An Investigation into Quality Management Principles at a ND Primary School in Durban

Shereen Pillay, A. Bozas
Management College of Southern Africa (MANCOSA) 16 SamoraMachel Street Durban, KZN, South Africa

Abstract: Total Quality Management (TQM) has been used to improve quality in various businesses and schools in the U.K. and U.S.A. Public schools in South Africa use the Integrated Quality Management System (IQMS). The study investigated TQM at a primary school in Durban North. Familiarity with TQM principles and barriers to implementing TQM in South African public schools were considered. The principal and educators at the school participated in the study. Findings extracted from the primary study presented evidence that educators were familiar with TQM and if implemented correctly, it could replace the IQMS at public schools. The findings indicated that the Department of Education should provide structured, well-thought out, professional development for school educators and management. Recommendations were made to both the Durban North School and the Department of Education (DoE) on quality principles in a school environment. Increased parental involvement and teamwork were practices recommended to the school. TQM was recommended to the DoE as an alternative to IQMS. Improvements on the quality of teaching and learning, decreases in paper load and practical methods of training were recommended to the DoE.

Keywords: IQMS, OBE, professional development, quality management, TQM

I. Introduction

Education is an important aspect of the South African economy. The South African schooling system has for many years been under constant change to improve the quality of the system. The constant changes include the Outcomes Based Education in 1994, the Curriculum 2005, the National Curriculum Statement, the revised National Curriculum and now the Curriculum and Assessment Policy Statement (Ramrathan, 2015). However, change in the programme does not constitute an improvement in quality. The study considers Total Quality Management (TQM) as a quality tool where the principles of TQM engage in continuous improvement. TQM has been designed to improve defects in a business and as schools are run as businesses, adoption of these quality principles should achieve results. In comparison, the Integrated Quality Management System (IQMS) is a quality tool that is currently used at South African public schools. Educators and staff have made continuous complaints about the IQMS as an inefficient tool (Nkambule, 2010). The study focuses on TQM as an alternate to IQMS, investigating the familiarity of TQM, possible barriers to integrating a TQM philosophy, and poses recommendations evolving from the study.

1.1. Background to the Problem

School management is constantly finding ways to improve quality in the organisation and the need to focus on attracting and maintaining customers who are parents and pupils. Customers (parents) are always looking for the best quality schools for their children. Management needs to come up with methods for improving quality in the organisation. Over the past few years customers (parents) have left the school for better quality schools. Therefore if the right quality principle is not adopted, the school could be facing higher pupil transfer rates. TQM shows an improvement in results and efficiency (Gopalan, 2014). The current education system incorporates an Integrated Quality Management System that focuses on management and educators improving their performance. However, the IQMS lacks a holistic form and strives to tackle all aspects from learner to management issues (Segoe, 2014). The IQMS is also not a continuous quality approach. The system frequently does not deal with all problems faced by management and other staff. Very often the Education Department does not address the issues that arise from the IQMS. On the other hand, according to Gopalan (2014), TQM shows an improvement in results and efficiency. The IQMS lacked thorough training and roll-out implementation (Segoe, 2014:729). All the participants expressed the view that the IQMS is an ineffective teacher evaluation system because it does not help educators to address their specific needs; nor give continued support for educators; and does not promote accountability, as envisaged in the IQMS document (Nkambule, 2010:72). Many schools in the United States have applied Total Quality Management principles and some have been awarded the Malcolm Baldrige quality award. Excellent, quality principles in a school environment attract customers of high standards. The current Integrated Quality Management System does not have all the facets of TQM. The IQMS focuses on serving the needs of the teachers through performance evaluation and development. However, the system does not provide for the development of other aspects of the school such as...
the administration, sporting and parent body. By applying TQM to a school environment, the school can strive for continuous improvement. Jie and Idris (2009) state that, ‘TQM provides a structured and comprehensive delivery system which may lead to improvements in education’. TQM helps any school to provide a better quality service through accountability and continuous improvement than any other ‘good enough’ learning environment can provide (Fitzgerald, 2009). Sallis (2002:2), states that the best institutions, whether private or public, embrace quality and look for the following attributes:

- Excellent, passionate educators
- Good moral values
- High academic results
- Support of parents and community
- Skilled with latest technology and resources
- Strong leadership
- Learners interest at heart and
- An all-round curriculum.

Education is ongoing learning that changes with modern technology and new techniques. With this constant change comes fast increasing and highly demanding customers. Modern-day customers (parents) are looking for schools with an all-round quality philosophy. This study will show how the TQM philosophy is a solution to adopting an all-round quality approach. TQM focuses on all aspects of the organisation in terms of quality improvement. Heizer and Render (2014:248), state that TQM involves the whole company from supplier to the customer which is a management driven concept, focusing on excellence in every aspect of the organisation. The use of TQM in an organisation will improve quality by continuous improvement from the customer to the supplier. Management in schools should therefore benefit from using the TQM principles in the school environment. Some overseas schools have resorted to using TQM principles and have achieved excellent results. Nderitu and Nyaoga (2013:13) indicated that, ‘quality management practices have significantly influenced performance among schools’.

1.2. Problem Statement

The research explores whether educators are familiar with TQM and whether TQM principles are being used in a school environment. Schools are competitive and by applying TQM principles the organisation will gain a competitive edge. The current quality system (IQMS) is not efficient and effective as the system is complex and intricate (Rabichundand Steyn 2013). Due to increasing pupil transfer rates, management use quality principles such as continuous improvement that advance quality in the organisation. The IQMS has been known to undermine educator confidence and is perceived as a monetary reward system (Rabichundand Steyn 2013). Educators often feel that monetary gain should be detached from professional development and performance scores. Professional development is only part of a quality philosophy and should not be seen as a means to a total quality philosophy. According to Tlhapi (2011:6), schools must provide for ‘optimal development’ for each learner. The optimal development process includes all facets of the learners’ schooling. Schools in South Africa are not alike, though the IQMS assumes that all schools and staffing should be treated equally. Many schools are marred with unequal power dynamics, resource distribution and staffing commitment (Keshav, 2012:29). TQM enables management to adapt principles to suit individual organisations. There are many issues and tensions with the IQMS (Keshav, 2012:18).

1.3. Objectives of the Study

The research addresses the following objectives:

- To investigate whether management and staff are familiar with Total Quality Management principles.
- To explore the use of Total Management Quality principles in the school environment.
- To determine the barriers to integrating an efficient Total Quality Management system.
- To make recommendations to the education quality department to improve quality practices at school.

Research objectives were achieved through data collection via interviews from the organisation under study as well as literature review.

1.4. Research Questions

The research addresses the following questions:

- Are management and staff familiar with Total Quality Management?
- Are Total Quality Management principles being used in a school environment?
- What are the barriers to integrating an efficient Total Quality Management system?
- What recommendations can be made to the education quality department on how to improve quality practices at school?
1.5. Significance of the Study
This research is significant to both the school organisation as well as the education quality department. This research is also significant to management at the school as the information gathered will be used to improve school practices. The current education system is constantly in the spotlight due to poor performance. Quality principles used in schools that achieve excellence in academics and sporting will be beneficial to the Education Department. Many studies have focussed on the negative effects of IQMS on educators and schools. Very little research has been done to attempt to implement an alternative quality method to the IQMS. The study therefore adds value to the literature on both the IQMS at public schools and TQM in a school environment. The literature focuses on schools that have implemented TQM in both the United States as well as Africa. Change in education is needed to satisfy the educational needs, continuous improvement in curriculum delivery, quality failure, or lack of performance standards (Pour and Yeshodhara, 2009). Researchers have looked into TQM principles during the implementation of the Outcomes Based Education. De Jager and Nieuwenhuis (2005:2) proposed that TQM should be integrated with Outcomes Based Education to provide an excellent quality education philosophy as the implementation of the correct quality principles have always been a concern in education. Both the TQM philosophy and OBE places great emphasis on the customer (De Jager and Nieuwenhuis, 2005:2).

II. Literature Review

2.1 Benchmarking
Benchmarking consists of comparing how different organisations perform making comparisons across the company (Hough, J., Thompson, A.A., Strickland III, A.J. and Gamble, J.E. 2011:131). According to Noe, R.A., Hollenbeck, J.R., Gerhart, B. and Wright, P.M. (2012:489), benchmarking occurs when an organisation compares the practices it uses against those of the competition. Benchmarking is done for talent retention, market related salaries provision and organisational practices. Benchmarking is a tool used for achieving effectiveness (Pineda, 2013:38). It is a valuable way of learning other organisations’ practices and using their techniques to improve your own activities (Hough et al., 2011:131).

