or expectations that prescribe appropriate kinds of behaviour by employees in particular situations and control the behaviour of organizational members towards one another. Senior management may try to determine a corporate culture. They may wish to impose corporate values and standards of behaviour that specifically reflect the objectives of the organization. In addition, there will also be an extant internal culture within the workforce. Work-groups within the organization have their own behavioural quirks and interactions which, to an extent, affect the whole system (Black, 2003).

Baidoun (2003) narrated that globally, every organization has its own unique way of doing things. This is defined in terms of culture of the organization. The processes, the philosophy, the procedures and the traditions define how the employees and management contribute to the achievement of goals and meeting of organizational objectives. Indeed, sticking to organizational culture is integral in delivery of the mission of the organization. However, Baidoun (2003) cautioned that, culture has to be reviewed and for that matter re-adjustments have to be done in tune with the prevailing economic, political, social and technological realities so as to improve on efficiency. Inadequate cultural dynamism has made total quality implementation difficult because most of the top level management of many organizations are rigid in their ways of doing things.

Youngless (2000) argued that rather than trying to inspect the quality of products and services after they have been completed, Total Quality Management instils a philosophy of doing the job correctly the first time. It all sounds simple, but implementing the process requires an organizational culture and climate that are often alien and intimidating. Therefore, the desire to determine the factors influencing implementation of total quality management as it relate to student academic performance.

**How culture impacts TQM**

This part aims at showing how culture impacts TQM. There are numerous research papers where organizational culture is seen to be one of the major causes of failure in a TQM program as cited by Laohavichien et al. (2009). Very seldom are the causal mechanisms behind the problems addressed or culturally correct TQM methods suggested, however. It is
thus of importance to take a closer look to organizational cultures and their effects to TQM.
The researcher is relying on Schein's (1986), as cited by Laohavichien et al. (2009) view to
organizational cultures, where culture of an organization is seen to consist of three levels: 1) artifacts and creations, that are visible but not often decipherable, 2) values, and 3) basic assumptions, that operate unconsciously. Artifacts are "the constructed physical and social level of the culture's environment", e.g. language, technological output, artistic production, physical space or the behavior of the group. Values are the organization's "sense of what ought to be, as distinct from what is" and reflect what is seen to be "good" or "correct". (Laohavichien et al., 2009) in different situations of choice. Even if artifacts and values are the levels typically approached by the researcher, Laohavichien et al. (2009) stated that "the term 'culture' should be reserved for the deeper level of basic assumptions and beliefs that are shared by members of an organization, that operate subconsciously, and that define in a 'taken-for-the granted' fashion an organization's view of itself and its environmentl. This approach to the organizational culture allows us to try to understand "why organizations do some of the things they do and why leaders have some of the difficulties they have" (Laohavichien et al., 2009) instead of just describing the differences in artifacts and values as some other research directions do. Typical assumptions may include the ultimate basis for human relationships (hierarchy, tradition, group welfare or individual welfare) but also the basic assumptions for structuring organizational relationships. The theoretical background to the model used in evaluating the cases presented here is the notion that all TQM approaches are, similarly, artifacts that are based on some sets of assumptions. That means that the workers may not resist change: they may resist the specific type of change that seems to bring in the wrong type of underlying cultural values and assumptions (Laohavichien et al., 2009).

According to Sallys (2002), TQM requires a change of culture which is notoriously difficult to bring about and takes time to implement. It requires a change of attitudes and working methods. Staff needs to understand and live the message if TQM is to make an impact. However, culture change is not only about changing behaviors. It also requires a change in institutional management.

Strong culture is said to exist where staff respond to stimulus because of their alignment to organizational values. Conversely, there is weak culture where there is little alignment with organizational values and control must be exercised through extensive procedures and bureaucracy. Where culture is strong, people do things because they believe it is the right thing to do, there is a risk of another phenomenon, Group think.
According to Schein as cited by Murphey (2009), culture is the most difficult organizational attribute to change, outlasting organizational products, services, founders and leadership and all other physical attributes of the organization. At the first and most cursory level of Schein's model is organizational attributes that can be seen, felt and heard by the uninitiated observer. The next level deals with the professed culture of an organization's members. At this level, company slogans, mission statements and other operational creeds are often expressed, and local and personal values are widely expressed within the organization. At the third and deepest level, the organization's tacit assumptions are found. These are the elements of culture that are unseen and not cognitively identified in everyday interactions between organizational members. Additionally, these are the elements of culture which are often taboo to discuss inside the organization. Murphey (2009) observed that, many of these 'unspoken rules' exist without the conscious knowledge of the membership. Those with sufficient experience to understand this deepest level of organizational culture usually become acclimatized to its attributes over time, thus reinforcing the invisibility of their existence.

Sallis (2002) postulated that, Total Quality Management major constant imperative is a concern for standard achievement. Total Quality Management is identified as one of the best means in effectively achieving educational goals and objectives. However, it has not been widely used in school organization. Even those schools that adopted the Total Quality Management practices are still faced with challenges such as absence of a guiding Total Quality Management framework, inadequate human resource and resources, lack of leadership, perception of Total Quality Management as a program instead of a culture of continuous improvement. So what effective Total Quality Management implementation offers is a treatment for these problems by ensuring the creation of quality culture where every member of the school is an instrumental. Juran’s rule of thumb (Sallis, 1993:52) says that “85% of Total Quality Management problems lie with management, as they have control over the system of the organization.

It has been discovered through literature studied that organizational management creates a culture that impacts on the implementation of TQM, however there is a gap on how organizational culture of school management affect the implementation of TQM practices.

2.3. TQM at Globally, Continental and National Level

TQM is not limited to particular schools but it also affects countries, continents and it is a global issue. Muma et al., (2014) contend that, it is a prevailing belief that the world has
entered a scenario in which quality has to play a vital role. It is also an unfolded truth that “quality of education” is the key factor on which there is a serious competition globally and between countries. Muma et al. (2014) further argued that the process of globalization and liberalization has created enormous opportunities and challenges in the era of global competitiveness. In the era of these fast emerging changes there is a need of efficient and talented human resources. The above illustration simply implies that, education and particularly higher education is being driven towards commercial competition imposed by economic forces. No one should deny that present higher education system has poor teaching, incoherent curricula, excessive price and insufficient administrative ability. Bennell (2004) emphasised that, global market demands skilled and talented workforce which only can be created through quality education.

Unlike industrial products, it is rather a difficult task to manage quality of education, but quality is the only currency, which is accepted universally and it is also true when product is education.

At National level, TQM has started receiving attention. As pointed out by Mehrotra (2010), TQM managers should give necessary training to all their employees to improve their proficiencies in their tasks. Mehrotra (2010) also said that effective training in management and improvement in quality brings success for the school. Employees’ effective knowledge and learning capability will provide sustainability of quality management in the firm. Furthermore, Mehrotra noted that learning organizations adapt rapidly to the changes and develop unique behaviour, which distinguishes them from other firms and enables them to obtain better results. He observed that quality does not begin in one department or function; it is the responsibility of the Nation, Province, District and the school. Training should be given to all employees based on the results of the training needs assessment. It therefore important to state that TQM requires the right human resource based on the right training and it also requires team work.

2.4 Management commitment in TQM

This part showed how management commitment affects TQM in organisational management. It is important to note that there are factors that may inhibit successful implementation of TQM. Arshida & Agil (2012) refer to them as barriers of TQM implementation. These factors include; lack of top management commitment which is associated with lack of critical resources and poor leadership leading to poor employee empowerment and motivation, poor
or weak organizational vision and plan statement that dilutes employee’s efforts in quality programs.

Idris & Ali (2008) alluded to the fact that, the development of leadership theories and quality management practices share the common objectives of improving organizational performance and enhancing the work experience of organizational members. But it is unclear what specific leadership styles are most effective in organization pursuing quality management practices. It is however evident that the role of leadership is a key factor in effective quality management in organizations as all excellence models include leadership as an enabling driver. The role of leadership includes long-term commitment to innovation and creativity. Managing human resources is a strategic issue that requires managerial capability. Knowledge is an important organizational resource, and leadership plays a key role in facilitating the acquisition of that knowledge. Thus, leaders must have the ability to realize formulated vision by managing quality elements to transform the firm into using quality managerial practices (Idris & Ali, 2008). This is possible through a transformational leader, who has the capability to inspire and direct subordinates.