2.2 Philosophy
Philosophy is a belief or principle that an individual or group of people abide by. According to Gray (2013), philosophy helps to improve ‘critical thinking skills’ and is a good way to gain knowledge. Philosophy in education is the practice or principles that the government have chosen to use in a public environment. The philosophy chosen provides educators with guidelines for teaching lessons, organising classrooms and schools (Ornstein and Hunkins, 2004:31). Organisations have different philosophies and principles. The philosophy practiced in a school environment must have quality principles to holistically develop the learner.

2.3 Accountability
Accountability is fulfilling duties, living up to performance standards and delivering expectations (Nkambule, 2010). In terms of education, accountability relates to holding all educators, management and parents responsible for the upliftment of children academically, sporting and holistically. Accountability is a system that is put into place to check who is responsible and what actions have occurred (Laudon and Laudon, 2012:159). Increased accountability in a school environment is meant to increase educator production (Keshav, 2012:22). Educators are often held accountable for poor learner performance.

2.4 Curriculum Assessment Policy Statement (CAPS)
The Curriculum Assessment Policy Statement was introduced into public schools in 2012 by the Department of Education (DoE). The Curriculum Assessment Policy Statement was replaced by the National Curriculum Statement (NCS). The CAPS document contains teaching and assessment material for every subject as well as every grade (Variend, 2011). The document emphasises consistency for all public schools in South Africa. The aim of the introduction to the CAPS document is to lessen the paperwork load for educators (Variend, 2011).

2.5 School Improvement Plan (SIP)
The School Improvement Plan is completed by management at a school level. The school improvement plan is a ‘comprehensive overview of major priorities to which the school will commit’ (Destacamento, 2012). It is a process or roadmap of where the school will be at in the next year or two. The plan outlines what improvements the school needs to make and how these will take place. The SIP document is looked at once a year and amendments are made to the document.

2.6 Personal Growth Plan (PGP)
Each educator or manager in a school environment completes a personal growth plan once a year. All training or development courses that an individual needs will be written in the personal growth plan.
Professional development is the first part of the personal growth plan. During this phase professional development courses and training in specific skills are identified. Time frames are put in place. Educators identify their weaknesses and record these on a PGP form. This plan is then submitted to the Department of Education, thus informing them of what development and support is required (Keshav, 2012:26).

2.7 Governing Body

The Governing Body Foundation (2015) states that the organisation was formed to give ‘advice, guidance, information, training and general support’ on all aspects regarding governing the school. These aspects include finance, building maintenance, staff employment, academic and sporting activities. The School Governing Body is made up of the principal, two educators, one school administrator and five parents. The Governing Body is required to make decisions that uplift the school. The management process consists of ‘planning, organising, staffing, leading and controlling’ (Heizer and Render, 2014:43). Management entails overseeing the smooth operations and activities of the organisation. Management have to identify objectives of the organisation, plan and implement policies, determine quality products and services and oversee all projects (Nel, Werner, Poisat, Sono, du Plessis, Ngalo, van Hoek and Botha. (2011:44). Management should have the correct skills, expertise and experience in their various fields to detect defaults and create solutions to upcoming problems. A public school is an ordinary school that enrols learners from Grade R to Grade twelve (Tlhapi, 2011:17). A public school is governed by the Department of Education (DoE) which is subsidised and funded through government taxes. A public school follows the norms and standards laid out by the department. Public schools vary according to the funding granted by the government. An educator is a qualified, trained individual that facilitates learning and teaching in a formal environment. According to the South African Schools Act (1996), an educator is any person who teaches, trains, educates learners and provides professional services in an institution or organisation. The School Management Team consists of the principal and heads of departments. The School Management Team is a ‘body with legal capacity to perform its duties’ (South African Schools Act, 1996). The School Management Team oversees the smooth running of the school. The team monitors, controls and implements practices and policies.

2.8 Quality

Quality is an important aspect in any organisation. Quality pioneers were W. Edwards Deming and Joseph Juran. Deming and Juran originated the idea that quality improvement should be managed and emphasized by management (Schroeder, Goldstein and Rungtusanatham, 2011:167). Quality in education can be defined as ‘meeting and exceeding stakeholders’ expectations in the education field’ (Ah-Tech and Starr, 2012:682). Quality is known as setting standards and then achieving those standards. Quality is reliability, excellence, specification compliance, assurance, and control with predefined objectives (Pineda, 2013:32). Ah-Tech and Starr (2012:683) state that quality in education evaluates the education process so that the outcomes are achieved and ‘accountability standards’ are met. Customers are then satisfied. Quality is a ‘perceived concept’ through the eyes of the consumer (Farkhondehzadeh, A., Karim, M.R.R., Azizi, J. and Hatami, F.L. 2013:634). Quality varies according to those who measure quality. Quality needs to be benchmarked within organisations that are familiar in the industry. Quality standards are similar to benchmarks put in place so that standards can be reached and assessed (Pecar, Cervai and Kekäle, 2009:285). According to Hill (2012:556), Deming argued that ‘management has a responsibility to train employees in new skills to keep pace with changes in the workplace’. Customers may be satisfied with present-day products and services, but may not be satisfied with future services or products (Schroeder, Goldstein and Rungtusanatham, 2011:159). Quality practices have to be reviewed over time in order to continuously satisfy customer needs. Quality satisfies customer requirements and continues to exceed specific standards (Batra, Shankar and Kumar, 2012:42).

2.9 Total Quality Management

Total Quality Management stems from the research of William Edwards Deming. The Japanese sought quality principles that would improve their all-round performance. TQM then became famous for improving performance as well as producing results. TQM principles focus on improving quality in the organisation from the customer to the supplier. According to Noe et al., (2012:31), TQM is a companywide effort to continuously improve the way people, machines, and systems accomplish work. Gopalan (2014:25) states that ‘this philosophy of management was well suited to the assembly-line processes developed by Henry Ford and widely copied in America’s private and public sectors. TQM is based on the concepts of ‘customer orientation, leadership commitment, full employee participation, organisation-wide focus on improvement and a global vision’ (Weinstein, 2009:368). TQM emphasises ‘meeting and exceeding standards’ that places organisations in the global market (Heizer and Render, 2014:248). TQM postulates that ‘good is not good enough’ and the organisation must continue to improve (Brown, 2011:362). For TQM tools to be used effectively, all facets of the organisation must be thoroughly involved with the quality process. TQM principles incorporate core
techniques and processes to meet and exceed both ‘internal and external customers’ desires, rigorous employee training, improved products and services, cooperation with suppliers as well as continuous feedback (Noe et al., 2012:31). Brown (2011:365) states that ‘TQM involves moving toward organisational excellence by integrating the desires of individuals for growth and development with organisational goals’. TQM is relatively a ‘modern concept’ which is based on management and staff tools to improve innovations, techniques, skills, defects and performance in the daily running of a business (Alobiedat, 2011:32). TQM uses resources, techniques and management skills to improve the organisations performance (Brown, 2011:365). The process is planned and strategically thought out. Achieving quality requires commitment from everyone in the organisation (Hill, 2012:556). TQM envisages improving problems in the system and leaders focusing on helping employees to minimise these problems. According to Hill (2012:555), ‘quality of supervision should be improved allowing more time for supervisors to work with employees and providing the tools they need to do the job’. It is up to management to create a work atmosphere in which employees will want to solve problems and find solutions for improvements (Hill, 2012:556). TQM comprises of ‘process thinking, shared long-term goals, employees’ participation and empowerment, teamwork, strong quality leadership, continuous improvement, customer relationships and process-orientation’ (Gopalan, 2014:28). TQM is a constant action that focuses on ‘continuous improvement of all organizational processes’ (Pineda, 2013:35). TQM means a new approach to improve quality and increase customer satisfaction on a continuous basis (Gopalan, 2014:28). According to Pineda (2013:37), the right quality principles are less costly compared to money spent on fixing problems that are due to poor quality, quality is supported by top management and requires cross-functional effort.

2.10 Total Quality Management in a School Environment

TQM in a school environment is different to a company with a production line. TQM in a school deals with quality improvement in a service. Defects are detected differently in a service compared to a product, although TQM was designed to improve results in a business environment services using TQM principles to gain a competitive edge. Services that are well designed and meet customer expectations have good quality principles (Heizer and Render, 2014:261). Poor quality services are usually directly attributable to employee behaviour or attitudes (Gopalan, 2014:31). Poor quality in the service industry is due to a lack of training and no care or concern for improvement. Service organisations have to be more responsive and offer better services due to customer profile in an environment in which competition is intense (Gopalan, 2014:34). TQM is a ‘must need’ in education. TQM is a different quality philosophy compared to the Integrated Quality Management System. TQM in schools require a change management process which includes the schools infrastructure (Altunay, Arli and Yalcinkaya, 2012:729). Schools that practice TQM have a ‘shared vision and dedication to quality’ and this vision is shared by staff, students, management, department and the governing body (Shroff and Dave, 2012:167). Schools that are quality orientated are committed to change and continuous improvement that best meet their stakeholders’ expectations (Hung and Ah-Teck, 2013:1). Gopalan (2014:35) emphasises that educational institutions from all over the world are creating mission statements, long term vision strategies and employee interaction systems with TQM tools in mind. Commitment, communication and culture are part of the schools quality philosophy. According to Gopalan (2014:35) ‘the pioneers of total quality in education generally came from the United States, but the ideas have spread around the world, particularly the United Kingdom, Canada, Australia and New Zealand’. TQM endorses distributed leadership including emphasis on ‘teacher leadership’, which values the importance of collaboration and teamwork (Hung and Ah-Teck, 2013:1). Stakeholders are allowed to engage in participative decision-making (Hung and Ah-Teck, 2013:1). Curriculum, organisational and management processes within educational institutions should be a way which serve the interests of students, parents and the community (Thlapi 2011:2). According to Jie and Idris (2009) ‘TQM provides a structured and comprehensive delivery system which may lead to improvements in education’. The philosophy of TQM in education can be applied on three levels. The first level is for management to apply the TQM in a school, the next level is to get the students involved, and the last level is to apply these TQM principles in and out of the classroom (Gopalan, 2014:36). In a school environment a clear distinction must be made between suppliers and customers as TQM involves everyone within the organisation. Education has different types of customers. Primary customers are the pupils, secondary customers are the parents or governors, tertiary customers are less directly involved and the internal customers are the employees (Sallis, 2002:22). All four types of customers play a vital role in TQM in education. All stakeholders of the education system contribute directly towards a TQM philosophy. TQM in education involves everyone, continuously improving service to customers with valuable data and apt knowledge (Fitzgerald, 2009). For successful implementation of TQM in schools, teachers need to be professionally trained (Hung and Ah-Teck, 2013:1). The essential elements that must be found in education are awareness and commitment, a clear mission, team focus, systems approach, mastery learning, breaking down fear and skills improvement (Fitzgerald, 2009). According to Hung and Ah-Teck (2013:1) the focus is on stakeholders through, ‘meeting and exceeding their needs and expectations, based on the principle that the stakeholder is the supreme judge of the quality of

DOI: 10.9790/7388-06050189108 www.iosrjournals.org 93 | Page
educational products and services’. Educators need to acquire attributes of perseverence, determination and quality principles. According to Tlhapi (2011:23), ‘self-motivation and self-esteem are interwoven aspects which motivate educators to build self-confidence, which, in turn, sharpens enthusiasm to improve their day-to-day activities’. Self-motivated educators strive for positive change which yields results. TQM is a holistic quality approach that involves all facets of the organisation. Educators as part of the TQM team play a vital role in implementing quality principles. The educators can only be carriers of quality principles if they have the knowledge and skills required. The educators need to attend continuous developmental programmes to upgrade their skills. According to Tlhapi (2011:34), TQM involves a primary focus on suppliers and customers, continuous dedication to continuous improvement and a system or process orientation.

2.11 Determinants of Service Quality
Reliability The service needs to be reliable and dependable.
Responsiveness Employees’ eagerness and readiness to provide the service.
Competence Employees must have the skills and knowledge to perform service.
Access The service must be easily accessible.
Courtesy Employees interaction must be polite, friendly, open minded.
Communication Open communication and quick response is needed. Customer friendly service.
Credibility Worthiness, quality promising and honesty must be promoted.
Security Free from danger or risk.
Understanding Understand and know what is needed from the customers.
Tangibles Make the service visible.

Schools that succeed with TQM principles have beliefs put in place for a quality approach. Tlhapi (2011:36) discussed the following issues which he believed are necessary for success:
- Customer focus – all educators, managers and supervisors should be customer orientated and strive to exceed customer needs and expectations
- Total involvement – all individuals must be actively involved in school improvement and adapt a hands-on approach towards improvement
- Measurement – continuous baseline assessments and performance indicators must be used to benchmark the schools performance. Assessments can be done through various styles such as peer assessment, schools performance in their area as well as the departments’ performance indicators
- Commitment – level of commitment is needed from all stakeholders to improve the quality of the school and
- Continuous Improvement – techniques and brain storming must be done on a continuous basis to improve quality standards.

According to Alobiedat (2011: 32), schools that implement TQM succeed due to strong management leadership and support as well as a ‘productive work climate’. TQM in an education environment involves identifying needs and expectations from teachers, learners, parents and the department (Alobiedat, 2011:32).

2.12 Effectiveness of Total Quality Management in Schools in Africa
Hung and Ah-Tech (2013:11) found that in Mauritian schools principals ‘applauded’ TQM which is used as a ‘competitive player in the global economic arena’. Through the studies of Hung and Ah-Tech (2013:11) they found that Mauritian schools’ quest for continuous improvement is due to aspects such as authentic school leadership; values; ethics; teacher leadership and authentic learning. School leaders are a driving team to produce outcomes in quality driven schools (Ah-Tech and Starr, 2013:695). According to Ah-Tech and Starr (2013: 695) results of the Malcolm Baldrige quality schools in Mauritian schools show that there is a positive relationship between leadership and strategic planning. The study found that school principals play a vital role in implementation of quality initiatives in schools. Secondary schools in Nigeria have quality academic educators, adequate funds and facilities that enable TQM to be successful (Terhile and Nike, 2013:75). Nigerian schools that implement TQM have a long term approach, top management driven (National Education Council), system evaluation, culture change focuses on school customer needs (Terhile and Nike, 2013:70). Schools in Nigeria that do not have quality principles need to put in place a quality system for identifying problems and solutions; recommendations to management for improvements and self-evaluation system (Nwogu and Abraham, 2013:32). Public schools in Zimbabwe are found to be quality conscious and adhering to international standards as well as the TQM principles (Ngwenya and Pretorius, 2014:708). Nderitu and Nyaoga (2013: 12) imply that quality management practices such as ‘top management, commitment, teamwork, continuous improvement and benchmarking’ have a positive influence on academic results. Schools do not tolerate failure on the basis of a single individual, but celebrate success as well as look to correct
problems collectively (Ngweya and Pretorius, 2013:708). Schools in Kenya that implement quality principles tend to show better academic results.

### 2.13 Effectiveness of Total Quality Management in Schools in the United States and other Countries

The United States is one of the oldest countries to implement TQM into their schooling system. Mt. Edgecombe High School, Fox Valley Technical College, George Westinghouse High School and Mill Creek School District have all practiced TQM (Gopalan, 2014:37). TQM in these schools have improved parent participation and communication between staff. According to Weinstein (2009:370) the music schools in the United States of America display socially responsible characteristics in a learning-centred environment with commitment from teachers and staff who are innovative and results driven. According to Rosenberg (2014) the Pewaukee School districts received the Malcolm Baldrige award due to commitment to TQM. The Pewaukee School districts focus on professional development; academics and student extracurricular; facilities and grounds improvement and the commitment of parents. According to Batra, Shankar and Kumar (2012:44) for TQM in the Meerut Region of India to succeed all individuals in schools must be committed to their organisation. The implementation of TQM will achieve improved results in the performance of students, teachers, principals and the organisation as a whole. TQM leads to high levels of commitment and dedication as well as introducing an excellent ethos for the school. The Hong Kong government implemented quality school education. Quality school focuses on ‘new roles and relationships for the Education department, new roles for school management team, greater flexibility in finance, participation in decision making, and a framework for accountability’ (Yau and Cheng, 2013:16). According to Pineda (2013:43), schools that practise TQM in the kingdom of Bahrain have a high level of effectiveness. According to Tasar and Celik (2011:37), schools in the Adiyaman province of Turkey found that principals and educators’ morale and motivation levels were high due to TQM. Leadership, top management and continuous development are some aspects of TQM that improve the level of work in schools. According to Yau and Cheng (2013:25), schools have to have values and principles that support teaching and learning. Decision making that leads to quality principals should be made by educators as well as management. Other principles need for a quality school to be developed are continuous professional development, well-educated staff, ‘meeting pupil needs and empowering staff’, and having strong leadership (Yau and Cheng, 2013:26). TQM is a tool that is used in schools that want to ‘focus on raising the potential of students to the highest level’ (Töremen, Karaku and Yasan, 2009:33). Quality has been an important aspect in the Malaysian public services. The government introduced TQM in 1996 to the education sector (Manaf and Seng, 2010:5). Turkish primary schools show that TQM is successfully implemented due to qualified educators (Töremen, Karaku and Yasan, 2009:40).