Moreover, it has been found that top management support is essential for quality improvement. Arshida and Agil, (2012) concurred to this notion based on an exploratory study conducted on the specific problems that Qatar Steel Company faced in the implementation of the quality program. The study revealed that lack of support from top management was the biggest impediment to TQM implementation. When commitment and support from the top management was forthcoming, Quality Circles (QC) implementation led to an atmosphere of cooperation and brought in many positive results, like quality improvement, productivity increases, and improved management style.

Arshida and Agil, (2012) said that, factor affecting the application of TQM in education is, sometimes, the misinterpretation of TQM philosophy and the lack of understanding the processes that are different in education as compared to industry. This could be due to lack of the necessary knowledge about TQM. A common barrier to both industry and education in implementing TQM is lack of proper leadership (Arshida and Agil, 2012). Leaders should be able to set viable corporate vision and be willing to initiate change and provide the resources needed for team efforts directed towards achieving the vision. Senior management may want the results, which TQM can bring but may not be backing it wholeheartedly. TQM should be
embraced as a strategy by the top management and they should get visibly and explicitly committed to its philosophy.

Management leadership is a key aspect in TQM. The following emphasises the role of Management leadership in TQM. Laohavichien et al. (2009) stated that, Management leadership is an important factor in TQM implementation because it improves performance through influencing other TQM practices. The lack of commitment in the top management levels may lead to some problems in the process of implementing TQM. Top management is completely involved in implementing and stimulating the TQM approach. Leadership is also responsible for the product and service which is offered. Successful implementation of TQM requires effective changes in an organization’s culture and it is somehow impossible without management leadership. In a TQM process, effective leadership should develop a clear mission statement and then build up suitable strategies in order to support the mission. The top management needs to identify the critical success factors and to review the management structure. Leadership must ensure that the principles of quality management are implemented continually (Yusuf et al., 2007). The four distinctive ways that top management can support TQM implementation include allocating budgets and resources; control through visibility; monitoring progress; and planning for change (Motwani, 2001).

Added to the importance of commitment by top management in TQM implementation, Deming predicted that visionary leadership was essential for an effective TQM program. Several case studies support the claim that effective QM requires top management to provide a clear direction to employees. Accordingly, Pannirselvam and Ferguson (2001) studied the strength of the relationships among the various quality management constructs as well as between quality management and organizational performance. They found that leadership considerably whether directly or indirectly affected all system units.

A more comprehensive effort was exerted by Baidoun (2003) who tried to develop a theory of quality management to describe and explain the effectiveness of Deming’s Management Method. The seven constructs that could capture the essence of the Deming method include visionary leadership, learning, internal and external cooperation, process management, employee fulfilment, continuous improvement, and customer satisfaction. The empirical study by Baidoun (2003) conducted in Japanese-owned and American-owned plants found that employee fulfilment is directly related to customer satisfaction. The authors emphasized that organizational commitment impacts the creation of organizational form and institutes
organizational practices for the sake of organizational survival. The study concluded that innovation is essential for achieving quality improvements in product, processes, and services. This leads to employee satisfaction, which enhances customer satisfaction and consequently the theoretical survival of the organization. However, what is sought is not merely the survival of the firm, but TQM. Organizational leadership should be responsible for innovation, not just the survival of the firm.

Another related study by Laohavichien et al. (2009) tested the influence of both transactional and transformational leadership on a firm's quality improvement. Through a study of quality managers in the United States, the study found that although transformational leadership affects infrastructure and core quality management, transactional leadership does not affect either. To date, no studies have used leadership theories to determine the impact on quality management practices; hence, Laohavichien et al. (2009) study is significant. They stated that leaders influence employees and this enhances quality performance or processes and products. The study also found that transformational leadership provides visionary leadership for successful quality management. However, transactional leadership does not decrease the quality, according to this study, which is contrary to previous findings. With regards to the impacts of leadership style and quality management practices on company performances, Idris and Ali (2008) carried out a study based on the empirical evidence from business firms in Malaysia. They found that the ability to adapt to change is critical to survive in the new global economic order. This ability, in the form of transformational leadership, combined with the best practice capability, could lead to organizational success. The study found that transformational leadership, mediated by best practice management, can enhance financial performance. In other words, an effective management approach can bring about much-needed organizational change. The transformational leaders establish the vision and through effective communication, they motivate followers to achieve that vision.

Srikanthan and Dalrymple (2004) stated that training is very important for employees to be highly productive. Supervisors are solely responsible for implementing TQM within their departments, and teaching their employees the philosophies of TQM. Training that employees require are interpersonal skills, the ability to function within teams, problem solving, decision making, job management performance analysis and improvement, business economics and technical skills. During the creation and formation of TQM, employees are trained so that they can become effective employees for the company.
Baidoun (2003) alluded to the fact that to become successful in Total Quality Management, teamwork is also a key element of TQM. With the use of teams, the business will receive quicker and better solutions to problems. Teams also provide more permanent improvements in processes and operations. In teams, people feel more comfortable bringing up problems that may occur, and can get help from other workers to find a solution and put into place. Team work therefore can only be attained with the total management commitment in TQM practices.

Arshida and Agil (2012) maintained that, Leadership is possibly the most important element in TQM. It appears everywhere in organization. Leadership in TQM requires the manager to provide an inspiring vision, make strategic directions that are understood by all and to in still values that guide subordinates. For TQM to be successful in the business, the supervisor must be committed in leading his employees. A supervisor must understand TQM, believe in it and then demonstrate their belief and commitment through their daily practices of TQM. The supervisor makes sure that strategies, philosophies, values and goals are transmitted down throughout the organization to provide focus, clarity and direction. A key point is that TQM has to be introduced and led by top management. Commitment and personal involvement is required from top management in creating and deploying clear quality values and goals consistent with the objectives of the company and in creating and deploying well defined systems, methods and performance measures for achieving those goals.

Baidoun (2003) said that, communication binds everything together. Starting from foundation to roof of the TQM house, everything is bound by strong mortar of communication. It acts as a vital link between all elements of TQM. Communication means a common understanding of ideas between the sender and the receiver. Baidoun (2003) further mentioned that, the success of TQM demands communication with and among all the organization members, suppliers and customers. Supervisors must keep open airways where employees can send and receive information about the TQM process. Communication coupled with the sharing of correct information is vital. For communication to be credible the message must be clear and receiver must interpret in the way the sender intended.

Deming can be considered as a major authority of TQM. This passage tries to explore major areas as brought about by Demining.
Fred (2010) pointed to the fact that TQM lies on Deming’s 14 principles. The principals are based on the assumption that people want to do their best and that it is management’s job to enable them to do so by constantly improving the system in which they work. The frameworks for transforming schools using Deming’s 14 principles are as follows:

- **Create constancy of purpose for improvement of product and service**: The purpose of the school system must be clear and shared by all stakeholders—school board members, administrators, teachers, support staff, parents, community, and students—and the aims of the system must be to improve the quality of education for all students.

- **Adopt the new philosophy**: Implementation of Deming's second principle requires a rethinking of the school's mission and priorities with everyone in agreement on them where by existing methods, materials, and environments may be replaced by new teaching and learning strategies where success of every student is the goal. Individual differences among students are addressed.

- **Cease dependence on inspection to achieve quality**: In industry this was called product inspection. According to Deming, it always costs more to fix a problem than to prevent one. Reliance on remediation can be avoided if proper intervention occurs during instruction. Examples of preventive approaches in schools include Robert Slavin's (2009) school development program, parent involvement strategies and long-standing intervention approaches: Head Start, Follow Through, preschool programs, and other remedial interventions. These intervention strategies can help students avoid learning problems later.

- **End the practice of awarding business on the basis of price alone**: The lowest bid is rarely the most cost-efficient. Schools need to move toward a single supplier for any one time and develop long-term relationships of loyalty and trust with that supplier on the basis of quality and reliability of their product.

- **Improve constantly and forever every activity in the organization, to improve quality and productivity**: The focus of improvement efforts in education, under Deming’s approach, is on teaching and learning processes. Based on the latest research findings, the best strategies must be attempted, evaluated, and refined as needed. And, consistent with learning style theories (Dunn & Dunn, 1992; Dunn, Dunn, & Perrin, 1994), Howard Gardner’s (1994) multiple intelligences, and Henry Levin’s accelerated schools for at-risk students, educators must redesign the system to
provide for a broad range of people—handicapped, learning disabled, at-risk, special needs students—and find ways to make them all successful in school. This means requiring universal standards of achievement for all students before permitting them to move to the next level.