### 2.14 Malcolm Baldrige Award

The Malcolm Baldrige Award was invented to promote improved quality practices in the American industry (Schroeder, Goldstein and Rungtusanatham, 2011:170). The award is a result of poor quality performance in many product and service industries. This award is given to different organisations including the service and education industry (Schroeder, Goldstein and Rungtusanatham, 2011:170). The Malcolm Baldrige Awards has been in effect for over two decades and has shown acceptance in the education sector (Alt-Tech and Starr, 2013:687). In order to achieve the Baldrige Award, schools will need to strive for organisational excellence; ‘systematically, integrated approaches in the areas of leadership; strategic planning; student, stakeholder and market focus; measurement; analysis; knowledge management; teacher and staff focus; and process management’ (Weinstein, 2009:369). Schools that strive for The Malcolm Baldrige award practise TQM principles and schools in Missouri compete for the Malcolm Baldrige award by practising TQM principles. According to Governor Jay Nixon, the Baldrige program helps to deliver results through greater accountability, commitment and higher expectations (Baldrige Performance Excellence Program, 2011). The Pewaukee School District has received the Malcolm Baldrige award through practising TQM. With the use of continuous improvement the system has become more efficient and effective.

### 2.15 Integrated Quality Management System

The Integrated Quality Management System (IQMS) is a quality system that is currently being used at public schools throughout South Africa. The IQMS serves the purpose of identifying ‘the specific needs of educators for support and development; provision of support for continued growth; and evaluating the performance of educators’ (DOE, 2005:1). The IQMS is a quality system that is designed to improve quality in the education sector. This quality system was introduced in 2004. The IQMS involves three programmes consisting of development appraisal, performance measurement and whole school evaluation. During the ‘developmental appraisal system’ phase the teacher is developed by the mentor to better his/her performance (Mosoge and Pilane, 2014:1). Developmental appraisal system is meant to help teachers improve their performance through upgrading the skills they lack. Performance management strives for excellence in teachers...
and for teachers to meet targets set out for them (Mosoge and Pilane, 2014:5). Performance management is performed by the Developmental Support Group (DSG). The task involves being mentors and coaching for improvement. The performance management team monitors and evaluates the teacher. The monitoring and evaluation is done once a year if the teacher is experienced and twice a year if the teacher is inexperienced.

Whole School Evaluation (WSE) is supervised by department superintendents. WSE serves to evaluate quality practices carried out by schools and provide support needed for improvement. A personal growth plan (PGP) is a record sheet that is put in place to identify skills and timeframes needed to accomplish these skills. The IQMS was designed as an accountability system to hold educators and other stakeholders responsible for their actions. Accountability in the IQMS was designed to achieve a set of performance standards set out pertaining to the teacher’s post level (Nkambule, 2010:12). The performance standards achieved then entitles teachers to a salary progression. The teachers get a salary progression of 1%. There is no differentiation to the progression given to a satisfactory performing educator or an outstanding performing educator (Education Labour Relations Council, 2008). Although the IQMS states that accountability is put in place, this is more on paper than action. TQM supports accountability with ‘objective and measureable outcomes’ (Sallis, 2002:4).

2.16 Shortfalls within the Integrated Quality Management System

The IQMS was brought into the system as a tool to improve quality. This quality tool requires holding management and staff accountable for their performance. Mosoge and Pilane (2014:1) strongly state accountability has ‘negative effects’ due to the fact that accountability creates individuals that are likely to hide behind the system as individuals do not want to appear weak and inefficient in the public light. The IQMS is a system that has more administration details with outcomes that are not achievable due to limited resources (Nkambule, 2010:31). An overload of paperwork was identified as one of the shortfalls in the system. According to Kolobe (2014:12), the performance appraisal system should be done with minimum paperwork and electronic recording. Others have stated that the system is time consuming, ‘absorbing as much as 25% of the principal’s time’ (Nkambule, 2010: 32). Since the introduction of the IQMS in 2004 very little training is provided by the Department of Education. In addition, there is no accountability from the department and professional development is not understood by educators. A quality tool cannot work in isolation as quality assurance needs to be monitored. IQMS is linked with pay progression and therefore educators tend to rate their peers high. The developmental appraisal system becomes questionable. The developmental appraisal system ‘is a process for determining how a teacher performs in his/her job’ and to develop training programmes for shortfalls that are found in the performance (Mosoge and Pilane, 2014:2). Performance management standards in the IQMS need to be discussed prior to teacher assessments. Teachers should not be accountable for unclear goals and undefined measurement standards (Mosoge and Pilane, 2014:2). Teacher evaluation systems do not differentiate between performing and underperforming teachers; instead, they create an impression that teacher performance is the same (Nkambule, 2010:19). According to Nkambule (2010:23), the success of the teacher appraisal system depends on the ability of the school principal to enlighten and train educators on the appraisal system. Teacher appraisal systems are not done continuously and the appropriate developmental programmes are not carried out. According to Nkambule (2010:23), teachers reported that there were no meetings or programmes for School Development Teams in their schools and schools did not have any formal school-based continuous professional development programmes. Mosoge and Pilane (2014:15) found that the IQMs has not been successful due to ‘lack of expertise and knowledge on mentoring, coaching and monitoring’. The IQMS has been reviewed and a number of challenges have been identified. According to Nkambule (2010:24), these challenges include conflicting roles of the School Management Teams (SMTs) and School Development Teams (SDTs), lack of human capacity to implement IQMS, subjective ratings, and a lack of training of individuals and structures responsible for implementing IQMS. The process of developmental appraisal should be to enrich teaching in teachers and empower them (Kolobe, 2014:14). The evaluators must empower the teachers to be able to have the skills to provide the performance evaluation (Kolobe, 2014:14). The IQMS needs suitably qualified supervisors and department managers. According to Setlalentoa (2011) the IQMS lacks clarity in the whole school evaluation process and supervisors lack training and accreditation.

2.17 Continuous Improvement

To achieve excellent quality results the organisation must have a continuous improvement approach. Continuous improvement is a ‘value system stressing that processes can be improved’ and that improvement is ‘an integral part of every employee’s job’ (Heizer and Render, 2014: 675). The process involves every individual making some small improvement in practice to seek ‘total perfection’ (Heizer and Render, 2014:675). Continuous improvement in a school environment means that educators and school management must strive to achieve outcomes that ‘promote better quality in services’ provided (Tlhapi, 2011:20). Continuous improvement is a conscience effort of knowing mistakes made and improving on the mistakes. TQM envisages ‘a permanent shift in an institution’s focus away from short-term expediency’ to the ‘long-term quality improvement’ (Sallis,
Continuous improvement implies a ‘commitment to constant examination of the technical and administrativ {processes that can only be created by developing quality services. ‘Constant innovation, improvement and change are stressed,’ which leads ‘into a cycle of continuous improvement (Sallis, 2002:25). This process involves planning, execution and evaluation (Nderitu and Nyaoga, 2013:4). To develop a continuous improvement environment management needs to trust their staff to plan and develop quality principles within their own environment. (Sallis, 2002:25). Although TQM is management-directed, employees must be involved with the designing, monitoring and evaluation process.

2.18 Teamwork

Teamwork is essential for employees to gain a competitive advantage. According to Hough et al., (2011:305), leaders must encourage effective teamwork. Teamwork ‘needs to be used in a wide range of decision making and problem-solving situations’ and ‘must exist at all levels, across all functions of academic and support staff” (Sallis, 2002:72). Effective teamwork helps to solve problems that arise and creates an atmosphere for creativity and constructive contributions (Hough et al., 2011:305). Educators, parents and children who strive for excellence tend to work in teams. The best ideas and practices that are developed tend to come from a group of people working together. Teamwork must be made a priority (Hough et al., 2011:305). Tlhapi (2011:26) states that teamwork is a major contributing factor of the ‘quality improvement process’ and through this process quality products and services are generated. TQM involves teamwork. Educators that work in teams tend to improve on their practices, gaining ideas from each other. Poor practices are discussed and solutions to problems are identified through effective teamwork. A well-structured team will promote effective production of services through the ‘integration of activities’. (Nderitu and Nyaoga, 2013:4). According to Tlhapi (2011:25) ‘educators should group themselves according to learning areas’ or common interests and discuss methods that impact on pupils’ results and the performance of the school as a whole. It is important to have self-motivating, work-driven individuals in the team in order for improvements to materialise (Nderitu and Nyaoga, 2013:4). Teamwork is often known as a building block for success and improvement and a stepping stone for building trust and open communication to improving overall performance (Tlhapi, 2011:26). Sallis (2002:73) goes on to state that quality improvement takes place with teams working on small projects to solve a problem, improve on or ‘design new’ processes.