- **Institute training on the job**: Training for educators is needed in three areas. First, there must be training in the new teaching and learning processes that are developed. Second, training must be provided in the use of new assessment strategies (Popham, 2010). Third, there must be training in the principles of the new management system. For schools, this means providing continuous professional development activities for all school administrators, teachers, and support staff.

- **Institute leadership**: Deming’s seventh principle resembles Peter Senge’s (2006) systems thinking. According to both Senge and Deming, improvement of a stable system comes from altering the system itself, and this is primarily the job of management and not those who work within the system. Deming asserts that the primary task of leadership is to narrow the amount of variation within the system, bringing everyone toward the goal of perfection. In schools this means bringing everyone toward the goal of learning for all. It means removing achievement gaps for all population groups—a movement toward excellence and equity.

- **Drive out fear**: A basic assumption of Total Quality Management is that people want to do their best. The focus of improvement efforts then must be on the processes and on the outcomes, not on trying to blame individuals for failures. If quality is absent, the fault is in the system, says Deming. It is management’s job to enable people to do their best by constantly improving the schooling system in which they work. Fear creates an insurmountable barrier to improvement of any system. In schools, staffs are often afraid to point out problems because they fear they may be blamed. School leaders at all levels need to communicate that staff suggestions are valued and rewarded.

- **Break down barriers among staff areas**: Deming’s ninth principle is somewhat related to the first principle: Create constancy of purpose for improvement of product and service. In the classroom, this principle applies to interdisciplinary instruction, team teaching and writing across the curriculum and transfer of learning. Collaboration needs to exist among members of the learning organization so that total quality can be maximized.
• Eliminate slogans, exhortations, and targets that demand zero defects and new levels of productivity: Implicit in most slogans, exhortations, and targets is the supposition that staff could do better if they tried harder. This offends rather than inspires the team. It creates adversarial relationships because the many causes of low quality and low productivity in schools are due to the system and not the staff. The system itself may need to be changed. In education, some slogans can be used like “All children can learn” such slogan serve as targets in school organizations.

• Eliminate numerical quotas for the staff and goals for management: There are many practices in education that constrain our ability to tap intrinsic motivation and falsely assume the benefits of extrinsic rewards. They include rigorous and systematic teacher evaluation systems, merit pay, management by objectives, grades, and quantitative goals and quotas. These Deming refers to as forces of destruction. Such approaches are counterproductive for several reasons: setting goals leads to marginal performance; merit pay destroys teamwork; and appraisal of individual performance nourishes fear and increases variability in desired performance.

• Remove barriers that rob people of pride in their work. Remove the barriers that rob people in leadership of their right to pride in their work: Most people want to do a good job. Effective communication and the elimination of "de-motivators" such as lack involvement, poor information, the annual or merit rating, and supervisors who don't care are critical.

• Institute a vigorous program of education and retraining for everyone: The principal and staff must be retrained in new methods of school based management, including group dynamics, consensus building, and collaborative styles of decision making. All stakeholders on the school's team must realize that improvements in student achievement will create higher levels of responsibility, not less responsibility.

• Put everyone in the organization to work to accomplish the transformation: The school board and superintendent must have a clear plan of action to carry out the quality mission. The quality mission must be internalized by all members of the school organization (school board members, administrators, teachers, support staff, students, parents, community). The transformation is everybody's job. (Deming, 1988, pp. 23-24).
The above principles are very important and key requirements for Successful Total Quality Management (TQM) Implementation. Committed managers have a role of making sure they are committed to apply the principals in order to achieve TQM.

A review conducted by Zakuan et al. (2012) on critical success factors of TQM implementation in Higher Education Institutions shows that the success of an institution depends on its quality management strategy and on how it identifies, classifies, analyzes, and reacts to the changes in quality requirements. This is consistent of Kasongo & Moono (2010)'s study on factors that lead to successful implementation of TQM that identified management strategy as one of the critical factors in implementing quality systems. Baidoun (2003) also conducted an empirical study on critical factors of TQM in Palestinian organizations and found out that top management commitment and involvement demonstrated by development of clear organization mission, development of quality policy and values, setting of realistic quality goals, proper planning on quality management and creating quality management structure creates quality awareness and improve implementation of quality management systems. In addition, quality management philosophy makes it easy to implement quality programs (Murphey, 2009). Most of what has been motioned seems to be missing among the secondary school. This envisage that it is important that proper understanding to barrier to Total Quality Management is surveyed and its effects to pupils performance.

2.5. Role of resources in Implementing TQM

Furthermore, the following literature aims at showing the role of resources in implementing TQM. Sallis (2002) narrated that, TQM practices improve various performance measures in a school, all aspects of TQM practices should be effectively managed in secondary schools. He pointed out that in order to achieve this, schools should improve employee involvement/skill and school structure and allocate sufficient resources to implement TQM practices.

Bahri et al. (2012) pointed out that since most companies do not involve quality in their strategic plan, little attention is paid to TQM in terms of human and financial resources. Much of the attention is drawn to increasing profit margins of the organization with little regard as to whether their offers and supply to customers are of expected quality. There is paltry budgetary allocation made towards employee training and development which is critical for total quality management implementation.
Bahri et al (2012) contends that, the debate about the effectiveness of TQM in education has largely revolved around issues of leadership, institutional mission, teamwork, student satisfaction and empowerment. While these are clearly key issues, without linking them to appropriate budgetary strategies they leave out a vital element in total quality. Without an appropriate and empowering budgetary process many of the TQM objectives are difficult to realize as they lack a relevant driving mechanism. In particular, the success of teamwork and empowerment so central to TQM is inextricably linked to the budgetary process. What does empowering teams mean if those teams do not have the resources to put their ideas into practice? Unless the institution’s own resource allocation mechanisms parallel the devolution of responsibilities to teams explicit in TQM programs, in reality that devolution will be little more than a cosmetic exercise, and empowerment will be no more than a slogan, as observed by Sally’s (2002). Real delegation of authority, which is the essence of empowerment, requires a real and effective control over resources.

Previous researchers have suggested that a number of factors contribute to the establishment of quality education in schools. For example, Digolo (2003) observed that the improvement of factors such as curriculum, instructional material, equipment, school management, teacher training and resources are some of the indicators of quality education. In addition, Gogo (2002) reported that low performance could be attributed to inadequate finance which resulted to inadequate supply of teaching and learning materials and equipment. Oluwatoyin and Oluseun (2008) also suggested that provision of quality education requires that head teachers be involved in translation of education policies and objectives into viable programs within the school; while Digolo (2003) emphasized that on a daily basis head teachers have the responsibility to ensure that teachers implement the set curriculum and that learning activities take place. In order to support teaching and learning processes, Sallis (2002) observed that the head teacher should ensure quality curricular supervision and provision of adequate physical resources. On the same point, Digolo (2003) suggested that the quality of principals is a relevant indicator of quality schools, and therefore underscored the importance of head teachers in school administration. Resources can be physical or financially.

Bahri et al (2012) observed that, a workforce is often unwilling to embrace TQM for a variety of reasons. They explained that a lack of long-term objectives and targets will cause a quality implementation program to lose credibility and further warned that an adversarial relationship between management and non-management should not exist, and he emphasized that a
cooperative relationship is necessary for success. A TQM project must be supported by employee trust, acceptance and understanding of management's objectives. Employees, therefore, should be recognized by the management as vital players in the decision making processes regarding to quality improvement as involving them would have motivating effect on implementation of quality programs.

In a research carried out by Mobegi et al, (2010) in Gucha district in Kenya, they observed that all schools had inadequate physical, learning and teaching materials. The ratio of textbook-pupil was 1:20. It was also reported that over 81.1% Mixed and Girls schools had no essential facilities, such as transport, tapped water and electricity. These illustrations are common in features of the Zambian situation as Moono and Kasongo (2010) indicated in their work entitled Factors that Lead to a Successful TQM Implementation.

Sallis (2002) observed that, there is an underlying naivety in much TQM literature, whether educational or commercial, about financial and budgetary issues. The underlying message appears to be that provided one gets the TQM strategy right then educational success will follow. Unfortunately, that is not always the case. Like it or not, educational success is very often resource driven. There are exceptions in the literature to this neglect of the role of budgeting. Tom Peters in Liberation Management, as quoted by Sally (2002) does significantly include handling budgets in his checklist for self-managed teams and he argues that in a world turned upside down 'financial management and control must be decentralized and that the authority for spending must be delegated down the line. Following Peters, it is important to recognize that resource management is about power in the organization. If we are about liberating staff in our institutions and providing them with professional responsibility, then we have to decentralize budgets and the control over them. As a result, the internal financial management of our institutions becomes a key element in any TQM Programme and an important adjunct to any work carried out on building self-motivated teams.

As noted earlier, resources in an institution goes beyond finances and physical resources to encompass the human resource. Traditional HRM practices conflict with TQM and should be changed if TQM principles are to be implemented. Although organizations have initially focused on a production-oriented perspective of quality the recent literatures has underlined the importance of HRM for success (Bahri et al., 2012). Therefore, the human resource function must take the lead in activities such as job design and teams that promote
cooperation empower employees to provide information, participation and autonomy, select employees that can adapt to the organizational culture, foster programs of training and development with quality goals and define appraisal and compensation policies which support quality targets. A fruitful cooperation between HRM and TQM can produce better organizational results. The alignment of HR and quality policies, such as creating and communicating the TQM vision, preparing the organization and employees for TQM implementation and generating quality awareness among the employees across all levels, functions, and departments, should contribute to an increase company performance (Palo and Padhi, 2005).

Quality management has high personnel content. It gives strategic importance to policies and processes whose personnel managers have traditionally considered to be on their patch. The role of the HRM department is therefore central to the success of total quality. TQM and HRM are in pursuit of the same goals - productivity, profitability, a customer-oriented institution and a motivated workforce. Continuous quality improvement depends upon the best use of the talents and abilities of a school’s workforce. To achieve world class quality, it is imperative that a school empowers its staff. Companies must develop and realize the full potential of their workforce and maintain an environment conducive to full participation, personal and organizational growth as indicated by Zarei et al (2011) this can be achieved through creating the appropriate human resource development through training, employee participation and involvement, building quality awareness among employees, and motivating employees. The main issues considered in human resource development are: human resource management, employee involvement, quality education and training, employee recognition and performance, and employee well-being and morale. The human resource development in an organization is an important contributor to proper and meaningful quality management since the quality philosophy and practice have to be part and parcel of the entire workforce and not the concern of only a few.

Training and development have been recognized as essential to the implementation of TQM. One of Deming’s 14 points was that all employees must be trained in quality improvement techniques. Companies committed to TQM invest in training (Muma, et al, 2014) believed that training is vital to the internal diffusion of quality ideas and practices, as without it there is no solid foundation for a formal quality program. TQM training is not a single effort, but should be conducted on a continuous basis. Effective training pursuits must be planned
systematically and objectively. Basically, training has to be oriented to the process methodology (Muma et al., 2014). Employee training is fundamental for many TQM programs such as the adoption of new quality concepts, the set-up and practices of customer satisfaction systems, the use of statistical quality control, or the change of culture or quality control circle (Yang, 2006). Moreover, employees require three basic areas of training (Muma et al., 2014): principles of TQM, the use of TQM tools and problem-solving techniques.

In tandem with the above Sallis (2002) points out another factor for TQM in education could be lack of sufficient funds and resources. TQM involves a paradigm shift in the mindset of the entire organization. This can be achieved through systematic and strategic training of all the employees. The educational organization may not have the required expertise to train the staff and may look for external consultants for training, especially to suit the requirements of education. Hence, TQM involves high cost, effort and time. Since educational institutions predominantly receive funds from the government, TQM may lead to overshooting of costs. Baidoun (2003) therefore stated that, with such immense financial and resource considerations, TQM may not yield the expected benefits within a specific time frame. In industry, it is easy to measure, monitor and improve product characteristics as compared to the situation in higher education. In higher education, service quality deals with people, the time of delivery, intangibility (learning process is subtle to be measured) and difficulty in measuring successful output and productivity in a quality audit. It is definitely not easy to measure academic processes due to the involvement of numerous intangible factors. Hence, suitable models need to be adapted to measure quality in higher education.

According to Murphey (2009), the perception of quality of education by many academics is increasingly becoming a problem for many outside the system. They mention unhappy customers and low human resource morale as major challenges. Quality management is seen by many as having enormous potential to respond to such challenges. Subrata and Anindya (2009) puts it that quality management can be applied as a means for improving stakeholders morale, increase productivity and delivering higher quality services to both internal and external customers. In a school system this means TQM can lead may demand highly motivated human resource to achieve TQM.

Oluwatoyin (2008) is with a view that implementation of TQM is an elaborate process that takes time and resources. It is a process that must be initiated and managed by the top
management. The top management must make available all critical resources required as well as the organizational structure and culture required. Oluwatoyin (2008) further stated that, the process must focus on finding out, meeting and exceeding customer needs and expectations through total involvement of everyone in the organization and through continuous improvement. This process requires exceptional skills and team work that call for continuous Employees Training and Development.

2.6. Summary

Predominantly, the review concentrated on effect of Organisation Culture in implementation of TQM, management Commitment and roles of resource in implementation of Total Quality Managements in schools. It presented the literature in an organised way and integrated and summarised what is known about a subject and demonstrated that was learnt from others. The next chapter covers the description of the methods that were applied in carrying out research study. It is organized under the following subsections: research design, study site, study population, sample size, sampling techniques, instruments for data collection, procedure for data collection and means of data analysis.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Overview

The chapter discusses the methodology used to investigate factors influencing Total Quality Management implementation practice at Siavonga secondary school of Siavonga District. Specific issues that were considered for the study were: research design, study site, study population, sample size, sampling techniques, instruments for data collection, procedure for data collection and means of data analysis.

3.2. Research Design

A descriptive survey design was used involving a mixed method approach with greater focus on the qualitative than the quantitative strand. The reason for choosing a descriptive survey design was to allow for a full description of the factors influencing the implementation of total quality management in public schools with a particular focus on Siavonga secondary school in Siavonga A survey was used because of its ability to collect data from large population by using questionnaires and interviews, its emphasis on fact finding and it allowed the researcher to generalize data. The strength of the descriptive survey is that it seeks to describe the state of affairs as it exists and can be used when collecting information about people’s attitudes, opinions, habits or any educational or social issue. This view is supported by Kothari (2008) who stated that the survey research design is a very valuable tool for assessing opinions and trends in a quantitative research even on a small scale, such as a department. It is therefore suitable for a research like this one because it just focused on one district level. Survey design is one of the most commonly used descriptive methods in education research. The data is collected from a group rather than the member of the population. This method was chosen because of its cost effectiveness when well piloted. These sources provided a solid foundation for uncovering the lessons learned from the factors influencing Implementation of TQM practices in public schools.

3.3. Study Site

The study site was Siavonga District. The study was only confined to Siavonga Secondary School on the Southern Province.
3.4 Study Population

A Population can be referred to as a group of people or items you are interested to sample from. Borg and Gall (1979) consider a study population as all members of a hypothetical set of people, events or objects to which generalization of the results of a research study could be made. There are two types of population; theoretical and accessible. A theoretical population is the one that you know exists but the researcher has no access to, due to some reasons. The accessible population is that which is immediately accessible to the researcher given resources. It is from accessible population where a complete listing of units is developed. This listing is referred to as a sampling frame (Rosenberg, 2013).

In this study therefore the target population comprised of all members of staff at Siavonga secondary school, all Standard Officers at Siavonga District Education Board Secretary [DEBs] offices, all Southern Province Senior Education Standard Officers [PESO].

3.5 Sampling Procedure and Sample Size

The term sample means the number of participants selected from the universe population to constitute a required aggregate (Ngandu-Kasonde, 2013). Sampling involves the process or procedure of selecting a subset or sample from the entire population so that generalizations of the results can be made to the population from which the elements are chosen. Peil et al (1992) are of the view that sampling techniques are the strategies applied by researchers during the sampling process such as probability (random) and non-probability (non-random) sampling. Probability sampling refers to sampling procedure where each unit in the population has an equal chance of being selected while non-probability sampling refers to the sampling procedure in which units in the population have no equal chances of being selected. This method of sampling aims to be theoretically representative of the study population by maximising the scope or range of variation of the study (Ngandu-Kasonde, 2013).

In this study, both probability and non-probability sampling techniques were applied when selecting the respondents. A total of 56 respondents were selected in this study. Simple random and purposive sampling was used to obtain the sample.

The purposive sampling technique was used to select one (1) District Education Standard Officer, one (1) Provincial Senior Education Standard Officer [PESO], one (1) Head teacher
and one (1) Deputy Headteacher, seven (7) head of departments. The simple random sampling technique was used to select 45 teachers from the 63 members of staff.