2.19 Benefits of using Total Quality Management in a School Environment

Schools that have implemented TQM principles have many assets in their organisation. According to Tlhapi (2011:43) schools based in the United States which used TQM have shown the following:

- Greater parental involvement
- Fewer discipline problems
- Increase in learner involvement with regard to extra-curricular activities
- Increase in school admissions
- Finances of the school has increased
- Work ethic, educator and learner morale has increased,
- Improvement in academic results.

Schools that practice TQM have a high level of effectiveness (Pineda, 2013:43). Schools that use TQM principles achieve quality awards. The schools have greater effectiveness and efficiency, continuous improvement, professional development and greater academic results (Baldrige Performance Excellence Program, 2011).

2.20 Problems Arising from the Use of Total Quality Management

Total Quality Management is an excellent quality tool, but if not implemented correctly will not yield the results an organisation perceives. According to Schroeder, Goldstein and Rungtusanatham (2011:177) ‘It’s not the approach a company uses to improve quality that makes the difference; it’s the implementation process’. According to Tlhapi (2011:44) TQM can fail due to educators that are lazy, educators and managers do not like change, hierarchical problems, as well as educators who do not have enough skills and knowledge. Teachers often fail to cooperate when dealing with changes in curriculum (Pineda, 2013:43). In many organisations the implementation of TQM has yielded results that employers are not satisfied with. Schroeder, Goldstein and Rungtusanatham (2011:177) through studies, have found that companies have obtained significant results from their quality programs, while other companies were not satisfied with their results.

2.21 Assessment of the Various Tools for Improvement

The IQMS has been used as a tool for improvement in the education system. The assessment tool has twelve performance standards. All twelve performance standards are used for managers, however the first seven
are used for educators that are past level one. Each performance has subcategories which are assessed by an unacceptable, satisfies minimum requirement, good or outstanding tool. The performance standards are aimed at improving educators and management performance. Educators do not make a connection with the performance standards used to assess them and their learners’ performance. According to De Clercq (2008), educators do not hold themselves responsible for learner’s results and other aspects of the school environment are then blamed for poor performance. The assessment of educators is done by managers and peers. Management and peers may not have the correct expertise to display professional behaviour and therefore the assessment techniques maybe incorrectly displayed. No formal training has been given to educators or managers on how to assess individuals and carry out this task in a professional manner. According to Rabichund and Steyn (2013), training given to educators for the IQMS was limited and did not ‘equip educators to manage’ the IQMS process successfully. Professional development is vital for educators and management to uplift their skills. Professional development is one of the key indicators in the IQMS tool. The Department of Education (DoE) does not provide for workshops for individual educators. The IQMS is a tool that allows employees, both at district level and school level, to be exposed to poor leadership capacity as well as the dilemmas in the system (De Clercq 2008). De Clercq (2008), goes on to state that the IQMS is an ‘unrealistic assumption’ of educators’ performances and how they view themselves. IQMS was enforced upon educators to ‘meet the expectations of the Department of Education’ (Rabichund and Steyn 2013). This tool is only used once a year. Although done once a year it comes with an abundance of paper work. According to Rabichund and Steyn (2013), the IQMS placed greater emphasis on ‘excessive record keeping’ and unnecessary paper work. Another major criticism is the monetary aspect attached to the IQMS. Educators across board attain a 1% salary increase even if they achieve a satisfactory, good or excellent score rating. Mediocre work then becomes acceptable. The IQMS process leads to nepotism, preferential treatment, hostility, resentment and biasness among staff (Rabichund and Steyn 2013).

2.22 Interrogation of the Literature

It is clear from the literature that the current IQMS system used in public schools in South Africa are not yielding fruitful results. The educators are not bought into the system. The IQMS has been around since 2004. It is now the eleventh year that it is being used, yet no results have been seen. Users of the IQMS system have blamed incorrect implementation, insufficient training, an overload of paperwork and a minimal monetary value attached to it. In order for the IQMS to be successfully implemented the educators had to be convinced that the quality system works and it is beneficial for all stakeholders. Schools that have used TQM have noticed incredible results in both sporting and academic fields. All facets of the school are directly involved in the organisation. The literature has shown successful implementation of TQM in schools in Mauritius, Nigeria, Zimbabwe, Kenya, America, India, Hong Kong and Turkey. The benefits have included authentic learning, teamwork, continuous improvement, high educators’ morale, an increase in academic results, strategic leadership and planning. TQM has been around the service industry for the past twenty years. South African schools have continuously been seeking methods to improve their quality systems. TQM provides the DoE with an alternative to the current quality system that has produced excellent results in other countries. The department cannot continue to practice the same principles and expect different results.

III. The Research Design

Exploratory research design has been used for this study. Exploratory research is a more flexible design that looks at different aspects of the problem (Kothari, 2004:39). Exploratory research is excellent for finding more about a subject where there is insufficient information about the problem (van Wyk, 2010). Exploratory research can be used as a mixed design method. Initially the researcher could use a qualitative approach and once data is collected the researcher can go on to the quantitative phase (McMillan and Schumacher, 2006:28). Exploratory research aims at clarifying concepts, research problems and gives clarity on the direction of the study. According to Kowalczyk (2015), exploratory serves the following purpose:

- Investigates an initial research into a theoretical or hypothetical idea
- Observes something and clarity towards the study
- Attempts to lay the foundation for future research
- Explains a current, already existing theory and
- Explores a new topic or angle.

3.1 Importance of Qualitative Research

Qualitative research aims to collect data from the subjects’ experiences through interviews, observations, case studies or focus groups. For the purpose of this study a qualitative research design was chosen. The researcher required the participants to view their opinions on quality practices in the school environment, therefore a qualitative method was used. The researcher focused on drawing information from participants’ responses about their familiarity on TQM principles. Further, in qualitative research the researcher
can get a better understanding of what the interviewee’s reaction is to the problem area being investigated. The main purpose of using a qualitative research method was to investigate other literature on the concept of TQM in a school environment. Qualitative studies gives a description of what is observed and the researcher ‘contextualizes, interprets and understands’ different perspectives of the study (McInroy, 2011:8). According to Keshav (2012:40), qualitative research makes meaning of participants’ response, perceptions, views, actions and spoken words. Further, the enquirer gets intensely involved in the subject and a small number of participants are used in the study (McInroy, 2011:8). In light of the above explanation of qualitative methods, the approach was chosen to answer the research questions:

- Are management and staff familiar with Total Quality Management?
- Are Total Quality Management principles being used in a school environment?
- What are the barriers to integrating an efficient Total Quality Management system?
- What recommendations can be made to the education quality department on how to improve quality practices at school?

According to McMillan and Schumacher (2006:317), qualitative research has the following purposes:

- It investigates new ideas or phenomena. The researcher explored TQM in a public school. TQM in South Africa is a new concept to the public schooling system.
- Finds themes from participant responses. Similar responses are identified from different participants and themes are formed. Participant responses that are closely related are grouped together.
- It sets the foundation for future research. This enables the researcher to explore new concepts and the data gathered will enable other researchers to investigate further.
- Explains patterns in study. Through qualitative research patterns are identified from the data collection process. Patterns are essential to make meaning of peoples’ experiences.
- Establishes and identifies relationships. Relationships pertaining to the study are identified from participants’ responses. Qualitative research gives the researcher a more detailed response and this provides the researcher with sufficient data to develop relationships.
- Creates a climate for social interaction. Qualitative research promotes social interaction as participants view their opinions on the area of study. Problems or solutions are identified and this encourages people to interact with each other. This study focused on quality principles so participants’ responses to this study created social interaction.