3.6 Instruments of Data Collection

An instrument entitled Total quality management questionnaire (TQMQ) was used to gather information from the respondents. The questionnaires were structured with open ended and closed ended questions. Open ended questions enabled the respondents discuss issues without their responses confined and also allowed more spontaneity of response and provided opportunities for self-expression as observed by Mutai (2000). While closed questions had array of choices or answers from which the respondents chose from. Such questions were easier and quicker to answer and the responses were more comparable among respondents. The questionnaire consisted of two major parts. The first part sought information about the respondent’s demographic questions to elicit information on total quality management practices in the sampled schools.

3.7 Data Collection Procedure

The data collection exercise was undertaken over a period of four weeks. Permission was sought from the District Education Board Secretary (DEBs) to carry out research at the selected school in the District of Siavonga.

Denzin and Lincoln (2005) supported the use of questionnaires because questionnaires allow collection of data from a large population and are self-administered. The researcher collected qualitative data as the study aimed at achieving an in-depth understanding of the situation.

Interviews were conducted at management level. Digolo (2003) also noted that interviews captures respondents' perceptions and their own experiences. The purpose of these interviews was to capture the respondents' perception of their own experience on the factors influencing Total Quality Management in school. The format of the interview was "focused" in that I followed a set of prepared questions and was prepared in relation to the purpose of the study which covered customer satisfaction, organizational culture, leadership commitment and resources.

3.8 Data Analysis

This refers to examining data that has been collected in a research survey and make deductions and inferences. Charles and McClelland (1989) argue that data analysis is a
practice in which raw data is ordered and organized so that useful information can be extracted from it. Ader, (2008) is of the view that analysis of data is a process of inspecting, cleaning, transforming, and modelling data with the goal of discovering useful information, suggesting conclusions, and supporting decision-making.

Data sought from this study were analysed both qualitatively and quantitatively. Quantitative data were analysed using Statistical Package for Social Sciences (SPSS). Data collected were entered into the software and manipulated accordingly to produce the required tables of frequencies and percentages.

On the other hand, qualitative data were analysed by processing the data into a form that allows common themes or patterns. This means that the data are not coded sentence by sentence or paragraph by paragraph but for meanings. Outstanding themes were kept in their form (Stake, 2006). A combination of qualitative data analysis and quantitative data analysis is called triangulation. Jick (1983) believes that triangulation uncovers a unique variance that might not have appeared in a single method of investigation. This increases confidence of results.

Quantitative data was analysed using statistical package for social sciences (SPSS) (Creswell, 2008). Numbers were assigned to response categories in which respondents were known. For example, number one was assigned to represent males and number two to represent females. Denzin and Lincoln (2005) postulated that, SPSS has scores of statistical and mathematical functions, scores statistical procedures, and a very flexible data handling capability. It can read data in almost any format (e.g., numeric, alphanumeric, binary, dollar, date, time formats). It also has excellent data manipulation utilities. In addition, in a statement where respondents were expected to indicate their degree of agreement or disagreement Likert scales were used. It is commonly used in questionnaires, and is the most widely used scale in survey research.

3.8. Summary

This chapter has given an account of the empirical research design. It has detailed the instruments used, the sample design and size, procedure used in distributing or administering the instruments and the process followed in validating them. This chapter also discussed, in detail, the sampling techniques and sample size used.
CHAPTER FOUR
PRESENTATION OF FINDINGS

4.1 Overview

The previous chapter presented the methodology adopted for the study. This chapter presents the findings of the study which sought to find out the factors influencing the implementation of total quality management in public schools in Zambia. Borg and Gall (1979) are of the view that research findings provide the interpretation, presentation and/or discussion of the results, also any comparisons with the results of previous research or effects of methods used on the data obtained.

In this study, the findings are based on the responses expressed by 56 respondents. This comprised 45 teachers, 7 head of departments, 1 deputy head teacher, 1 Headteacher and 2 Education Standards Officers. The researcher managed to collect the 45 questionnaires out of 60 initially distributed. With regards to head of departments, the head and deputy head teachers as well as the standards officer, all the 11 interviews were conducted and collected. Interviews were conducted to seek information from the Headteacher, the deputy Headteacher, the heads of departments and Education Standards Officers while questionnaires were administered to teachers. The results are presented using the thematic approach in line with the three research questions set out in chapter one of this dissertation.

The following were the research questions:

(1) What factors affect the implementation of TQM practice in public schools?

(2) To what extent does management commitment influence the implementation of practice in public schools?

(3) What role does resources have on the implementation of TQM practice in secondary schools of Siavonga?

A summary of the chapter is given at the end.

This chapter first presents the demographic characteristics of the participants in the study. After which, the presentation of both qualitative and quantitative results will follow under each theme derived from the three objectives above, qualitative results are first presented. In doing so, some key quotes from interview conversations with respondents have been
highlighted to illustrate their importance to the study. Thereafter, quantitative data are presented using statistical tables, frequency counts and charts.

4.2 Demographic Characteristics of Respondents

Table 4.1: Percentage Distribution of Gender of participants

<table>
<thead>
<tr>
<th>Category</th>
<th>Class Teachers</th>
<th>Heads of Department</th>
<th>D/Head teacher</th>
<th>Headteacher</th>
<th>Standards Officers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>18</td>
<td>04</td>
<td>01</td>
<td>01</td>
<td>01</td>
<td>25 (46.6%)</td>
</tr>
<tr>
<td>Female</td>
<td>27</td>
<td>03</td>
<td>00</td>
<td>00</td>
<td>01</td>
<td>31 (55.4%)</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>07</td>
<td>01</td>
<td>01</td>
<td>02</td>
<td>56 (100%)</td>
</tr>
</tbody>
</table>

From Table 4.1 above, this study had a total number of 56 respondents. These included 45 (80.4%) students, seven heads of departments (12.5%), one deputy head teacher (1.7%), one Headteacher also representing (1.7%) and two Education standards officers (3.5%). In gender terms of the majority of the respondents were female 31, which comprised 55.4% of the total number of respondents. On the contrary, the proportion of males was 25 representing 46.6% of the total number of respondents.

4.2.1 Marital Status and Age of Respondents

In this study, 42 (75%) respondents were married, 11 (19.6%) were single while 3 representing (5.3) were divorced as shown in table 4.2 below. The age distribution of respondents was more confined to the middle aged cohorts 45-54 years. Half of the respondents were aged between age 45-54 (50%), followed by those aged between 35-44 years (37.5%). Those aged between ages 25-34 were 12.5% of the total number of respondents. Table 4.2 below depicts the information on marital status and age of respondents.
Table 4.2: Marital status and Age of Respondents

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Age of participant (Years)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25-34</td>
<td>35-44</td>
</tr>
<tr>
<td>Married</td>
<td>02</td>
<td>14</td>
</tr>
<tr>
<td>Single</td>
<td>05</td>
<td>05</td>
</tr>
<tr>
<td>Divorced</td>
<td>00</td>
<td>02</td>
</tr>
<tr>
<td>Total</td>
<td>07 (12.5%)</td>
<td>21(37.5%)</td>
</tr>
</tbody>
</table>

4.2.2 Highest Qualifications and Duration of service of participants

Table 4.3 below shows the distribution of qualifications of respondents. 11 (19.6%) had secondary school diplomas, 38(67.9%) had bachelor degrees while 7(12.5 %) had attained master’s degree. The findings show that there were more respondents (38 67.95) with bachelor’s degree. Only seven had a master’s degree. On the other hand the study revealed that15 (26.8%) had served between 0-14 years, 19(33.9%) had served the ministry for between 15 -30, while 22(39.2%) had served 31 years and above. The findings show that the majority of the respondents had served 31 and above in service.

Table 4.3 Highest qualification and Duration of service (years)

<table>
<thead>
<tr>
<th>Highest Qualifications</th>
<th>Duration of service (Years)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-14</td>
<td>15-30</td>
</tr>
<tr>
<td>Secondary Diploma</td>
<td>05</td>
<td>02</td>
</tr>
<tr>
<td>Bachelors Degree</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>Masters Degree</td>
<td>00</td>
<td>01</td>
</tr>
<tr>
<td>Total</td>
<td>15 (26.8%)</td>
<td>19(33.9%)</td>
</tr>
</tbody>
</table>
Having presented the demographic characteristics of the study participants, the section that follows presents the results of the study.

4.3 The first question was what are the factors affecting the implementation of TQM practice in public schools?

One of the three objectives of the study was to investigate factors affecting the implementation of TQM practice in public schools. This objective was guided by the research question: What factors affect the implementation of TQM practice in public schools? To get well informed responses, the researcher targeted Educational Standards Officers and those in management to provide answers to this question.