3.2 Research Strategies

Interviews were chosen for the face-face, in-depth process. Interviews enable the participants to share their experiences and knowledge about the study. The participants in the study have experience in management, academics, administration and sport. Detailed information about quality principles can be collected from the participants through interviews. Interviews are one of the most popular ways of gathering information from people (McInroy, 2011:39). Interviews allow participants to present their own opinions and point of views on their life experiences (Cohen, Manion and Morrison, 2007:349). Interviews are flexible as words, meaning, actions and expressions can be recorded. The interview can be conducted face-to-face by the interviewer and the participants or indirectly through someone else (Kothari, 2004:97). Interviews allow the researcher to collect information that cannot be gathered from observations or other research strategies (Tlhapi, 2011:50).

3.3 Target Population

The target population refers to the number of people that have the same attributes to the situation (McInroy, 2011:26). A population is not confined to people, it is cases, incidents, events, objects or things. The participants selected for the study must represent the total population to gain effective data collection (Kothari, 2004:55). Further, participants chosen should have sufficient knowledge to be able to share information freely and openly (Turner, 2010:757). The target population for the research study is all educators, principals and management in a school environment. The target population is confined to a public school as the study focused on quality principles in a school environment. The study was taken at a Durban North primary school. The total target population was 31. This includes both academic and non-academic staff. The academic staff ranges from classroom educator to specialist educators. The specialists came from the disciplines of Sport, Zulu, Music, Drama and Computers. The non-academic staff includes the administrators, teacher assistants and maintenance. For the purpose of this research 10 participants were drawn from the population. The population consists of all academic and non-academic staff at the Durban North Primary school. The population total is 31. The population comprises of three managers, 17 academic staff, two sport staff, seven administration staff and three cleaners. The sample size is 10 respondents. The participants include three managers, four academic staff, one sport-manager staff and two administration staff. The sample size was sufficient for the research. Adequate data could be collected from the sample for the study. For the purpose of this research non-probability sampling has been used. The non-probability sampling method used in this research is quota sampling. Quota sampling was
used to represent every level of position in a school environment. TQM involves every member of the organisation therefore the sample drawn represents all levels of the organisation. Management, educators, administrators and sport staff were representative in the study. According to McMillan and Schumacher (2006:129), quota sampling has the following advantages:

- More affordable and less time-consuming
- Participants are eager to get involved
- Administration work is less and
- Provides more representatives.

3.4 Interviews

Interviews were used as the research instrument for the study. With the correct interview design the researcher collects in-depth information and knowledge about the study (Turner, 2010:754). Cohen, Manion and Morisson (2007:350) claim that interviews are purely advantageous for information transfer, different opinions and every day experiences of participants. These experiences are related to the interviewer. The interview instrument was vital for collecting information from the school stakeholders about information on the current IQMS and TQM principles that could be used in a school environment. The standardized open-ended questions were used in the interview process. Questions based on quality principles, IQMS and TQM were used. The questions related to the research objectives and aim. Set questions were planned and each participant was asked the same questions. The validity in qualitative research uses a combination of strategies. The researcher used structured, standardized open-ended interviews. All participants were given the same questions. Responses were given on each participants’ position and experience in the school environment.

3.5 Interview Process

Prior to the interview, participants were enlightened about the interview and the study. According to Turner (2010:757), the interviewer must explain the purpose of the interview, the time the interview would take place, and clarify any questions if respondents have any. Participants were informed that their participation was voluntary. Appearance of the interview plays a vital role. The interviewer dressed appropriately and in accordance with the respondents (McMillan and Schumacher 2006:205). This made the participants feel relaxed and comfortable in their own environment. The interviewer used an unbiased way of recording information through a tape recorder. The interviewer ensured the recorder was working at all times (Valenzuela and Strivastava, 2008). Once the interviews were conducted the information was transcribed, analysed and verified. Findings of the interviews were then recorded. Interviews were chosen for this study as the researcher felt that quality principles are an important aspect of the organisation. In order to gain an in-depth response of how the current quality system is working each participant was asked to respond from their own experiences. The responses given from participants enabled the researcher to recommend strategies needed to improve quality principles. This could only be done through responses that were in-depth. In order to collect data from all facets of the school organization, participants were taken from different departments of the school. This enabled the researcher to collect and analyse data from different fields within the organization. During the interview process the participants responded to the current use of the IQMS, using benchmarking and continuous improvement as quality tools.

3.6 Pilot Study

A pilot study is done prior to the actual interview process. In a qualitative research study a pilot study is done on one or two participants. The participants are not part of the sample of participants used in the research collection process. Problems are identified during a pilot study. These problems are eliminated or reduced. According to Turner (2010:757), pilot studies determine the flaws or weaknesses in the interview and through the pilot test the researcher can improve his or her questions in the interviews. Pilot studies are conducted in small scale by using the research instrument that will be used in the study (van Teijlingen and Hudley, 2001). The research instrument could be a survey, questionnaire or interview. Pilot studies are a crucial element of a good study design and the use of pilot studies increases success in the main study as well as providing valuable ‘insights for other researchers’ (van Teijlingen and Hundley, 2001). Pilot studies help to determine whether questions are complicated, confusing or inappropriate. The pilot study was conducted with one participant. The participant was interviewed at school. The participant is a white female educator with seven years of teaching experience. The participant was not included in the sample. Ten structured questions were asked in the interview process. The ten questions asked were not sufficient enough to collect the data needed. Five more questions were added as well as the wording of some the questions were changed to yield effective results.

3.7 Data Analysis

Qualitative analysis is a ‘relatively systematic process of coding, categorizing, and interpreting data to provide explanations of a single phenomenon’ (McMillan and Schumacher, 2006:364). Analysis of data is done
by statistical tests. There is a process for analysis of qualitative studies. The process involves initially recording the data, then coding and categorizing, forming pattern themes and codes and lastly presenting the findings narratively or through visuals (McMillan and Schumacher, 2006:365). The researcher must make meaning of what has been said in the interviews (Turner, 2010:759). The researcher tape recorded all interviews. The recordings were transcribed and a data analysis system was used. A thematic analysis was used. Themes were identified through the use of Nvivo 10. Nvivo 10 involves the analysis of language and words. Consistent words, phrases or ideas are formulated from the participants’ responses (Turner, 2010:759). Cabraal (2012) states that Nvivo 10 has the following advantages:

- It helps the researcher to find patterns and places things into groups and categories
- Patterns are easily formed
- Everything is clearly visible at once and
- It enables the researcher to change categories.

By using Nvivo 10 it eliminates biasness in the research study. Bar graphs representing participants’ responses are used to display the data. The main concepts and ideas are identified through the thematic analysis method. Thematic analysis is a ‘form of pattern recognition within the data, where emerging themes become the categories’ (Fereday and Muir-Cochrane, 2006:82). Thematic analysis involves generation themes through identifying and drawing up common themes throughout interviews (McInroy, 2011:42). Codes are identified from the data collected. Codes that are similar are grouped and prioritized according to importance. The process is continued until it is refined.

3.8 Validity and Reliability: Research instruments used in any study must show strengths of validity and validity in qualitative studies is measured through honesty, in-depth observations and triangulation (Cohen, Manion and Morisson, 2007:133). The researcher has used interviews as the research instrument. Validity with regard to interviews is essential to verify the trustworthiness in the data collected. According to McMillan and Schumacher (2006:324), strategies to enhance validity in qualitative research include: prolonged and persistent fieldwork, multi-method strategies, participant language and verbatim accounts, multiple researchers, mechanically recorded data, member checking, participant review and negative data.

3.8.1 Internal Validity: The internal validity methods used for this research are low-inference descriptors and participant review. A tape recorder was used to record the interviews and direct information was transcribed. This ensures the interviews are not transcribed in a bias way. Participants have viewed the interview transcribed material to ensure that the content is real and valid.

3.8.2 External Validity: The external validity was done through credibility. Nvivo 10 was used as the data analysis instrument. This is an external form of analysis. Triangulation was also used as more than one participant was used to increase the validity of data used. Multi-method strategies were used as the researcher referred to both literature reviews and interviews.

3.8.3 Reliability: Reliability in interviews defers from questionnaires. Researchers use parallel, test-retest or inter-rater reliability when using questionnaires. Reliability in interviews as a research instrument refers to other researchers finding similar data collected. Independent researchers can find same information between the researcher and participants (Keshav, 2012:46). Ali and Yusof (2011:34), agree with the view that reliability in qualitative studies can be measured if another researcher using same sample size, investigating the same issue should receive similar data. For this research study the researcher has recorded all interviews. This allowed the researcher to transcribe correctly and not misinterpret any responses by participants.