When the question was asked regarding the factors affecting the implementation of TQM practice in public schools the majority of the respondents thought that: work culture of the labour force, the attitudes and experiences of the human resource, the professionalism, expertise or knowledge of the teachers, the enthusiasm, motivation, values and beliefs of both those in management and the workforce themselves (teachers).

4.3.1 Work culture

These results are presented below. In order to answer the first question which required investigating the factors affecting the implementation of TQM practice in public schools, interviews were conducted with the Ministry of Education Standards Officers at district and provincial levels. Information from teachers regarding this question was obtained.

The standard officers were of the view that the factors affecting the implementation of TQM practice in public schools bordered on the work culture of the teachers. To illustrate this, when asked to state some of the factors affecting TQM implementation a senior education standards officer stated that:

"The success of the TQM practice will most importantly depend on the government policies directing the work culture of the employees in this case our teachers and the factors affecting TQM range from professionalism of the teachers, the know-how and self-motivation of both teachers and heads of departments of course under the supervision of their immediate supervisors"
4.3.2 Attitudes and Experiences of Human Resource

Another Senior Education Standards Officer alluded to the fact that the attitudes and experiences of the teachers do influence the implementation of the TQM in public schools.

To illustrate this point the Provincial Education Standards Officer stated that:

“To me the factors that seem to affect TQM are quite immense but the most cardinal issue in the Zambian scenario is the attitude and experiences of our officers. If they could exhibit a proper attitude most things as regards to TQM could easily be achieved”

4.3.3 Professionalism

With regards to professionalism the Headteacher of the school echoed these statements

“Factors that influence the implementation of TQM include the professionalism of us the administrators including our teachers...It is very important to organise workshops and continue training these teachers time after time so that they could be abreast with modern trends in teaching...This will ensure implementation of the TQM practice in these public schools”

4.3.4 Summary of findings from research question number one (1)

The first question of this study was; what factors affect the implementation of TQM practice in public schools?

To answer this question the findings of this study show that the work culture, attitudes and experiences of Human Resource(teachers) and professionalism are the most notable factors affecting the implementation of TQM practice in public schools?

4.4. The second question was to what extent does management influence the implementation of TQM practice in public secondary schools?

The second question of the study sought to find out the extent to which management influence the implementation of TQM practice in public secondary schools. This was to gather from Teacher’s opinions regarding TQM. This question was directed to 45 teacher respondents from whom data were collected by way of a questionnaire.
Table 4.5: The Extent to which management influence the implementation of TQM practice in public secondary schools

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of top management commitment</td>
<td>7</td>
<td>15.6%</td>
</tr>
<tr>
<td>Poor leadership</td>
<td>19</td>
<td>42.2%</td>
</tr>
<tr>
<td>Weak organisational vision</td>
<td>2</td>
<td>4.4%</td>
</tr>
<tr>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of managerial capability</td>
<td>8</td>
<td>17.8%</td>
</tr>
<tr>
<td>Lack of support from top</td>
<td>9</td>
<td>20.0%</td>
</tr>
<tr>
<td>management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

The majority of respondents 19 (42.2%) perceived that weak leadership had a negative bearing on the implementation of TQM practice in public schools, 7(15.6%) perceived lack of top management commitment to likely have a negative net effect on TQM practice implementation, 2(4.4%) attributed weak organisational vision to a negative bearing on the implementation of TQM, 8(17.8%) perceived lack of managerial capability as the most negative attribute to TQM practice implementation while 9(20%) lack of support from top management to the less likelihood of contributing positively to TQM practice in public schools.

Figure 4.1 The Extent to which management influence the implementation of TQM practice in Public secondary schools.
Data from the interviews showed that, the education standards officer were also of the view that poor leadership was the most virtue that negatively affected the implementation of TQM practice in public secondary schools.

To illustrate this, the provincial education standard officer stated that:

“Good and motivational leadership is important in public secondary schools as it motivates people to put in their best and achieve TQM.....that can propel any institution like a school to potentially maximise their potentialities in terms of contribution...So I think teachers need motivation.”

4.5. The third question was what is role of resources in the implementation of TQM practice in secondary schools of Siavonga?

The third objective of the study provided the researcher an opportunity to explore the role of resources in the implementation of TQM practice in secondary schools of Siavonga. This was guided by the research question: what role does resources have on the implementation of TQM practice in secondary schools of Siavonga?

The responses from the seven heads of departments and the head and his deputy indicated that mechanisms such as having: skilled human resource, fiscal policy discipline implementation and policy interpretation. Presented below, are these mechanisms.

4.5.1 Skilled Human Resource

When asked about the role of resources in implementing TQM in public schools three senior officers stated that there was need to empower, train and motivate teachers. The respondents also emphasised the need for teamwork. To illustrate this, the Headteacher asserted that:

“...in every organisation it is important to ensure that the human resource or personnel is well trained in order to implement quality education in schools...The teachers should be well trained and workshops are usually organised in order to foster quality management in the classroom”

Furthermore, the deputy head had this view:

“The role of human resources in implementing TQM involves delegation of authority to these teachers, empowering them with this authority will eventually motivate them to work hard”
4.5.2 Fiscal Discipline Implementation

During a separate interview one head of department responded that:

"it is important for the school to prepare a budget in order to acquire instructional materials including teaching and learning materials, equipment for classrooms and laboratories and all other relevant physical resources"

4.5.3 Policy Interpretation

The senior education officer had this to say regarding policy interpretation in relation to the role of resources in implementing TQM practice:

"I think head teachers must always rise to the occasion and get involved in translation of Education policies and objectives into doable viable actions in the schools that they manage"

Results from the questionnaires from the 45 respondents pertaining to the role of resources in implementing TQM practice in public schools in Siavonga is illustrated in the tables and figure below.

Table 4.6: The role of resources in implementing TQM practice in public schools?

<table>
<thead>
<tr>
<th>Resource</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>24</td>
<td>53.3</td>
</tr>
<tr>
<td>Education Materials</td>
<td>5</td>
<td>11.1</td>
</tr>
<tr>
<td>Valid Finance</td>
<td>13</td>
<td>28.9</td>
</tr>
<tr>
<td>Infrastructure development</td>
<td>3</td>
<td>6.7</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>100.0</td>
</tr>
</tbody>
</table>

From table 4.6 above it is evident that the majority of respondents perceive human resource or personnel as the most vital resource in implementing TQM in public schools. This was represented by 24( 53.5 %) .5(11.1%) suggested education materials as the most important material,13(28.9%) were of the view that financial resources are the most important resources in implementing TQM practice in public schools, while 3(6.7%) perceived infrastructure development as the most cardinal resource in implementing TQM practice in public schools. This information is presented graphically in figure 4.2 below.

Figure 4.2: The role of resources in implementing TQM practice in public schools.
The role of resources in implementing TQM practice in public schools

Source: field data

Figure 4.2 depicts the role of resources in implementing TQM practice in public schools and as earlier presented, 24 (53.5%), 5 (11.1%) suggested education materials as the most important material, 13 (28.9%) were of the view that financial resources are the most important resources in implementing TQM practice in public schools, while 3 (6.7%) perceived infrastructure development as the most cardinal resource in implementing TQM practice in public schools.

Figure 4.2: The role of resources in implementing TQM practice in public schools.

Table 4.7: The Role of resources in implementing TQM practice in public schools

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Role of Resources in Implementing TQM Practice in Public Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>45</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>1.89</td>
</tr>
<tr>
<td>Median</td>
<td>1.00</td>
</tr>
<tr>
<td>Mode</td>
<td>1</td>
</tr>
</tbody>
</table>

To further substantiate the role of resources in implementing TQM practice Pertaining to the 45 respondents table 4.7 above reveals descriptive statistics of the findings.
The mode of 1 simply means that most of the respondents had a perception that the most critical area of resources in implementing TQM practices rests on the human resource. The median of 1 entails that half of the respondents also perceived human resource as the most cardinal area in implementing TQM practices in public schools. The mean of 1.89 means that each teacher is about 1.89 times more likely to perceive human resource as the most important resource in the implementation of TQM practices in public schools.

4.6 Summary of Results

This chapter presented the results of the study on the factors influencing the implementation of Total Quality Management in public schools in Zambia, a case study of Siavonga secondary school in Siavonga district. The results have been presented in line with the three objectives set out in chapter one. The researcher used the thematic approach to present both qualitative and quantitative results. The results bordered on the factors affecting TQM practice in public schools which include work culture of the labour force, the attitudes and experiences of the human resource, the professionalism, expertise or knowledge of the teachers, the enthusiasm, values and beliefs of both those in management and the workforce themselves; the extent to which management influence the implementation of TQM practice in public secondary schools which included weak leadership, perceived lack of managerial capability, weak organisational vision and lack of support from top management and the role of resources in implementing TQM practice in public schools which included having skilled human resource, fiscal policy discipline implementation and policy interpretation. Chapter five will discuss the findings of the study.
CHAPTER FIVE

Discussion of Findings

5.1 Overview

The previous chapter presented the results of the study. The present chapter discusses the findings presented in chapter four by relating them to the literature reviewed in chapter two in the light of the three objectives of this study. The major findings are discussed under three (3) headings derived from the research questions. This is meant to provide adequate answers to the three objectives and realize the purpose of this study.

5.2 The First Objective was to establish factors affecting the implementation of TQM practice in public schools.

With regards to the factors affecting the implementation of TQM practice in public schools the study yielded the following findings: work culture of the labour force (teachers), the attitudes and experiences of the human resource, the professionalism, expertise or knowledge of the teachers, the enthusiasm, motivation, values and beliefs of both those in management and the workforce themselves (teachers).

The findings are consistent with prior research by Sallis (2002) Murphey (2009) who stressed the importance of training personnel as an important factor affecting implementation of TQM practice in different organisations. The findings also conform to Baidoun (2003) who conducted a study of Japanese and American employees and that found employee fulfilment and motivation affect implementation of TQM in public institutions.

The factors affecting are from different facets of any organisation. It is vital for management to plan ahead in training personnel and motivating them so that they can exhibit the best possible practices in implementing TQM in public schools.

5.3 The second objective was to ascertain extent to which management commitment influence the implementation of TQM practice in public secondary schools?

With regards to the extent to which management commitment influence the implementation of TQM practice in public secondary schools the study yielded the following findings: there were perceptions that weak leadership had a negative bearing on the implementation of TQM practice in public schools, perceived lack of top management commitment to likely have a
negative net effect on TQM practice implementation. Weak organisational vision was perceived to have a negative bearing on the implementation, perceived lack of managerial capability also had a negative attribute to TQM practice implementation and finally lack of support from top management was also perceived to the less likelihood of contributing positively to TQM practice in public schools.

The findings confirm the position of the literature review. A study by Arshida and Agil (2012) found barriers of TQM to include lack of top management commitment associated with lack of critical resources and poor leadership leading to poor employee empowerment and motivation. The findings are also consistent with Laohavichien et al (2009), Pannivselvan and Ferguson (2001) who argued that leadership commitment impacts negatively on the chances of TQM implementation.

The results are at variance with Yusuf et al (2007) who found that budgetary allocations are the most cardinal preparations that may affect an institution’s quest to implement TQM in public organisations.

It is therefore undeniable to state that management commitment influences the implementation of TQM practice in public secondary schools and these calls for leaders who are well motivated and well versed to understand the current scenario in terms of quality assurance in public schools. Top management should therefore motivate and engage their subordinates in order to achieve the goals of the school relating to total quality management.

5.4 The third objective was to establish role of resources in implementing TQM practice in public schools

The findings regarding the role of resources in implementing TQM practice in public schools showed that having: skilled human resource, fiscal policy discipline implementation and policy interpretation are the key resultant areas of resource allocation.

The results are consistent with prior research by Bahri et al (2012) who found financial and trained human resource to be cardinal in implementing TQM practices in public schools, Digulo (2003) who found implementation of factors such as curriculum improvement, instructional material, equipment, school management, teacher training and physical resources as some of the indicators of quality education. The results are also in tandem with Olusen (2008) who suggested that provision of quality education requires that head teachers be
involved in translation of education policies and objectives with viable programs within the school.

In line with these findings it is imperative to stress here that resources in form of physical, financial, human and other resources play a pivotal in the implementation of TQM practice in public schools. it is therefore incumbent upon powers that be to ensure that a provision of such resources is made available to the needy areas in different school set ups.
CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Overview

The preceding chapter presented the major findings of the study. The present chapter will draw conclusions to the study; provide recommendations on the factors influencing the implementation of total quality management in public schools in Zambia, a case study of Siavonga secondary school in Siavonga district based on the findings and make suggestions for further research.

6.2 Conclusion

The purpose of this study was aimed at investigating the factors influencing the implementation of total quality management in public schools in Zambia. After a thorough analysis of the findings in the light of the study purpose, the researcher is of the view that; The effect of organizational culture based on the factors attitudes and belief of local communities, teachers' perception of the role of administration towards TQM, existence of faction groups with different values and opinion from the administration and the tradition of how things have always been done and the mind-set towards the change greatly affected the implementation of Total Quality Management (TQM). The success of implementation of TQM practices were enhanced by support, cooperation, mutual respect and consideration between staff members. Acceptance of change, work policies and level of productivity played a role to TQM practice. From the respondents' information, it was found that TQM cannot be practised without commitment of management who should engage staff empowerment, teamwork, continuous improvement and process improvement. Such included the following major findings:

i. Work culture of the labour force (teachers), the attitudes and experiences of the human resource, the professionalism, expertise or knowledge of the teachers, the enthusiasm, motivation, values and beliefs of both those in management and the workforce themselves (teachers).

ii. The findings regarding the role of resources in implementing TQM practice in public schools showed that having; skilled human resource, fiscal policy discipline implementation and policy interpretation are the key resultant areas of resource allocation.
iii. There were varying perceptions that weak leadership, perceived lack of top management commitment, weak organisational vision, perceived lack of managerial capability and lack of support from top management were perceived to have the less likelihood of contributing positively to TQM practice in public schools.

iv. The researcher found out that other than documentation of institution's activities, implementation TQM practices was not fully managed as most schools had not put a mechanism in place to handle quality policy, undertaking training and education of staff, resource allocation, developing specific strategies, implementing quality programme, communicating quality strategy and review and follow up.

v. There is evidence that resources played a great role in implementation of total quality Management (TQM) Practice in public secondary schools. The researcher found personnel, educational materials and finance to be very critical in implementation of Total Quality Management. Generally resources played a critical role in implementation of the TQM practice. The areas of change included: administration, school rules, staff responsibilities, school routine, facilities, rate of staff turnover and student population.

6.3 Recommendations

In the light of the major findings above, the following recommendations are being proposed. Based on the findings, the researcher recommends that for TQM to be implemented

i) Organizational culture should be taken into consideration and where necessary changed to give way for the implementation of TQM practices.

ii) The management too should be committed while engaging all stakeholders in implementation of TQM practices. Areas such as school rules, administration, staff responsibilities, school routine, available facilities, and student population needs to be changed if quality management is to be realised. TQM in itself is change and therefore change in such areas is inevitable in school administration.

iii) Resources should be mobilised and effectively utilised to make it possible for TQM practices to be feasible. Resources such as personnel, education materials, and infrastructure were found to be critical in school management. It is also clear that in school management the role of finances cannot be underestimated because without which managerial activities cannot run.

6.4 SUGGESTIONS FOR FURTHER RESEARCH
Research in education is never ending. The mentality that should control education specialists is the one that says if there is nothing wrong with our education; people should be looking into the possibilities of improving it before something wrong happens. In the case of education in public schools, one would say already there is something wrong because Grade 12 results are not satisfactory. The main focus should be on how public schools could be helped to improve themselves and perform to the expected standard and go beyond to sustain the improvement.

The present study focused on examining factors influencing the implementation of TQM in public schools. One would say the study assumed that the effect of organizational culture based on the factors attitudes and belief of local communities, teachers’ perception of the role of administration towards TQM, existence of faction groups with different values and opinion from the administration and the tradition of how things have always been done and the mindset towards the change greatly affected the implementation of Total Quality Management (TQM) and this in turn may have affected the results at Grade 12.

Therefore, it is suggested that the above question be investigated in the form of a research involving a good number of public schools in order to have a comparison of the findings. Further, it is suggested that the Siavonga Secondary should have its own Research Team to undertake continuous research on what obtains at that school. This would help the school to have an understanding of the problems that this study failed to unearth and at the same time think of possible solutions that may improve the quality of education at the school.
REFERENCES


Gogo, JO (2002).—The impact of cost sharing on access, equity and quality of secondary education in Rachuonyo District Kenya.