3.8.4 Dependability: The use of dependability in qualitative studies ensures that the same research issue investigated again will yield the same findings. An outside audit was conducted in order to achieve the same findings. An ‘external audit’ refers to a professional checking organization that analyses the data and assesses the appropriateness of the findings with the researchers’ outcome. The researcher provided the external auditor with interview transcribed scripts. The findings of the researcher were supported by the external auditor.

3.8.5 Credibility: Credibility of data relies on trustworthiness of the results. In this study member checking was used. Member checking refers to ‘checking informally with participants for accuracy data collection’ (McMillan and Schumacher, 2006:324). The written recordings were taken back to the participants to verify the accuracy of the recordings. This adds credibility to the study.

3.8.6 Confirmability: Qualitative studies focuses on inquiry and the results should not be bias (Nkambule, 2010:45). The researcher guards against biasness and the data recorded were views expressed by the participants.
An Investigation into Quality Management Principles at a ND Primary School in Durban...

and not the researchers. To avoid bias in this research an external data analyst was consulted to review the interview transcripts. The external analyst confirms the findings of the researcher.

3.9 Assumptions and Limitations of the Study

The research was conducted at a primary school in Durban North. It was assumed that the participants are highly qualified with in-depth experience in their field of work. It was also assumed that all participants answered accurately and honestly based on the interview questions asked. Assumptions were made on the basis that participants responded truthfully about their work and personal experience. Limitations of the study refer to time, cost and other variables that can affect the data findings. Time was the limitation to complete the study in allocated time. Generalisation of the fact that all participants have experience and qualifications is another limitation to the study. Qualitative interviews cannot be generalised. Data collected can be used for further studies. Another limitation is that participants may provide incorrect information due to the sensitivity of the issue studied. The study involved ten participants. An increase in participants would involve a lengthy data analysis which would take up a considerable amount of time.

3.10 Delimitations of the Study

The research was conducted at a primary school in Durban North. It was assumed that the participants are highly qualified with in-depth experience in their field of work. It was also assumed that all participants answered accurately and honestly based on the interview questions asked. Assumptions were made on the basis that participants responded truthfully about their work and personal experience. Limitations of the study refer to time, cost and other variables that can affect the data findings. Time was the limitation to complete the study in allocated time. Generalisation of the fact that all participants have experience and qualifications is another limitation to the study. Qualitative interviews cannot be generalised. Data collected can be used for further studies. Another limitation is that participants may provide incorrect information due to the sensitivity of the issue studied. The study involved ten participants. An increase in participants would involve a lengthy data analysis which would take up a considerable amount of time.

3.11 Elimination of Bias: The researcher ensured that spoken words used during interviews were free from gender, race and ethnic bias. All language used during interviews did not represent any stereotypes. Questions asked during the study were free from assumptions. Participants were given clarity on questions when asked. No reference was made to race or ethnic group. Participants were chosen on the basis of each sector of the school. The total population of the school was represented. Both male and female participants were in the study. Different race groups were represented in the sample. Participants’ views and responses were respected. Each participant was treated equally and were given sufficient time to respond.

3.12 Ethical Considerations

The researcher ensured that all information used and collected was completed in an ethical way. When using qualitative studies the researcher needs to ensure that consent, confidentiality, anonymity and permission is obtained.

3.12.1 Ensuring participants have given informed consent: Consent was gained from the participant after the participant was informed about the research and the purpose of the studies. Prior to the interviews participants consent was given for the interviews. Participants were addressed about the study and what was required from them in terms of time. All participants of the study are experienced in their field and have the maturity to understand their involvement in the study. Participants were given the chance to decline their involvement if they felt uncomfortable. No participants were forced to participate in the study.

3.12.2 Ensuring no harm comes to the participants: The researcher must ensure that no harm comes to the participants resulting from the research (McMillan and Schumacher, 2006:335). For the purpose of this study the participants were guaranteed that no harm will be caused to them and information used will be of no threat. The participants were allowed to withdraw from the research at any time if felt threatened or not satisfied.

3.12.3 Ensuring confidentiality and anonymity: Researchers have two responsibilities: ‘to protect the individuals’ confidences from other persons in the setting and ‘to protect the informants from the general reading by public’ (McMillan and Schumacher, 2006:334). The participants involved in this research remain anonymous. Number codes have been used to protect the identity of participants.

3.12.4 Ensuring that permission is obtained: The organisation involved in the research was informed of the study. A written permission letter was obtained in order for the research to be conducted in the organisation.

3.12.5 Caring and fairness: Some participants may experience ‘humiliation and loss of trust’, (McMillan and Schumacher, 2006:335). A ‘sense of caring’ and ‘fairness’ must be part of the way a researcher carries himself or herself (McMillan and Schumacher, 2006:335). Participants of the study were treated with fairness and trust and honesty was encouraged throughout the study.
IV. Discussion And Interpretation Of Findings

4.1 Thematic Analysis of Qualitative Data

Thematic analysis is often used in qualitative data analysis. Thematic analysis records frequent patterns and words. Thematic analysis is a ‘search for themes’ that is important for the study (Fereday and Muir-Cochrane, 2006:3). Thematic analysis was used to identify themes and codes using an inductive process involving the identification of different codes that form themes which were then analysed. Recurring codes were also identified and grouped. At many different stages the data was re-analysed and codes and themes were formed. Sub-themes were also formed from the core themes. Nvivo 10 was also used to identify themes and codes. Nvivo 10 allows the researcher to see a ‘clear series of events that led to the emergent findings’ (Khalil, 2013). Nvivo 10 processes the raw data into systematic data. Word frequencies, tree maps, tag clouds and Matrix coding queries are used in Nvivo 10. Inductive thematic analysis was used. Nodes were identified and sub-nodes were also formed. Word trees are used to identify key words from the data. The size of words displayed in the rectangle is compared to other words in the tree. The branches of the tree represent words or phrases used in the participant responses. The process helps to identify nodes and themes. Matrix Coding Queries are used to compare data. The Matrix Coding Queries displays demographic information, positive or negative views, as well as specific detail about participants’ experiences. Word frequency is used to identify the most frequent words. The words are used ‘within perimeters of length’ (Nvivo 10, 2015). Matrix coding queries help to detect patterns in the data or content analysed. The Matrix coding queries help to compare different contexts and attitudes about themes, as well as views of different demographic groups. Five themes were identified. These include inefficiencies in the Integrated Quality Management System, lack of professional development offered by the Department of Education (DoE), familiarity with the TQM philosophy, principles of TQM already in the school system and barriers for successful TQM implementation. The last three themes address the research questions of the study.

4.2 Inefficiencies in the IQMS

Training for IQMS assessments are inadequately done. As identified in the in-depth interviews, management does not have the qualifications or skills required to carry out assessments. Neither are educators trained for the actual process. Segoe, (2014:729) clearly states that educators and management do not know how to conduct an accurate analysis of educators as they have not been given ‘high quality training’ to implement the process successfully. If management does not have the necessary qualifications, skills and expertise, their approach will be unprofessional. This causes ill-feelings towards the IQMS process. This opinion was confirmed by a number of respondents. IQMS is not a continuous process. The quality checks are done once a year. Feedbacks are also questionable. Feedbacks are not consistent and one participant stated she received no feedback. Segoe (2014:729), states that teachers never receive concrete feedback from peers and management. Feedback in a quality system is important for continuous improvement. Educators need feedback from their peers as well as heads of department. IQMS then becomes less effective in terms of whole school quality improvement. IQMS does not provide for a quality improvement in other aspects of the school. The focus is on teachers being assessed. One of the respondents felt that the teachers’ performance is being evaluated, rather than the whole school including the children. Other respondents agreed with this opinion. Other areas for concern with regards to IQMS were time, too much paperwork and the concurrent implementation of CAPS. Respondent one felt that time is one of the main concerns for IQMS. Other respondents did comment on time restraints and the impact on performance in the classroom. Since the use of the IQMS from 2004, the users are still not completely brought into the system. From the ten participants, two participants felt that the IQMs was not beneficial in the schooling system. Only three participants felt that the IQMS was effective. Five out of the ten participants were unsure or in-between. The IQMS has been in use at public schools all over South Africa for the ten years.

4.3 Lack of Professional Development from Department of Education

Professional development is part of continuous improvement which helps to improve the quality of the organisation through acquiring knowledge about the latest advances in technology or methods. Respondents reported that support is not provided from the Department of Education on this aspect. Rabichund and Steyn (2013) strongly stated that educators felt the IQMS was not about professional development but rather an inspection of educators. Professional development then becomes a paper trail. Professional Development courses offered are for academic purposes, but the DoE does not look at the school holistically. Respondent Five, a sports manager at the school, clearly states when asked whether the Department of Education provide for professional development “the most we get is a first aid course”. Respondent One, a head of department, strongly agrees by advising that no specific workshops have been provided by the DoE. One respondent felt that is was the schools fault for lack of communication between the DoE and the school. Another participant felt there was insufficient input from the subject advisors. The subject advisors are the personnel conducting
workshops that are held by the DoE. The quality of the workshops held were an area of concern. Even though the DoE have implemented workshops, they have not been done in a manner that is meaningful for educators. Other respondents commented on the content which did nothing to improve their professional development. Workshops held by the DoE are often held during school times. This means taking the teachers out of their classrooms to train them to improve their teaching, but this counteracts the effort. This system needs a new strategy. Personal Growth Plans (PGP) are part of the IQMS. It is a section in the document that needs to be completed by all employees of the school. Every year this section gets completed but there is no feedback from the department in terms of carrying out individual professional development. Six out of the ten participants clearly stated that the DoE does not provide for professional development laid out in the PGP plans. The four that stated yes also reported that workshops given were not professional, lacked information or were conducted in teaching time. Out of the ten participants that partook in the study, seven participants felt that educators do practise quality principles. However participant five and six clearly stated that some do and some don’t. Two of the participants responded that educators do make some attempt at practising quality principles. However, Respondent One strongly felt that educators do not practice quality principles. Placing the customer first is a principle of TQM. Sallis (2002:16), claims that ‘quality is defined by the customer’ and that product or service is measured by the customers’ positive response. With regards to a school as an organisation the customer is then the children and parents. The school under study places the children and parents first both academically and in sport. The school principal strongly agrees that children come first. Other respondents felt that activities such as parent sport interaction, introduction of additional reading programmes and other after school or weekend activities are all done in the best interest of the child and parent. In a school organisation placing the customer first means getting parents involved with school activities and then taking note of suggested improvements. However, Respondent Two felt that often parents become too involved like completing research projects. Parents have much to say about the daily running of the school. Suggestions made by parents need to be considered as this will bring the quality of the school to a level desired by all stakeholders. Benchmarking is done in many areas at the school. Some of the benchmarking activities are sporting, the Annual National Assessment (ANA), collaboration by principals and comparison of high school achievers. The ANA is an assessment done by all public schools. The results are made public and the school compares their results to neighbouring schools. Conquesta is another exam but administered by international examiners. The school compares its results with those of neighbouring schools. Principals and deputy principals often meet and share or compare information about academic and sport. Sporting activities are also benchmarked. Results are compared to other schools in the area. Very often additional sport coaches are brought into the school to uplift the sporting results. Quarterly meetings are held to discuss how improvements can be made. Another important aspect of TQM is training and development. Although the DoE does not provide for meaningful professional development, the school itself ensures that educators and staff attend private professional workshops that are organised by the National Professional Teachers Organisation of South Africa (NAPTOSA). Some principles of TQM run on the same lines as IQMS. However, IQMS is not a total quality philosophy and parts of the school are not taken into account. The study found that participants felt that if TQM was implemented correctly it would be a better option than IQMS. Respondent Seven felt that TQM is a better option as it has a holistic approach to it.

4.4 Barriers to Successful TQM Implementation

Implementing any new philosophy comes with challenges. People who are in the system for years do not like changes. Adapting to change by all staff and parents can be a daunting process and can therefore prevent successful implementation. Töremen, Karaku and Yasan (2009:39), indicate that TQM involves change that must be accommodated by staff and managers for successful implementation of TQM. The leaders of the school need to buy-in as they are the link to guiding the staff and facilitating the process. Time is a major factor in implementing TQM. Implementing a new philosophy means getting training and going through the process of change which takes time. Respondent One and Two felt that time was a major challenge. Meeting the parents and teachers to implement it would take up time. At the moment there is too much emphasis on CAPS which means that educators will need additional time to find for training. Educators need to work as a team. There is a lack of leaders to implement TQM. This means that managers will need more time to implement TQM.

V. Recommendations To The School

In this section recommendations to the school under study and the Department of Education are made. Recommendations that are made come from the challenges and problems that have been brought to attention through the primary research.

5.1 Increase Parental Involvement

There needs to be an increase in parental involvement. Some educators indicated that some parents lacked involvement in school activities. Educators, management and staff could come up with different
strategies to get all parents more involved in the daily running of the school. Through TQM parents are part of the stakeholders and this would mean them participating in the decision making process.

5.2 Increase Team Work
Educators and management felt that the school works in isolation or with their peers. Team building exercise is done once a year. Academic and non-academic activities are often planned by individuals or with a peer. This does not promote team building. Both academic and sporting activities need to be done through teams. Teams allows for more ideas to infiltrate into the system. Efficiency, creativity and high-end organisation are often the end result of team work.

5.3 Policies such as Benchmarking
Although benchmarking is done in the school at Durban North, there was no formal tool in place. A formal structure and statistical method is needed to measure academic and non-academic activities at the school. A formal tool allows the school to benchmark against other schools that offer the same schooling activities. TQM can be used in order to put formal quality checks and benchmarking in place.

5.4 Motivation
Educators indicated that one of the challenges in implementing a TQM philosophy is motivation. Often educators do not like change. The school needs to find various ways in motivating staff to change. Once the educators see the benefits of change they accept that change is good. The rewards of implementing TQM should be exposed to the educators. This will be an extrinsic motivation. Reward systems should be put in place to motivate educators both intrinsically and extrinsically.

VI. Recommendations To The Department Of Education

6.1 TQM Improving Quality of Teaching and Learning
Educators indicated that if TQM was implemented it would improve the quality of teaching and learning. Although the school is constantly trying to improve their practices, systems need to be put in place that assures the continuous improvement in all departments of the school within a formal structure. Quality assurance checks need to be done, not only once a year like the current IQMS. Continuous feedback from district level must be carried out. Educators need feedback to improve. At the moment the ANA is the only academic benchmarking tool used at public schools. The ANA is an academic tool and it is not sufficient to do benchmarking. More academic and sporting benchmarking tools need to be used at district and school levels. School districts need to formulate teams and ensure that educators work as teams at a school level. This could be done through different programmes offered by the Department of Education.

6.2 Management becoming Exclusively Leaders
Currently schools have the principal, deputy-principals and the heads of department as managers. The deputy- principals and heads of department often have formal classes in which they teach most of the day. Little room is left for managing the school. More time is required for managers to fulfil their duties and oversee the daily running of the school. More qualified educators need to be employed by the Department of Education to eliminate this problem. When managers are given more time to monitor other staff continuous quality checks can be done. This will improve the quality of teaching and learning in the school. Management can therefore have available time to learn new skills and information about the latest technology. The managers would also be available to offer help with children with difficulties in any learning area.

6.3 Increase Practical Methods of Training, including Upskilling and Upgrading Educators
Educators indicated that the Department of Education did not offer workshops to improve the educators’ skills. Some educators indicated that the workshops conducted by the Department of Education are of a poor quality and did not have appropriate content knowledge. Educators, staff and management complete documents stating what professional development is needed. The DoE must provide for the professional development of educators and management. High quality, knowledge-based workshops must be held regularly to up-skill all educators. If the DoE lacks the proper staff to implement the professional development, the workshops can be outsourced from the private sector.

6.4 Decrease Paper Load
Educators indicated that too much paperwork is a major concern. Paperwork is done on a daily basis. Daily lesson plans, weekly plans, term plans, year plans and continuous academic assessment plans, amounts to more paperwork. The CAPS document was designed to decrease the amount of paperwork, but educators are still burdened with excess. Paperwork takes up valuable time and therefore the DoE should implement paperless activities or limit the amount of activities that require paperwork.
6.5 Involvement of all Stakeholders

Through the primary research it was found that educators and management of the school were in favour of TQM. Through the literature review it was found that schools that have implemented TQM have positive benefits in both sporting and academic activities. TQM requires the involvement of all stakeholders. Parents must also play a more active role in the schools’ activities. The school governing body and parents must work together with the staff of the school. The DoE must be more involved in schools and provide regular quality checks. The primary and secondary research addressed each of the objectives under the study. Though the study was conducted at one school, it is believed that if the recommendations are implemented and carefully monitored at the school concerned the results will indicate that TQM is of value. Consideration will therefore be given into implementing TQM at all public schools. If the recommendations given to the DoE are successfully implemented, controlled and monitored, quality performance in public schools will improve.

References