APPENDIX I

QUESTIONNAIRE INSTRUMENT FOR TOP MANAGEMENT (EDUCATION STANDARD OFFICERS, HEADTEACHER, DEPUTY HEADTEACHER AND HEADS OF DEPARTMENTS) OF SIAVONGA SECONDARY SCHOOLS

The purpose of this questionnaire is to collect data on factors influencing the implementation of Total Quality Management practices in public secondary schools. Please be honest in your responses. All responses will be kept strictly confidential. Thank you in advance for your cooperation.

SECTION A: GENERAL INFORMATION

1. Gender
   (a.) Male  
   (b.) Female

2. Age bracket
   (a) 22-30 years  
   (b) 31-40 years  
   (c) 41-49 years  
   (d.) 50 years and above

3. Highest education level
   (a) Doctorate  
   (b) Masters  
   (c) Bachelors  
   (d) Diploma

4. Current position in school:
   (a) Headteacher  
   (b) Deputy Principal  
   (c) Head of Department

5. How many years have you served in this position? ..........................

SECTION B

TOTAL QUALITY MANAGEMENT PRACTICE

6. Does the school have a strategic plan?   
   (a) Yes  
   (b) No

   If yes, who developed the strategic plan?
   (a) Teachers  
   (b) PTA  
   (c) invited resource persons  
   (d) principal
7. Total Quality Management practice encourages schools to participate in certain quality awards. Identify the ones that your school has ever participated in.

**Level:**

<table>
<thead>
<tr>
<th>Quality Awards:</th>
<th>School</th>
<th>District</th>
<th>Provincial</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOYA (Headteacher of the Year Award)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOYA (Teacher of the Year Award)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pupil Award</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Indicate if you have never participated in any...............................

8. The following are some of the TQM strategies that lead to customer satisfaction and continuous improvement. Specify the extent to which they are practiced in your school.

<table>
<thead>
<tr>
<th>No</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Training and education of staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Delegation of power</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Involvement in decision making process</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Staff well being</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Performance appraisal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) Motivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g) Communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION C

EFFECT OF SCHOOL CULTURE ON TQM PRACTICE

9. What is your school mission and vision?

Mission........................................................................................................................................

Vision........................................................................................................................................

Which are some of the activities you do as a school to achieve your mission and Vision?
..................................................................................................................................................

10. Please fill in your level of agreement in the following table according to the scale; strongly agree..........agree..........neutral..............strongly disagree........

<table>
<thead>
<tr>
<th>TQM practice is greatly enhanced when:</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived support, cooperation, mutual</td>
<td></td>
<td></td>
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<td>respect and consideration between staff</td>
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<td>members are prevalent.</td>
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<td>be observed</td>
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<td>The level of productivity or performance expected is high</td>
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11. To what extent do you think the following factors influence the implementation of TQM practice in your school?

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</table>

SECTION D

MANAGEMENT COMMITMENT TO TQM PRACTICE

12. Do you as a manager, support Total Quality Management? ......................... If yes identify some of the TQM practices below that you implement and show the extent

<table>
<thead>
<tr>
<th>Commitment to elements of TQM</th>
<th>No extent</th>
<th>Small extent</th>
<th>Moderate extent</th>
<th>Great extent</th>
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<td>Team work</td>
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</table>
13. Show the extent to which the school apply the following TQM implementation process

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<tr>
<th>TQM implementation process</th>
<th>No extent</th>
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<td>Create top management commitment</td>
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<td>Develop a quality policy</td>
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<td>Undertake training and education of staff</td>
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RESOURCE

17. Fill in the extent to which the following resources affect the implementation of TQM practice in your institution according to the scale

<table>
<thead>
<tr>
<th>Resource</th>
<th>critical</th>
<th>moderate</th>
<th>average</th>
<th>minimal</th>
<th>Not at all</th>
</tr>
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<td>Personnel</td>
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<td>Education material</td>
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<tr>
<td>Infrastructure</td>
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</table>

18. Time is a very important resource for quality management. Does your school allocate time for the following activities to improve management?

a) Acknowledge the best staff and students (Yes) (No)
b) Training of staff (Yes) (No)
c) Common discussion between students and staff (Yes) (No)

19. Make a brief comment on the role of resource on the implementation of TQM practice

APPENDIX B – FIRST STAGE OF THE STUDY INTERVIEW GUIDE - FOR MANAGEMENT

1. Please briefly describe your functional responsibility.

2. Is there a formal job description in your organization for your job?
3. Is there a formal documentation? If yes, may I have a copy?

4. How do you define Total Quality Management (TQM) in your organisation?

5. Are there formal guidelines for promoting a Total Quality Management in your organisation? If yes, may I have a copy?

6. Do customer requirements exist within these guidelines?

7. Are there formal guidelines to determine "a job well done or TQM"? If yes, may I have a copy?

8. How do you ensure that members of staff have adequate training to achieve TQM goals? Please briefly describe the types of hardware which are currently installed in-house?

9. What action does the organization take to increase employee involvement?

10. What actions does the organization take to increase employee responsibility?

11. Do managers receive any specific training on Total quality management?

12. How does management use its organisation culture to achieve continuous improvement and keep customer happy?

13. How does the organization ensure that these commitments address the concern of the customers?

14. How does the organization ensure that these commitments are understandable?

15. How do employees use the information about customer requirements and expectations to improve TQM?

16. In summary, please tell me what you think about the roles of a leader and manager in the quest to improve TQM.

17. Do you have any additional comments?
Appendix c

QUESTIONNAIRE INSTRUMENT FOR TEACHERS OF SIAVONGA SECONDARY SCHOOLS

The purpose of this questionnaire is to collect data on the challenges facing the implementation of total quality management practices in public secondary schools. Please be honest in your responses. All responses will be kept strictly confidential. Thank you in advance for your cooperation.

SECTION A: GENERAL INFORMATION

1. Gender (a.) Male (b.) Female

2. Age bracket (a) 22-30 years (b) 31-40 years (c) 41-49 years (d.) 50 years and above

3. Highest education level (a) Doctorate (b) Masters (c) Bachelors (d) Diploma

4. Current subject taught in school: ..............................................

5. How many years have you served? ......................

SECTION B

TOTAL QUALITY MANAGEMENT PRACTICE

6. Does the school have a strategic plan? (a) Yes (b) No

   If yes, who developed the strategic plan? (a) Teachers (b) PTA (d) principal (c) invited resource persons
7. Total Quality Management practice encourages schools to participate in certain quality awards. Identify the ones that your school has ever participated in.

**Level:**

<table>
<thead>
<tr>
<th>Quality Awards:</th>
<th>School</th>
<th>District</th>
<th>Provincial</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOYA (Headteacher of the Year Award)</td>
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<tr>
<td>TOYA (Teacher of the Year Award)</td>
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<tr>
<td>Pupil Award</td>
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</table>

Indicate if you have never participated in any...

8. The following are some of the TQM strategies that lead to customer satisfaction and continuous improvement. Specify the extent to which they are practiced in your school.

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<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>5</th>
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</thead>
<tbody>
<tr>
<td>No</td>
<td>small</td>
<td>Moderate</td>
<td>Great</td>
<td>Very</td>
<td>Great</td>
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<tr>
<td>a) Training and education of staff</td>
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<td>b) Delegation of power</td>
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<tr>
<td>c) Involvement in decision making process</td>
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<tr>
<td>d) Staff well being</td>
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<tr>
<td>e) Performance appraisal</td>
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<tr>
<td>f) Motivation</td>
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<tr>
<td>g) Communication</td>
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</table>

**SECTION C**
9. What is your school mission and vision?

Mission

Vision

Which are some of the activities you do as a school to achieve your mission and Vision?

10. Please fill in your level of agreement in the following table according to the scale:

<table>
<thead>
<tr>
<th>TQM practice is greatly enhanced</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived support, cooperation, mutual respect and consideration between staff members are prevalent.</td>
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<td>General openness to change and propensity to experiment and take risks is apparent</td>
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</tbody>
</table>

SECTION D

MANAGEMENT COMMITMENT TO TQM PRACTICE

12. Do the manager or Head of Departments support Total Quality Management?

If yes identify some of the TQM practices below that you implement and show the extent.
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<thead>
<tr>
<th>Commitment to elements of TQM</th>
<th>No extent</th>
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<td>Team work</td>
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<tr>
<td>Continuous improvement</td>
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<tr>
<td>Process improvement</td>
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13. Show the extent to which the school apply the following TQM implementation process:

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<td>commitment</td>
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SECTION F

RESOURCE

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18. Time is a very important resource for quality management. Does your school allocate time for the following activities to improve management?

a) Acknowledge the best staff and students  (Yes)  (No)

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19. Make a brief comment on the role of resource on the implementation of TQM practice